# **Beach Birds**

**BIRDS** 

# Description

Beaches are small linear strips of specialized habitat that host a wide variety of plants and animals found nowhere else. Beaches are also under a great deal of stress from a variety of recreational uses, including vehicles, dog-walking, and other forms of disturbance. Increased populations of subsidized predators, such as skunks and raccoons, also plague birds that attempt to nest in such habitats. Piping Plovers and Least Terns nest exclusively in coastal beach habitats.

# **Species**

Spotted Sandpiper (Actitis macularia) Piping Plover (Charadrius melodus) Least Tern (Sternula antillarum)

# 

Image: Carlos Pedro

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Spotted Sandpiper nests throughout most of North America and winters from the southern United States through the Caribbean, Central America and much of South America. In Rhode Island, this species is an uncommon breeding species and also an uncommon stopover migrant. Spotted Sandpipers nest in dune vegetation along the coast and also on lake shores, where they hide their nest on the ground in thick dry vegetation. Spotted Sandpipers prefer open country and were formerly common in sheep pastures or other agricultural lands near water. Because of the maturation of forests, it is likely that the most Spotted Sandpiper nesting now occurs only along the coast. However, nesting sites are scattered throughout the state and are difficult to monitor. Nevertheless, sites that are surveyed often (e.g., Napatree Point) suggest a long-term decline. This is not surprising because Spotted Sandpipers are prone to the pressures faced by all ground-nesting species that prefer beach habitats. Spotted Sandpipers also occur as migrants, with the peak southbound numbers passing through Rhode Island in July. The last decade has had only about ten Rhode Island counts of more than 15 birds, all of which have occurred at Napatree Point. The highest of these was a total of 33 Spotted Sandpipers on 22 July 2010. Conservation actions include developing a standardized survey protocol to assess the current spatial distribution of this species throughout the state.

Habitat Community: Inland Pond and River Shore, Type: Shallow

# Status

FED: FWS. SRANK: S4B,S4N. GRANK: G5. Shrbrd: 1. USSCP: LC. AJV BCR: M. CODES: B. Res/B: 1. GRP: 50. PRIOR: 1. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# **Threats and Actions**

## Threat 1 - Residential and commercial development; Disturbance to nesting habitat and feeding areas

- Actions: Land/water protection; Work with state and non profits to conserve nesting and feeding habitats. Rank: 2
  - Site/area protection. Rank: 2
  - Site/area management. Rank: 3
  - Education and awareness. Rank: 3
  - Awareness and communications. Rank: 3

## Threat 2 - Problematic native species; Nest predators

- Actions: Education and awareness. Rank: 3
  - Site/area management. Rank: 3

• Invasives/problematic species control. Rank: 3

## Threat 3 - Climate change and severe weather; Sea level rise

- Actions: Habitat and natural process restoration. Rank: 3
  - Site/area protection. Rank: 3
  - Site/area management. Rank: 2

#### Threat 4 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 3

#### Threat 5 - Shipping lanes; Oil pollution

- Actions: Law and policy; Double hulled barge requirement. Rank: 2
  - Site/area management. Rank: 2

Refer to the Community: Inland Pond and River Shore, Type: Shallow - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

Image: Peter WC Pator

~See map disclaimer in profiles introduction

The Piping Plover is a short-distance Nearctic migrant. The breeding distribution of the Piping Plover consists of three disjunct areas; the Atlantic Coast, the Great Lakes, and the Great Plains. In 1986, the Atlantic Coast population was listed by the USFWS as threatened, with the other range components also assigned ESA status. At the time of its listing, the Rhode Island population was down to about 10 nesting pairs. After federal protection and intensive management for the nearly three decades, the state-wide population now is estimated to be approximately 90 nesting pairs. Piping Plovers also occur in Rhode Island as migrants. This species does not winter this far north and the spring migration peak is not evident from local data, suggesting that most birds arrive directly on the breeding grounds. The fall migratory peak is more evident and occurs between late June and late July. Transient birds during fall consist of post-breeding adults and juvenile. Piping Plovers nest on coastal sandy beaches and dry overwash areas adjacent to tidewater. Adults and young forage in the intertidal zone of barrier beaches and also use mudflats, where they tend to occur on migration with Semipalmated Sandpipers, and Least and Semipalmated Sandpipers. The Piping Plover is one of the most intensively monitored birds in North America. Because of its federal status, continued monitoring, management, and protection of prime foraging areas are necessary.

Habitat Community: Coastal Beach and Dune, Type: Maritime Beach Strand

# Status

IUCN Rank: NT. FEDSTAT: FE. FED: FWS. STSTAT: SE. SRANK: S1B,S1N. GRANK: G3. STATE: E-1(1-1). RSGCN: H-VH. NALCC: X (B). Shrbrd: 1. USSCP: HI. PIF BCPSN: Tier I A. AJV BCR: HH. CODES: B. Res/B: 1. GRP: 81. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

## Threat 1 - Residential and commercial development; Disturbance to nesting habitat and feeding areas

- Actions: Land/water protection; Work with state and non profits to conserve nesting and feeding habitats. Rank: 2
  - Site/area protection. Rank: 2
  - Site/area management. Rank: 3
  - Education and awareness. Rank: 3
  - Awareness and communications. Rank: 3

## Threat 2 - Problematic native species; Nest predators

- Actions: Education and awareness. Rank: 3
  - Site/area management. Rank: 3

• Invasives/problematic species control. Rank: 3

## Threat 3 - Climate change and severe weather; Sea level rise

- Actions: Habitat and natural process restoration. Rank: 3
  - Site/area protection. Rank: 3
  - Site/area management. Rank: 2

#### Threat 4 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 3

#### Threat 5 - Shipping lanes; Oil pollution

- Actions: Law and policy; Double hulled barge requirement. Rank: 2
  - Site/area management. Rank: 2

Refer to the Community: Coastal Beach and Dune, Type: Maritime Beach Strand - Habitat Profile for additional threats to this species.



Image: Peter WC Paton (adults) and Richard Enser (chick)

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Least Tern is a Neotropical migrant and has three disjunct nesting populations, a population along the Atlantic Coast, an interior population, and a small population in coastal regions of California and Baja. In Rhode Island, this species nests on small sandy islands and more commonly on barrier beaches. Least Terns aggregate into colonies and place their nests directly on the sand on flat sections of beaches or overwash fans. Least Terns are highly mobile and face many threats in these habitats from mammalian and avian predation, tidal surges, and excessive recreational use of beaches. Following disturbance, they frequently abandon and move to another site to renest. For this reason, nesting sites are used somewhat irregularly and recruitment is episodic; negligible in some years and good in others. Even with this variability, however, surveys suggest that the number of Least Terns in this area have declined in recent years, both with respect to total number of nesting birds and the number of utilized nesting locations. This species used to nest at 3-4 locations in Narragansett Bay, but there have been no documented nesting records at any of these sites for several years. Because some Least Terns nesting colonies occur at sites occupied by Piping Plovers, many colonies receive some level of protection and monitoring by the USFWS. However, it is imperative that Least Terns receive active management and monitoring in the future due to the large number of threats potentially impacting this species including sea level rise.

Habitat Community: Coastal Beach and Dune, Type: Maritime Beach Strand

## Status

IUCN Rank: LC. FED: FWS. STSTAT: ST. SRANK: S2B,S2N. GRANK: G4. STATE: E-1(3-1). RSGCN: L-VH. PIF BCPSN: Tier V. NATerns: 1. AJV BCR: H. CODES: B. Res/B: 1. GRP: 105. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

## Threat 1 - Residential and commercial development; Disturbance to nesting habitat and feeding areas

- Actions: Land/water protection; Work with state and non profits to conserve nesting and feeding habitats. Rank: 2
  - Site/area protection. Rank: 2
  - Site/area management. Rank: 3
  - Education and awareness. Rank: 3
  - Awareness and communications. Rank: 3

## Threat 2 - Problematic native species; Nest predators

Actions: • Education and awareness. Rank: 3

- Site/area management. Rank: 3
- Invasives/problematic species control. Rank: 3

## Threat 3 - Climate change and severe weather; Sea level rise

- Actions: Habitat and natural process restoration. Rank: 3
  - Site/area protection. Rank: 3
  - Site/area management. Rank: 2

## Threat 4 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 3

#### Threat 5 - Shipping lanes; Oil pollution

Actions: • Law and policy; Double hulled barge requirement. Rank: 2

Refer to the Community: Coastal Beach and Dune, Type: Maritime Beach Strand - Habitat Profile for additional threats to this species.

# **Island Birds**

## **BIRDS**

## Description

This category of birds includes several species of herons, gulls and terns that tend to nest on uninhabited, predator-free islands. Species accounts to follow include those for Great Egret, Snowy Egret, Black-crowned Night-Heron, Glossy Ibis, Yellow-crowned Night-Heron, Herring Gull, Common Tern and Roseate Tern (stopover only). Certain species that were considered GCN species in the 2005 SWAP were omitted from the 2015 version. Little Blue Heron and Cattle Egret no longer nest in the state. Double-crested Cormorants numbers have grown so rapidly throughout the region and in many places there were concerted efforts designed to reduce populations (e.g., Great Lakes). Great Black-backed Gulls, although declining throughout the region, are still so abundant that they were not a conservation concern at this time. Because these species co-occur with others dealt with in more detail, their omission or inclusion does not appreciably affect the species-habitat nexus or the appropriate conservation actions for the colonial birds that were retained.

By the end of the 19th century, populations of most colonial birds including, gulls, terns, herons and egrets that nested along the Atlantic coast had been decimated by unregulated hunting for eggs and feathers. The ancestral status of these species in Rhode Island is conjectural, but, by the time the Ornithological Record began, some had already been gone for many decades. Following legal protection after the passage of the Migratory Bird Treaty Act and aggressive conservation action, populations began to recover and recolonize the Northeast. Rhode Island has a rich history of colonial waterbird monitoring. After the Herring Gull began to nest in 1937, casual surveys were conducted at nesting sites by ornithologists such as Roland Clement, David Emerson and Robert Woodruff. Clement and Woodruff published a summary of the nesting status of gulls and terns in 1962 (Narragansett Naturalist). Many of the "southern" herons and egrets arrived later than the gulls, with several species nesting in Rhode Island by the 1960s. Following recognition that egrets were nesting on islands in Narragansett Bay, casual surveys were conducted by local ornithologists and then more consistent survey work began by James Myers (RIDFW) and Richard Ferren in 1977. This work was summarized in 1998 (Rhode Island's Nesting Maritime Birds, RI DEM) but monitoring continues to this day.

Gulls and terns nest on small islands, including structures and rooftops near tidewater, but the heron and egret colonies occur on the larger uninhabited islands within Narragansett Bay (and Block Island). Many of these sites were once owned by the military and, following abandonment, were incorporated as conservation property. Several of these sites, including Hope Island, now reside within the Narragansett Bay Estuarine Research Reserve (NOAA). Colonial birds nest on the ground or in low trees and are sensitive to disturbance and predation (especially by mammals) at nesting sites. Primary conservation activities for these species include reducing disturbance and consistent monitoring. Foraging habitats, usually salt marshes away from nesting sites, are also important habitat components that will be threatened by rising sea levels.

## **Species**

Great Egret (Ardea alba) Snowy Egret (Egretta thula) American Oystercatcher (Haematopus palliatus) Herring Gull (Larus argentatus) Yellow-crowned Night Heron (Nycticorax nycticorax) Black-crowned Night Heron (Nycticorax nycticorax) Glossy Ibis (Plegadis falcinellus) Common Tern (Sterna hirundo)



# **Distribution & Abundance**

Great Egrets are long-distance Neotropical migrants that nest in a narrow band along the Atlantic and Pacific Coast as far north as southern Maine and also throughout the mid-west along the Mississippi River. This species winters in coastal regions in North America, and throughout Central America and much of South America. Great Egrets were extirpated from Rhode Island for decades in the1900s until nesting birds were documented in early 1960's. Great Egrets prefer to nest in low trees on larger uninhabited islands in Narragansett Bay and on Block Island, with typically foraging habitat in salt marshes throughout coastal regions in the State. The North American Waterbird Plan (2007) estimated about 180,000 breeding birds in North America and their nationwide population was currently not at risk. However, locally the number of nesting pairs in Rhode Island peaked at ~250 nesting pairs in 2003 and has since gradually declined to ~123 pairs in 2013. Therefore local conservation actions are needed, including continued monitoring of breeding birds, and protection of nesting sites and foraging sites from human disturbance. Finally, the impacts of sea level rise could impact nesting and foraging habitat. Large flocks of migrants stage in coastal salt marshes during spring and fall migration.

Habitat Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland

## Status

FED: FWS. STSTAT: C. SRANK: S1B,SZN. GRANK: G5. STATE: E-1(3-1). PIF BCPSN: Tier V. CODES: B. Res/B: 1. GRP: 53. PRIOR: 1. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

# Threat 1 - Invasive and other problematic species and genes; Introduction of predators to predator free islands

- Actions: Species management; Prevent introduction of predators. Rank: 3
  - Site/area management; Maintain forest/shrub habitat on nesting islands. Rank: 2
  - Invasive/problematic species control; Control spread of phragmites in marshes and wetlands that are foraging habitat. Rank: 2

## Threat 2 - Recreational activities; Increased human disturbance of nesting habitat and foraging sites

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 2

## Threat 3 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

Actions: • Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3

• Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

## Threat 4 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

## Threat 5 - Other; Potential oil spills

- Actions: Compliance and enforcement. Rank: 2
  - Legislation. Rank: 2

Refer to the Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

Snowy Egrets are long-distance Neotropical migrants that nest along the Atlantic and Pacific Coasts of North America and throughout the western US. The winter range is along the Gulf Coast, south throughout Central America, and into South America. Snowy Egrets prefer to nest in low trees on larger uninhabited islands in Narragansett Bay and on Block Island, with typically foraging habitat in salt marshes throughout coastal regions in the State. In Rhode Island, this species also began to nest in the early 1960s. Breeding numbers peaked earlier than the Great Egret, with the historical high counts ~300 nests in 1978-79, a steep decline to 91 pairs in 1984, an increase to 225 nests in 1991, and then a gradual decline to ~45 nests in 2013. Reasons for these local fluctuations are unclear, but nationwide the number of breeding pairs has been high conservation concern due to declining population trends (North American Waterbird Plan 2007). As with Great Egrets, conservation actions include monitoring of breeding birds, and protection of nesting sites and foraging sites from human disturbance, and monitoring impacts of sea-level rise on foraging habitat. Migrants stage in coastal salt marshes during spring and fall migration.

Habitat Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland

## Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,SZN. GRANK: G5. STATE: E-1(3-1). RSGCN: L-VH. NALCC: X (B, NB). PIF BCPSN: Tier V. AJV BCR: M. CODES: B. Res/B: 1. GRP: 17. PRIOR: 1. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

Threat 1 - Invasive and other problematic species and genes; Introduction of predators to predator free islands

Actions: • Species management; Prevent introduction of predators. Rank: 3

- Site/area management; Maintain forest/shrub habitat on nesting islands. Rank: 2
- Invasive/problematic species control; Control spread of phragmites in marshes and wetlands that are foraging habitat. Rank: 2

## Threat 2 - Recreational activities; Increased human disturbance of nesting habitat and foraging sites

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 2

## Threat 3 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

Actions: • Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank:

3

• Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

## Threat 4 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

## Threat 5 - Other; Potential oil spills

- Actions: Compliance and enforcement. Rank: 2
  - Legislation. Rank: 2

Refer to the Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The American Oystercatchers is a short-distance Neararctic migrant that nests along the Atlantic Coast from Maine to Florida, along the Gulf Coast, along Baja, Mexico, and throughout coastal South America. This species winters in most of these same areas, except populations in New England are migratory. In the past four decades, the American Oystercatcher has expand their breeding distribution from the southern United States and is now a localized breeding species in Rhode Island. Since the first documented nesting in 1976, the American Oystercatcher population has reached about 30 nesting pairs in Rhode Island located on small predator-free islands in Narragansett Bay, and Little Narragansett Bay where gulls and egrets also nest. American Oystercatchers are an uncommon and localized migrant in Rhode Island. There is no obvious spring migratory peak, which suggests that birds arrive abruptly on nesting grounds. The number of southbound migrants peak between August 20 and September 20. Migrants tend to stage at foraging areas that have extensive mussel beds, such as Napatree Point, where fall totals have exceeded 50 birds recently. Recent rangewide surveys by the American Oystercatcher Working Group suggest their population has slowly increased recently in the past decade to 11,200 birds in over 9,000 miles of potential habitat surveyed. The local population continues to slowly expand and continued monitoring of nesting and staging sites is desirable. In addition, efforts to minimize human disturbance at nesting sites and staging sites should be encouraged.

Habitat Community: Coastal Beach and Dune, Type: Maritime Beach Strand

# Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S2B,S2N. GRANK: G5. STATE: E-1(3-1). RSGCN: L-VH. NALCC: X (B). Shrbrd: 1. USSCP: HC. PIF BCPSN: Tier I A. AJV BCR: HH. CODES: B. Res/B: 1. GRP: 65. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

Threat 1 - Invasive and other problematic species and genes; Introduction of predators to predator free islands

Actions: • Species management; Prevent introduction of predators. Rank: 3

- Site/area management; Maintain forest/shrub habitat on nesting islands. Rank: 2
- Invasive/problematic species control; Control spread of phragmites in marshes and wetlands that are foraging habitat. Rank: 2

## Threat 2 - Recreational activities; Increased human disturbance of nesting habitat and foraging sites

Actions: • Awareness and communications; Educate public about disturbance factors. Rank: 2

• Policies and regulations; Policy regulations on buffer zones and land use or enforcement of

existing policies including wetland buffer. Rank: 2

## Threat 3 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

## Threat 4 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

## Threat 5 - Other; Potential oil spills

- Actions: Compliance and enforcement. Rank: 2
  - Legislation. Rank: 2

Refer to the Community: Coastal Beach and Dune, Type: Maritime Beach Strand - Habitat Profile for additional threats to this species.



Image: Richard L Ferrer

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Herring Gull nests across North America from eastern Canada to Alaska through the sub-boreal areas of the continent. Herring Gulls winter in the southeastern United States, in coastal Central America, and along the Pacific Coast. In the early 1900s, this species did not nest in New England and this species was the first colonial waterbird to re-colonize Rhode Island after the shooting era ended, with birds appearing on the Sakonnet Islands in the 1940's. The statewide nesting population rapidly increased and expanded to many other islands, which was fueled by abundant food resources at several open garbage dumps in the state. The State nesting population peaking in the 1980s at about 6000 pairs, as subsequently declined as landfills were capped and Great Black-backed Gull nesting populations increased. As of 2013 in Rhode Island, approximately 1,600 pairs of Herring Gulls were documented nesting at ~23 sites, with large numbers of non-breeding birds also documented (C. Raithel, RI DFW). Herring Gulls are large ground-nesting birds that are sensitive to predation from mammals (e.g., Raccoons), therefore they tend to nest at sites with no predators (i.e., predator-free islands or flat rooftops). Although often considered to be an overabundant nuisance species, Herring Gulls are included in the WAP because they require predator-free environments, and are indicative of places where other colonial waterbirds do or could nest. There are control efforts currently taking place at the Central Landfill and local airport, thus continued monitoring of this nesting colonies of this species seems warranted.

Habitat Community: Coastal Beach and Dune, Type: Maritime Herbaceous Dune

# Status

IUCN Rank: LC. FED: FWS. SRANK: S3B,SZN. GRANK: G5. STATE: E-1(3-1). CODES: B. Res/B: 1. GRP: 16. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

# Threat 1 - Invasive and other problematic species and genes; Introduction of predators to predator free islands

- Actions: Species management; Prevent introduction of predators. Rank: 3
  - Site/area management; Maintain forest/shrub habitat on nesting islands. Rank: 2
  - Invasive/problematic species control; Control spread of phragmites in marshes and wetlands that are foraging habitat. Rank: 2

## Threat 2 - Recreational activities; Increased human disturbance of nesting habitat and foraging sites

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 2

## Threat 3 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

## Threat 4 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

## Threat 5 - Other; Potential oil spills

- Actions: Compliance and enforcement. Rank: 2
  - Legislation. Rank: 2

Refer to the Community: Coastal Beach and Dune, Type: Maritime Herbaceous Dune - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Yellow-crowned Night-Heron is a long-distance Neotropical migrant that nests throughout the southeastern United States and along the Atlantic Coast as far north as Massachusetts. This species winters in Central America and northern South America. This species is not as gregarious as many other colonial waterbirds, and usually nests singly or in small colonies on islands and mainland areas. This species is a rare and localized breeder in Rhode Island, known most consistently from Block Island. However, there is some evidence of a slight recent increase and this species may be nesting at other sites in Rhode Island. The North American Waterbird Plan (2007) considered this species to be a moderate conservation concern nationwide. In Rhode Island, conservation actions include protecting nesting sites from human and mammalian disturbances. This species is a rare migrant in Rhode Island.

Habitat Community: Coastal Shrubland, Type: Maritime Shrubland

# Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,S1N. GRANK: G5. RSGCN: L-VH. PIF BCPSN: Tier V. AJV BCR: M. CODES: B. Res/B: 1. PELAG: BI. GRP: 62. PRIOR: 1. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

Threat 1 - Invasive and other problematic species and genes; Introduction of predators to predator free islands

- Actions: Species management; Prevent introduction of predators. Rank: 3
  - Site/area management; Maintain forest/shrub habitat on nesting islands. Rank: 2
  - Invasive/problematic species control; Control spread of phragmites in marshes and wetlands that are foraging habitat. Rank: 2

## Threat 2 - Recreational activities; Increased human disturbance of nesting habitat and foraging sites

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 2

## Threat 3 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

## Threat 4 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

## Threat 5 - Other; Potential oil spills

- Actions: Compliance and enforcement. Rank: 2
  - Legislation. Rank: 2

Refer to the Community: Coastal Shrubland, Type: Maritime Shrubland - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Black-crowned Night-Heron is a widespread species that nest throughout much of the United States into central Canada, as well as throughout South America and parts of Central America. This species winters in southern coastal regions of North America, and throughout Central and South America. The North American Waterbird Plan (2007) considered this species to be a moderate conservation concern nationwide. In Rhode Island, large colonies were present throughout the 1900s during the height of the shooting era including the grounds of Butler Hospital, in Providence, in Bristol and certain large islands within Narragansett Bay (i.e., Prudence and Conanicut). By the 1970s, this species was extirpated from all mainland sites and larger islands, probably due to burgeoning predatory mammal populations that were allowed access to larger islands by bridge construction. Recently, the nesting population peaked in 1982 at ~ 700 nesting pairs, and then slowly declined to 214 nests in 2013. As with other colonial waterbirds, conservation concerns include keeping mammals off nesting islands, monitoring nesting populations, and minimizing human disturbance to nesting islands. This species is solitary in their nocturnal foraging behavior, and uses a wide variety of coastal habitat for foraging. Black-crowned Night-Herons can congregate in coastal areas during spring and fall migration.

Habitat Community: Coastal Shrubland, Type: Maritime Shrubland

# Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S2B,SZN. GRANK: G5. STATE: E-1(3-1). RSGCN: L-VH. PIF BCPSN: Tier V. AJV BCR: M. CODES: B. Res/B: 1. GRP: 80. PRIOR: 1. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

# Threat 1 - Invasive and other problematic species and genes; Introduction of predators to predator free islands

- Actions: Species management; Prevent introduction of predators. Rank: 3
  - Site/area management; Maintain forest/shrub habitat on nesting islands. Rank: 2
  - Invasive/problematic species control; Control spread of phragmites in marshes and wetlands that are foraging habitat. Rank: 2

## Threat 2 - Recreational activities; Increased human disturbance of nesting habitat and foraging sites

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 2
- Threat 3 Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

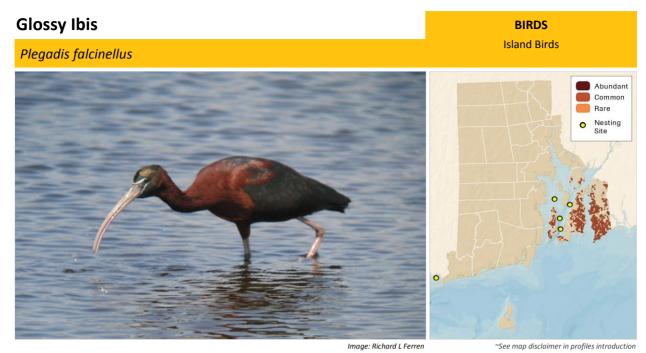
## Threat 4 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

## Threat 5 - Other; Potential oil spills

- Actions: Compliance and enforcement. Rank: 2
  - Legislation. Rank: 2

Refer to the Community: Coastal Shrubland, Type: Maritime Shrubland - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Glossy Ibis is a long-distance Neotropical migrant that nests in a narrow band along the Atlantic and Gulf Coasts of North America and throughout the Caribbean and winters in the same areas. Birds nesting in northern latitudes such as Rhode Island are migratory, whereas birds in southern areas can be year-round residents. In Rhode Island, Glossy Ibis were first documented nesting in 1971, populations peaked at 500 nesting pairs in 1991, and then declined slowly to 135 pairs in 2013. This species displays great volatility in the number of nesting pairs that change abruptly between years, which must result from short-term recruitment from other nearby nesting areas. According to the North American Waterbird Plan (2007), there are about 13,000 to 15,000 pairs nesting in North America and they are considered a low conservation concern nationwide. However, due to their small population size in Rhode Island, this species is a local conservation concern. They nest on a limited number of island in Narragansett Bay, therefore monitoring these islands during the breeding season and minimizing human disturbance to nesting islands are important. Glossy Ibis prefer to forage in wet meadows or grasslands in agricultural areas, thus protection of this open space is critical for this species. This species is an uncommon migrant in Rhode Island during spring and fall migration.

Habitat Community: Coastal Shrubland, Type: Maritime Shrubland

# Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,SZN. GRANK: G5. STATE: E-1(3-1). PIF BCPSN: Tier V. AJV BCR: H. CODES: B. Res/B: 1. GRP: 68. PRIOR: 1. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# **Threats and Actions**

Threat 1 - Invasive and other problematic species and genes; Introduction of predators to predator free islands

Actions: • Species management; Prevent introduction of predators. Rank: 3

- Site/area management; Maintain forest/shrub habitat on nesting islands. Rank: 2
- Invasive/problematic species control; Control spread of phragmites in marshes and wetlands that are foraging habitat. Rank: 2

## Threat 2 - Recreational activities; Increased human disturbance of nesting habitat and foraging sites

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 2

## Threat 3 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

Actions: • Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank:

3

• Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

## Threat 4 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

## Threat 5 - Other; Potential oil spills

- Actions: Compliance and enforcement. Rank: 2
  - Legislation. Rank: 2

Refer to the Community: Coastal Shrubland, Type: Maritime Shrubland - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Common Tern a long-distance Neotropical migrant that is a widespread species nesting throughout much of Canada and the northern United States. They winter in nearshore waters along the Pacific and Atlantic Coasts of South America. In Rhode Island, the Common Tern apparently persevered the shooting era relatively unscathed, as nesting colonies were still known in the early 1900s, and became more abundant in the following decades when thousands of migrants could be detected. From 1977 to 2000 the statewide Common Tern population hovered around 400 nests, but recently the population has declined to ~200 nesting pairs in 2013. In Rhode Island, Common Terns nest in unvegetated habitats on small islands and derelict structures (e.g., old barges and lighthouses), with several breeding sites recently lost. Several low natural islands have been over-washed by rising ocean levels. The North American Waterbird Plan (2007) estimates 300,000 breeding birds in North America and does not Common Tern as a conservation concern nationwide as this time. However, due to local declines of breeding birds in Rhode Island, continued local monitoring is desirable for this species, and there should be a more proactive program of establishing and managing tern populations on structures, such as abandoned oil platforms, in Narragansett Bay. This species is common in coastal areas during migration.

Habitat Community: Coastal Shrubland and Grassland, Type: Maritime Grassland

## Status

IUCN Rank: LC. FED: FWS. SRANK: S3B,SZN. GRANK: G5. STATE: E-1(3-1). RSGCN: L-VH. NALCC: X (B). PIF BCPSN: Tier V. NATerns: 1. AJV BCR: M. CODES: B. Res/B: 1. GRP: 87. PRIOR: 1. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# **Threats and Actions**

# Threat 1 - Invasive and other problematic species and genes; Introduction of predators to predator free islands

- Actions: Species management; Prevent introduction of predators. Rank: 3
  - Site/area management; Maintain forest/shrub habitat on nesting islands. Rank: 2
  - Invasive/problematic species control; Control spread of phragmites in marshes and wetlands that are foraging habitat. Rank: 2
  - Planning; Species and habitat management planning. Rank: 2

## Threat 2 - Recreational activities; Increased human disturbance of nesting habitat and foraging sites

Actions: • Awareness and communications; Educate public about disturbance factors. Rank: 2

• Policies and regulations; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 2

## Threat 3 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

## Threat 4 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

## Threat 5 - Other; Potential oil spills

- Actions: Compliance and enforcement. Rank: 2
  - Legislation. Rank: 2

Refer to the Community: Coastal Shrubland and Grassland, Type: Maritime Grassland - Habitat Profile for additional threats to this species.

# **Forest Birds**

**BIRDS** 

# Description

There are a variety of forest types. Densely forested areas support different species depending upon the array of tree and other plant life in the community, which supply nutrition for the bird life. Pine and other conifer habitats are much different from deciduous hardwood forests. Please see the detailed descriptions of the different types of forests in the Habitat Profiles. Birds are grouped into the following categories that can and do encompass multiple and sometimes overlapping key habitats:

Forest Edge, Mature Forest Interior, Forest Interior Understory, Forest Interior Conifer, Forest Interior Wetlands

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# Species

Forest Edge Birds	
Great Crested Flycatcher	(Myiarchus crinitus)
Rose-breasted Grosbeak	(Pheucticus ludovicianus)
American Redstart	(Setophaga ruticilla)
Yellow-throated Vireo	(Vireo flavifrons)
Mature Forest Interior Birds	
Northern Goshawk	(Accipiter gentilis)
Pileated Woodpecker	(Dryocopus pileatus)
Hairy Woodpecker	(Picoides villosus)
Scarlet Tanager	(Piranga olivacea)
Cerulean Warbler	(Setophaga cerulea)
Forest Interior Understory Birds	
Veery	(Catharus fuscescens)
Acadian Flycatcher	(Empidonax virescens)
Wood Thrush	(Hylocichla mustelina)
Black-and-white Warbler	(Mniotilta varia)
Black-throated Blue Warbler	(Setophaga caerulescens)
Hooded Warbler	(Setophaga citrina)
Forest Interior Conifer Birds	
Least Flycatcher	(Empidonax minimus)
Purple Finch	(Haemorhous purpureus)
Yellow-rumped Warbler	(Setophaga coronata)
Blackburnian Warbler	(Setophaga fusca)
Blue-headed Vireo	(Vireo solitarius)
Forest Interior Wetlands Birds	
Canada Warbler	(Cardellina canadensis)
Northern Waterthrush	(Parkesia noveboracensis)
Northern Waterthrush Prothonotary Warbler	, ,

# **Great Crested Flycatcher**

Myiarchus crinitus

BIRDS Forest Edge Birds



Image: USFW

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Great Crested Flycatcher is a long-distance migrant that nests throughout the eastern continental United States and southeastern Canada (Fig. 4). The wintering range is lowland areas of Central America southward to northern South America. Great Crested Flycatchers nest throughout the mainland of Rhode Island, where forests are interspersed with open habitats. Nesting densities peak in Washington County and east of Narragansett Bay in Newport County. They do not nest on Block Island and rarely in forest tracts on islands in Narragansett Bay. Annual trend estimates from BBS surveys from 1966-2011 suggest that populations are stable in New England and Mid-Atlantic states (annual trend = 0.17 [95% Cl = -0.3 to 0.6]), and in eastern North America (annual trend = 0.08 [95% Cl = -0.09 to 0.25]). This species may benefit from forest fragmentation and mixed land-use mosaics. Great Crested Flycatchers are cavity nesters and would benefit from nest-box programs in areas where competing species are few. Great Crested Flycatchers are not encountered in large numbers during either spring or fall migration, but there is some use of coastal thickets during the fall.

Habitat Community: Oak Forest, Type: Oak Forest

# Status

IUCN Rank: LC. FED: FWS. SRANK: S5B,SZN. GRANK: G5. PIF NALCP: Tier II.a. AJV BCR: H. CODES: B. Res/B: 1. GRP: 92. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

# Threat 1 - Residential and commercial development; Fragmentation of forest habitat for key species breeding areas

Actions: • Land/water protection; Conserve forest habitat especially during key breeding season. Rank: 3

- Land/water management; Manage forest habitat for breeding season. Rank: 3
- Resource and habitat protection. Rank: 3
- Site/area management. Rank: 3
- Education and awareness. Rank: 2

## Threat 2 - Natural system modifications; Loss of stopover habitat during migration

- Actions: Land/water management; Manage for stopover habitat. Rank: 3
  - Land/water protection; Conserve stopover habitat. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Site/area management. Rank: 3

• Education and awareness. Rank: 2

Threat 3 - Problematic native species; Deer browsing

Actions: • Site/area management. Rank: 3

Threat 4 - Housing and urban areas; Urbanization

Actions: • Site/area protection. Rank: 3

Refer to the Community: Oak Forest, Type: Oak Forest - Habitat Profile for additional threats to this species.

## **Rose-breasted Grosbeak**

Pheucticus Iudovicianus



Image: Carlos Pedro

~See map disclaimer in profiles introduction

BIRDS Forest Edge Birds

# **Distribution & Abundance**

The Rose-breasted Grosbeak is a long-distance Neotropical migrant whose breeding range extends over the eastern continental United States from the Canadian Maritimes as far west as British Columbia and southward in the Appalachian Mountains to Georgia. This species winters in the Caribbean, Central America and northern South America. The Rose-breasted Grosbeak nests across Rhode Island in deciduous woodlands or adjacent open habitats. This species is more common northeastern Rhode Island, and is rare or absent from the greater metropolitan area, the coast, and Block Island. Rose-breasted Grosbeaks are sparsely distributed across the state, with scattered territories. Based on Breeding Bird Surveys throughout New England and Mid-Atlantic States from 1966-2012, this species is declining at a significant rate in the region (annual trend = -2.8 (95% CI = -3.7 to -1.9), whereas they appear to declining at a more graduate rate throughout eastern North America (annual trend = -1.0 (95% CI = -1.3 to -0.6). This species has only rarely been encountered during bird surveys designed to sample forest birds and so there are few recent data for this species. Conservation actions include developing a systematic monitoring plan to assess the distribution, abundance, habitat use, and population trends for this migrant. Also developing a forest management plan to protect this species and other forest specialists is important.

Habitat Community: Oak Forest, Type: Oak Forest

## Status

IUCN Rank: LC. FED: FWS. SRANK: S4B,SZN. GRANK: G5. PIF NALCP: Tier II.a. PIF BCPSN: Tier II A. CODES: B. Res/B: 1. GRP: 41. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

Threat 1 - Residential and commercial development; Fragmentation of forest habitat for key species breeding areas

- Actions: Land/water protection; Conserve forest habitat especially during key breeding season. Rank: 3
  - Land/water management; Manage forest habitat for breeding season. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Site/area management. Rank: 3
  - Education and awareness. Rank: 2

## Threat 2 - Natural system modifications; Loss of stopover habitat during migration

- Actions: Land/water management; Manage for stopover habitat. Rank: 3
  - Land/water protection; Conserve stopover habitat. Rank: 3

- Resource and habitat protection. Rank: 3
- Site/area management. Rank: 3
- Education and awareness. Rank: 2

## Threat 3 - Problematic native species; Deer browsing

Actions: • Site/area management. Rank: 3

## Threat 4 - Housing and urban areas; Urbanization

Actions: • Site/area protection. Rank: 3

Refer to the Community: Oak Forest, Type: Oak Forest - Habitat Profile for additional threats to this species.

# **American Redstart**

Setophaga ruticilla

BIRDS Forest Edge Birds



Image: Peter WC Paton

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The American Redstart breeds across North America in deciduous forests that have a well-developed understory component. They winter in southern Central America, the Caribbean, and northern South America. American Redstarts are nest throughout Rhode Island, including larger islands in Narragansett Bay and Block Island (rarely). The highest nesting densities occur in deciduous forests along river floodplains, such as in the Great Swamp an they appear to be more common in southern Rhode Island than in the thickly forested interior of the state. Nesting habitat quality appears to be improving as coastal forests mature, whereas habitat quality has declined in interior forests as stands have matured and lost the understory component. State management areas support some of the largest concentrations of nesting American Redstarts, but pressure on these areas from beaver and deer activity may degrade the habitat. Regional population trends are uncertain, with trends estimates from Breeding Bird Surveys from 1966-2011 suggesting a non-significant decline in New England and Mid-Atlantic states (annual trend = -0.35 [95% CI = -1.32 to 0.94]) and throughout eastern North America (annual trend = -0.3 [95% CI = -0.8 to 0.2]). American Redstarts are among the more common stopover migrants through Rhode Island during fall, when they are found along the coast in shrub or young forest habitat. Protection of coastal habitats for migrant birds is indicated.

Habitat Community: Oak Forest, Type: Oak Forest

# Status

IUCN Rank: LC. SRANK: S5B. GRANK: G5. Climate Change Vulnerability: Unknown

# **Threats and Actions**

Threat 1 - Residential and commercial development; Fragmentation of forest habitat for key species breeding areas

## Actions: • Land/water protection; Conserve forest habitat especially during key breeding season. Rank: 3

- Land/water management; Manage forest habitat for breeding season. Rank: 3
- Resource and habitat protection. Rank: 3
- Site/area management. Rank: 3
- Education and awareness. Rank: 2

## Threat 2 - Natural system modifications; Loss of stopover habitat during migration

- Actions: Land/water management; Manage for stopover habitat. Rank: 3
  - Land/water protection; Conserve stopover habitat. Rank: 3
  - Resource and habitat protection. Rank: 3

- Site/area management. Rank: 3
- Education and awareness. Rank: 2

Threat 3 - Problematic native species; Deer browsing

Actions: • Site/area management. Rank: 3

Threat 4 - Housing and urban areas; Urbanization

Actions: • Site/area protection. Rank: 3

Refer to the Community: Oak Forest, Type: Oak Forest - Habitat Profile for additional threats to this species.

# Yellow-throated Vireo BIRDS Streo flavifrons Forest Edge Birds Image: Contract of the street of t

# **Distribution & Abundance**

The Yellow-throated Vireo is a long-distance Neotropical migrant whose breeding range includes most of the eastern United States from New England and southern Canada westward to North Dakota and south to the Gulf coast. Wintering is in the Caribbean and Central and northern South America. In Rhode Island, Yellow-throated Vireos prefer to nest at the sharp ecotone between tall deciduous trees and open areas such as agricultural fields or lakes and rivers. This species primarily nests on mainland in Rhode Island, especially in Washington County, but there are a few nesting localities on the large Narragansett Bay islands (esp. Conanicut). This species does not nest on Block Island. Yellow-throated Vireos are not found in high densities with usually no more than one male detected per survey point. Based on Breeding Bird Surveys from 1966-2012, annual trends in New England and Mid-Atlantic States are uncertain, with an annual decline of -0.4 (95CI = -1.4 to 0.7), while throughout eastern North America, BBS trends suggest a gradual annual increase (annual trend = 0.8 [95% CI = 0.5 to 1.0]. This species is rarely encountered during migration in Rhode Island.

Habitat Community: Oak Forest, Type: Oak Forest

# Status

IUCN Rank: LC. FED: FWS. SRANK: S4B,SZN. GRANK: G5. PIF NALCP: Tier II.a. AJV BCR: H. CODES: B. Res/B: 1. REV: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

# Threat 1 - Residential and commercial development; Fragmentation of forest habitat for key species breeding areas

Actions: • Land/water protection; Conserve forest habitat especially during key breeding season. Rank: 3

- Land/water management; Manage forest habitat for breeding season. Rank: 3
- Resource and habitat protection. Rank: 3
- Site/area management. Rank: 3
- Education and awareness. Rank: 2

## Threat 2 - Natural system modifications; Loss of stopover habitat during migration

- Actions: Land/water management; Manage for stopover habitat. Rank: 3
  - Land/water protection; Conserve stopover habitat. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Site/area management. Rank: 3

• Education and awareness. Rank: 2

Threat 3 - Problematic native species; Deer browsing

Actions: • Site/area management. Rank: 3

Threat 4 - Housing and urban areas; Urbanization

Actions: • Site/area protection. Rank: 3

Refer to the Community: Oak Forest, Type: Oak Forest - Habitat Profile for additional threats to this species.

# Northern Goshawk BIRDS Accipiter gentilis Mature Forest Interior Birds

Image: USFWS Karen Laubenstein

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Northern Goshawk is non-migratory, diurnal bird of prey that nests throughout much of sub-boreal North America, from northeastern Canada to Alaska and southward in the Rocky Mountains to central Mexico. Primarily a northern species characteristic of the spruce-fir biome, the Northern Goshawk is a rare resident in Rhode Island. Recently there have been several verified nesting records in the state. Northern Goshawks require large tracts of unfragmented forest, which only occur in western Rhode Island. At present, the Northern Goshawk is a rare and localized nester, with just a few active or suspected territories known. This species is thought to be sensitive to disturbance, so appropriate management consists of routing human activity away from known territories. There are no systematic survey efforts currently focused on forest-dwelling raptors, so a monitoring plan should be developed to monitor the distribution, abundance, habitat associations, and population trends of this rare species.

Habitat Community: Mixed Oak/White Pine Forest

## Status

CITES: II. IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,S1N. GRANK: G5. RSGCN: L-VH. PIF BCPSN: Tier V. CODES: B. Res/B: 1. GRP: 96. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

## Threat 1 - Natural system modifications; Loss of mature forest

- Actions: Site/area management; Maintain mature forest stands. Rank: 3
  - Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Awareness and communications; Education of landowners about appropriate land management . Rank: 2
  - Land/water protection; Need large stands of mature trees. Rank: 3
  - Land/water management; Need large stands of mature trees. Rank: 3
  - Education and awareness; Need large stands of mature trees. Rank: 2

# Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands; includes development and human impacts (ATV, etc.)

Actions: • Site/area protection; Work with state and local non profits and federal partners to conserve suitable habitat. Rank: 3

Refer to the Community: Mixed Oak/White Pine Forest - Habitat Profile for additional threats to this species.

## **Pileated Woodpecker**

Dryocopus pileatus

BIRDS Mature Forest Interior Birds



Image: Brian Wulker

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Pileated Woodpecker is a non-migratory species that occurs throughout North America, but is less common or absent in arid regions of the Great Plains and intermountain West. This species reaches peak densities in the southeastern United States. During the mid-1980s, Pileated Woodpeckers were only detected at a few locations in western Rhode Island. There has been a noticeable increase throughout the State (e.g., Lincoln Woods, Great Swamp). This population increase is related to the continued maturation of Rhode Island forests. Their populations have increased dramatically in New England and the Mid-Atlantic state (annual trend = 4.2 (95% CI = 3.4 to 5.1]) and at a more gradual rate throughout eastern North America (annual trend = 1.8 [95% CI = 1.7 to 2.2]). Pileated Woodpeckers are still localized enough in Rhode Island to warrant some conservation activity, if only expanded monitoring, but this species is increasing in this area and should be secure for the foreseeable future.

Habitat Community: Oak Forest, Type: Oak Forest

# Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,S1N. GRANK: G5. CODES: B. Res/B: 1. GRP: 85. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

## Threat 1 - Natural system modifications; Loss of mature forest

- Actions: Site/area management; Maintain mature forest stands. Rank: 3
  - Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Awareness and communications; Education of landowners about appropriate land management . Rank: 2
  - Land/water management; Need large stands of mature trees. Rank: 3
  - Education and awareness; Need large stands of mature trees. Rank: 2

# Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands; Including development and human impacts

- Actions: Site/area protection; Work with state and local non profits and federal partners to conserve suitable habitat; includes development and human impacts (ATV, etc.). Rank: 3
  - Land/water management. Rank: 2
  - Education and awareness. Rank: 2

Refer to the Community: Oak Forest, Type: Oak Forest - Habitat Profile for additional threats to this species.

# Hairy Woodpecker BIRDS Picoides villosus Mature Forest Interior Birds

#### Image: Peter WC Pator

~See map disclaimer in profiles introduction

#### **Distribution & Abundance**

The Hairy Woodpecker is a non-migratory species that occurs throughout North America and highlands of Central America. In Rhode Island, Hairy Woodpeckers nest in mature deciduous forests east and west of Narragansett Bay and on some larger islands in the Bay. This species exhibits periodic irruptions and can appear in atypical localities (e.g., Block Island, where they do not nest). Hairy Woodpeckers are more common in the rural forests of the state, but can be found in urban areas also. In New England and the Mid-Atlantic States, there is evidence of a gradual decline (annual trend estimate = -0.5 [95% CI = -1.3 to 0.3), whereas their populations appear to be more stable throughout eastern North America (annual trend = 1.1 [95% CI = 0.4 to 1.6]). There is little evidence of a dramatic decline in Rhode Island since the 1980s, but Hairy Woodpeckers are localized enough to warrant additional survey work and conservation scrutiny.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S4B,S4N. GRANK: G5. PIF BCPSN: Tier II A. CODES: B. Res/B: 1. GRP: 91. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

#### **Threats and Actions**

#### Threat 1 - Natural system modifications; Loss of mature forest

Actions: • Site/area management; Maintain mature forest stands. Rank: 3

- Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
- Awareness and communications; Education of landowners about appropriate land management . Rank: 2
- Land/water protection; Need large stands of mature trees. Rank: 3
- Land/water management; Need large stands of mature trees. Rank: 3
- Education and awareness; Need large stands of mature trees. Rank: 2

# Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands; includes development and human impacts (ATV, etc.)

Actions: • Site/area protection; Work with state and local non profits and federal partners to conserve suitable habitat. Rank: 3

# Scarlet Tanager

Piranga olivacea

BIRDS Mature Forest Interior Birds



Image: Carlos Pedro

See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Scarlet Tanager is a long-distance Neotropical migrant whose breeding range extends throughout most of the eastern United States into southern Canada. Wintering occurs in northwestern South America. In Rhode Island, Scarlet Tanagers nest throughout the state, but tend to be rare near the coast, on islands, and in metropolitan areas. Peak nesting densities occur in western Rhode Island along the Connecticut border including Arcadia Management Area, Durfee Hill and George Washington Management Areas, and near the Cumberland Reservoir. Although frequently detected, Scarlet Tanagers nesting densities are sparse, with usually no more than two males detected at point count stations. Scarlet Tanagers typically nest in mature, dry, mixed deciduous-coniferous forests, and are more common in larger habitat patches with taller trees. This species is absent or has poor nesting success in smaller habitat patches, presumably because of cowbird parasitism and predation. Fragmentation of nesting habitat may explain why regional trends suggest a population decline throughout New England and Mid-Atlantic states with a -1.7 annual decline (95% Cl = -1.2 to -2.2), although larger scale trends are less certain across eastern North America (annual trend = 0.2 [95% CI = -0.4 to 0.1]). Scarlet Tanagers are relatively uncommon in Rhode Island during spring and fall migration.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S5B,SZN. GRANK: G5. RSGCN: H-H. PIF NALCP: Tier II.a. PIF BCPSN: Tier I A. AJV BCR: H. CODES: B. Res/B: 1. REV: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of mature forest

Actions: • Site/area management; Maintain mature forest stands. Rank: 3

- Resource and habitat protection; Work with state and local non profits to conserve suitable ٠ habitat. Rank: 3
- Awareness and communications; Education of landowners about appropriate land management. Rank: 2
- Land/water protection; Need large stands of mature trees. Rank: 3
- Land/water management; Need large stands of mature trees. Rank: 3
- Education and awareness; Need large stands of mature trees. Rank: 2

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands; includes development and human impacts (ATV, etc.)

Actions: • Site/area protection; Work with state and local non profits and federal partners to conserve

suitable habitat. Rank: 3

#### Threat 3 - Natural system modifications; Loss of stopover habitat during migration

- Actions: Land/water management; Manage for stopover habitat. Rank: 3
  - Land/water protection; Conserve stopover habitat. Rank: 3

#### **Cerulean Warbler**

BIRDS

Setophaga cerulea

Mature Forest Interior Birds



Image: Carlos Pedro

"See map disclaimer in profiles introductior

# **Distribution & Abundance**

The Cerulean Warbler is a long-distance Neotropical migrant with a limited breeding range in the eastern United States and a narrow wintering range in northwestern South America. The Cerulean Warbler is extirpated as a breeding species in Rhode Island, with the last territorial bird reported in 1995. During mid to late 1980s, singing males were consistently detected in appropriate habitat in the Arcadia Management Area and the Scituate Reservoir Watershed in Foster. Habitats formerly occupied were typically in moist, deciduous forest stands near or along streams in some of the larger unfragmented forests in the State. Territorial Cerulean Warblers were usually detected along roadsides, probably because that is where surveys occurred. Throughout their range, this species is considered area-sensitive and is most likely detected in large forest tracts, which provide critical habitat for other rare species. Therefore identifying and protecting large stands of mature deciduous forest is an appropriate conservation measure for Cerulean Warblers and many other forest-nesting birds. Regional trends are uncertain based on the small number of Breeding Bird Survey Routes in New England and the Mid-Atlantic States where this species nests, with an annual trend estimate of a 3.4% annually from 1966-2012 (95% CI = -6.4 to 14.4), whereas throughout their current breeding range in eastern North American, annual trends suggest a rapidly declining population with a -3.0 annual decline (95% CI - -2.1 to 3.9%). With the retraction of their breeding range, Cerulean Warblers are now extremely rare as stopover migrants in Rhode Island. Since 1995 there have been only six reports of migrants in Rhode Island, five of these during spring and there has not been a valid report since 2006.

Habitat Community: Northern Hardwood Forest, Type: Beech/Sugar Maple/Red Oak Forest

#### Status

STSTAT: SE. SRANK: S1B,S2N. GRANK: G4. RSGCN: H-VH. PIF BCPSN: Tier I B. AJV BCR: M. Climate Change Vulnerability: Unknown

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of mature forest

- Site/area management; Maintain mature forest stands. Rank: 3 Actions: •
  - Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Awareness and communications; Education of landowners about appropriate land management. Rank: 2
  - Land/water protection; Need large stands of mature trees. Rank: 3
  - Land/water management; Need large stands of mature trees. Rank: 3

• Education and awareness; Need large stands of mature trees. Rank: 2

Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands; includes development and human impacts (ATV, etc.)

Actions: • Site/area protection; Work with state and local non profits and federal partners to conserve suitable habitat. Rank: 3

Refer to the Community: Northern Hardwood Forest, Type: Beech/Sugar Maple/Red Oak Forest - Habitat Profile for additional threats to this species.

#### Veery

Catharus fuscescens

BIRDS Forest Interior Understory Birds



Image: Carlos Pedro

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Veery is a long-distance Neotropical migrant whose large breeding range extends from maritime Canada to British Columbia and southward in the Rocky and Appalachian Mountains. Peak breeding concentrations occur in the northeastern United States and in near the Great Lakes. This species winters in northern South America. The Veery nests in mixed deciduous and coniferous forests, usually in moist lowlands with a thick shrub understory. This is one of the most common nesting birds in the interior forests of Rhode Island, but it is nearly absent from islands in Narragansett Bay and does not nest on Block Island. This striking pattern is probably related to habitat fragmentation. Because the Veery is so common and so indicative of habitat condition, it is a useful umbrella species for landscape-scale planning efforts to maintain large core forest areas. Population trend estimates based on BBS suggest a gradual decline in New England and the Mid-Atlantic states (annual trend = -0.8 [95% CI = -1.6 to 0.03), whereas there is a stronger indication of declines throughout eastern North America (annual trend = -0.9 [-0.5 to -1.4]). The Veery is a common coastal migrant in Rhode Island. Although the calls of birds can be detected migrating at night, transient Veeries are cryptic during the day and little is known of migratory habitat use in this area, with the exception of captures at coastal banding stations.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. SRANK: S5B. GRANK: G5. RSGCN: L-H. Climate Change Vulnerability: Unknown

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Loss of mature forest

Actions: • Site/area management; Maintain mature forest stands. Rank: 3

- Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
- Education and awareness; Education of landowners about appropriate land management . Rank: 2

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands

Actions: • Site/area protection; Work with state and local non profits to conserve suitable habitat. Rank: 2

Threat 3 - Human intrusions and disturbance; Loss of stopover habitat

- Actions: Resource and habitat protection. Rank: 3
  - Site/area management. Rank: 3
  - Education and awareness. Rank: 2

# **Acadian Flycatcher**

# BIRDS Forest Interior Understory Birds Empidonax virescens Rare

Image: Carlos Pedro

"See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Acadian Flycatcher is a widespread, long-distance Neotropical migrant that is a locally common breeding species in Rhode Island. Acadian Flycatchers prefer breeding territories in moist deciduous woodlands near streams. Acadian Flycatchers nest east and west of Narragansett Bay in mainland Rhode Island at sites including the Falls River in Arcadia Management Area and the Weetamoo Woods Preserve in Tiverton. Territories are widely spaced, thus only one male is usually detected at a point count station. Based on Breeding Bird Surveys, Acadian Flycatcher populations appear to be stable from 1966-2011 (annual trend = 0.3, (95% CI = -0.2 to 0.9, n = 81 routes)) in New England. Its status seems unchanged since the Breeding Bird Atlas period. Acadian Flycatchers are considered to be area-sensitive and therefore vulnerable to habitat fragmentation, therefore are useful indicators of intact deciduous forest. Acadian Flycatchers are rarely observed as stopover migrants in Rhode Island.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,S1N. GRANK: G5. RSGCN: L-H. PIF NALCP: Tier II.a. CODES: B. Res/B: 1. GRP: 26. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of mature forest

- Actions: Site/area management; Maintain mature forest stands. Rank: 3
  - Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management. Rank: 2

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands

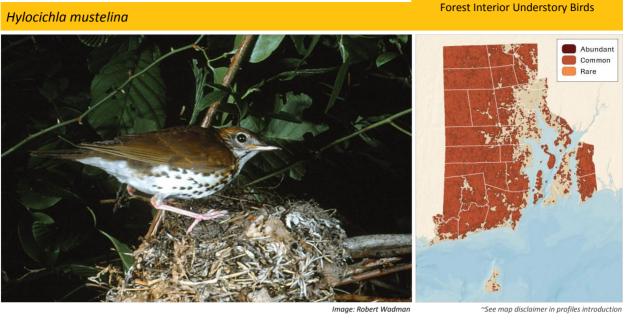
Actions: • Site/area protection; Work with state and local non profits to conserve suitable habitat. Rank: 2

#### Threat 3 - Human intrusions and disturbance; Loss of stopover habitat

- Actions: Resource and habitat protection. Rank: 3
  - Site/area management. Rank: 3
  - Education and awareness. Rank: 2

# Wood Thrush

BIRDS



# **Distribution & Abundance**

The Wood Thrush is a long-distance Neotropical migrant whose breeding range includes most of the eastern continental United States and southeastern Canada. The wintering range is in lowland areas of Central America. In Rhode Island, the Wood Thrush is a widespread and locally common nesting species. It is scarce in the highlands of northwestern Rhode Island, occurs in greatest numbers at lower elevations but is not found along the immediate coast and only sparingly on the Narragansett Bay islands. It does not nest on Block Island. Wood Thrushes are locally common in Rhode Island and there are places where four or five males can be detected per sample point. Their preferred nesting habitat is moist deciduous or mixed. Nevertheless, this species is sensitive to habitat fragmentation and is a useful indicator of intact forested habitats. BBS annual trends from 1966-2012 suggest this species is declining throughout their breeding range, with annual decline of -2.8 (95% CI = -2.4 to =3.1) in New England and Mid-Atlantic states, and an annual decline of -2.2 (95% CI = -2.0 to -2.3) in eastern North America. Like most passerines that migrate nocturnally to the Neotropics, Wood Thrushes are not commonly detected as stopover migrants and it is difficult to assess their habitat needs at those seasons.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S5B,SZN. GRANK: G5. RSGCN: H-VH. NALCC: X (B). PIF NALCP: Tier I. PIF BCPSN: Tier I A. AJV BCR: HH. CODES: B. Res/B: 1. GRP: 101. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Loss of mature forest

- Actions: Site/area management; Maintain mature forest stands. Rank: 3
  - Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands

Actions: • Site/area protection; Work with state and local non profits to conserve suitable habitat. Rank: 2

#### Threat 3 - Human intrusions and disturbance; Loss of stopover habitat

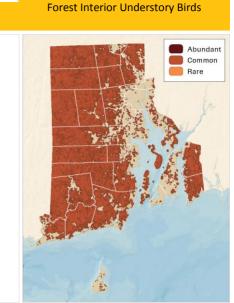
- Actions: Resource and habitat protection. Rank: 3
  - Site/area management. Rank: 3

• Education and awareness. Rank: 2

#### Black-and-white Warbler

Mniotilta varia





BIRDS

Image: Jay Osenkowski

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Black-and-white Warbler is a long-distance migrant whose large breeding range includes much of eastern North America, extending from the Canadian Maritime Provinces westward to British Columbia and southward in the Appalachian Mountains and Midwest to the Gulf states. However, the densest nesting populations are in the Northeast and the upper Midwest. The wintering range is also extensive and includes much of Central and northern South America, with some individuals wintering in North America. In Rhode Island the Black-and-white Warbler is a widespread nesting species that is by far more common in western Rhode Island than elsewhere. Black-and-white Warblers prefer deciduous forests with thick shrub understory and ample leaf litter. Black-andwhite Warblers reach their peak abundance in the hilly terrain of southwestern Rhode Island adjacent to the Connecticut border near Ell and Blue Ponds. This area also supports the highest nesting densities of Hooded Warblers. Based on Breeding Bird Surveys from 1966-2011, their populations are experiencing a significant decline in New England and Mid-Atlantic states (annual trend = -3.2 [95% CI = -2.3 to -4.2]), and a nonsignificant decline in eastern North America (annual trend = -0.5 [95% CI = -1.2 to 0.1]). This species is thought to be sensitive to forest fragmentation, a premises supported by its differential abundance in western Rhode Island. Therefore, this species could be a useful umbrella species in landscape planning designed to protect cores of forested habitat. Black-and-white Warblers are moderately common during migration, when they tend to occur in coastal thickets during fall.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S5B,SZN. GRANK: G5. RSGCN: L-H. PIF NALCP: Tier II.a. PIF BCPSN: Tier II A. AJV BCR: H. CODES: B. Res/B: 1. GRP: 19. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of mature forest

- Actions: Site/area management; Maintain mature forest stands. Rank: 3
  - Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands

Actions: • Site/area protection; Work with state and local non profits to conserve suitable habitat. Rank: 2

Threat 3 - Human intrusions and disturbance; Loss of stopover habitat

- Actions: Resource and habitat protection. Rank: 3
  - Site/area management. Rank: 3
  - Education and awareness. Rank: 2

# 

# **Distribution & Abundance**

The Black-throated Blue Warbler is a long-distance migrant whose small breeding range extends from the Canadian Maritime Provinces westward to Minnesota and southward though the Appalachian Mountains to Georgia. This species winters in the Caribbean and eastern Central America. This shrub-obligate species prefers to nest in forest stands where downed trees or selective logging have created openings that allow a dense shrub understory (i.e., Mountain Laurel and Spicebush) to develop. Breeding Bird Survey trend estimates in New England and Mid-Atlantic states suggest a non-significant population decline (annual trend = -0.6 [95% CI = -3.1 to 2.0]), whereas the trend estimate for eastern North America suggests an increasing population (annual trend = 2.4 (95% CI = 1.6 to 3.3). The Black-throated Blue Warbler is one of Rhode Island's rarest and most localized nesting species, with the entire population found near Sprague Hill (600' asl) in Gloucester. Territorial Black-throated Blue Warblers indicate high- quality forest habitat that are shared by other shrub-obligate species (e.g., Chestnut-sided Warbler). Because this species nests at higher elevations in New England, global climate change could accentuate a northward migration of its breeding range. The habitat quality in the core of its Rhode Island distribution is presently suitable, but eventually some selective cutting will be necessary to create other forest openings and regenerate the shrub understory. Black-throated Blue Warblers are moderately common as stopover migrants, especially during fall in coastal thickets.

Habitat Community: Northern Hardwood Forest

#### Status

FED: FWS. STSTAT: ST. SRANK: S1B,S3N. GRANK: G5. STATE: E-1(3-5). RSGCN: L-H. PIF BCPSN: Tier I B. CODES: B. Res/B: 1. GRP: 113. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of mature forest

- Actions: Site/area management; Maintain mature forest stands. Rank: 3
  - Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands

Actions: • Site/area protection; Work with state and local non profits to conserve suitable habitat. Rank: 2

#### Threat 3 - Human intrusions and disturbance; Loss of stopover habitat

Actions: • Resource and habitat protection. Rank: 3

- Site/area management. Rank: 3
- Education and awareness. Rank: 2

Refer to the Community: Northern Hardwood Forest - Habitat Profile for additional threats to this species.

# **Hooded Warbler**

Setophaga citrina

BIRDS Forest Interior Understory Birds



Image: Carlos Pedro

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Hooded Warbler is a long-distance migrant that nest throughout the eastern United States from southern New England westward to the Great Lakes and then southward to the Gulf of Mexico. The wintering range is somewhat limited in eastern Central America and certain Caribbean islands. Hooded Warblers are near the northern edge of their breeding range in Rhode Island. They occur throughout mainland areas, but are most common in southwestern Rhode Island in Hopkinton near Blue and Ell Ponds where counts of breeding males can exceed four males per survey point. Hooded Warblers nest in forests that contain dense understory vegetation, usually Mountain Laurel, Rhododendron and Spicebush. Breeding Bird Surveys from 1966-2011 suggest a non-significant decline for nesting populations in New England and Mid-Atlantic states (annual trend = -0.6 [95% CI = -1.9 to 0.5]), but a stable population throughout eastern North America (annual trend = 1.7 [95% CI = 1.2 to 2.3]). Hooded Warblers are sensitive to forest fragmentation, a premise supported by its differential abundance in western Rhode Island. Because of this habitat preference and they co-occur with other priority nesting birds, the Hooded Warbler is a useful umbrella species with which to develop landscape-scale plans that protect core forest areas. Hooded Warblers are rarely encountered as stopover migrants in Rhode Island.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S3B,SZN. GRANK: G5. RSGCN: L-H. CODES: B. Res/B: 1. GRP: 39. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of mature forest

- Actions: Site/area management; Maintain mature forest stands. Rank: 3
  - Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands

Actions: • Site/area protection; Work with state and local non profits to conserve suitable habitat. Rank: 2

#### Threat 3 - Human intrusions and disturbance; Loss of stopover habitat

- Actions: Resource and habitat protection. Rank: 3
  - Site/area management. Rank: 3

• Education and awareness. Rank: 2

# Least Flycatcher

BIRDS Forest Interior Conifer Birds Empidonax minimus Rare



Image: Carlos Pedro

"See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Least Flycatcher is a widespread long-distance migrant whose breeding range extends throughout boreal forests of southern Canada from New Brunswick to British Columbia and south through Appalachian Mountains to Georgia. This species winters throughout lowland areas of Central America. The Least Flycatcher is a habitat specialist that is locally uncommon in western Rhode Island, with 1-2 pairs occupying mature stands of White Pine that have an open understory. Based on BBS annual trend estimates from 1966-2011, breeding populations throughout New England and Mid-Atlantic states are declining rapidly (-5.8% annual decline [95% CI = -4.8 to -6.9]), as well as throughout eastern North America (-2.1 annual decline [95% CI = -1.6 to -2.6]). Least Flycatchers are sensitive to habitat fragmentation, so landscape-scale planning efforts should retain large forest patches of tall White Pine. Other rare breeding species in Rhode Island that specialize in tall White Pine forests include Blackburnian Warbler and Yellow-rumped Warbler. Least Flycatchers are only rarely reported in migration in Rhode Island, usually along the coast during fall.

Habitat Community: Mixed Oak/White Pine Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S3B,SZN. GRANK: G5. CODES: B. Res/B: 1. GRP: 69. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of mature forest

Actions: • Site/area management; Maintain mature forest stands. Rank: 3

- Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2
  - Land/water protection. Rank: 3
- Land/water management. Rank: 3

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands

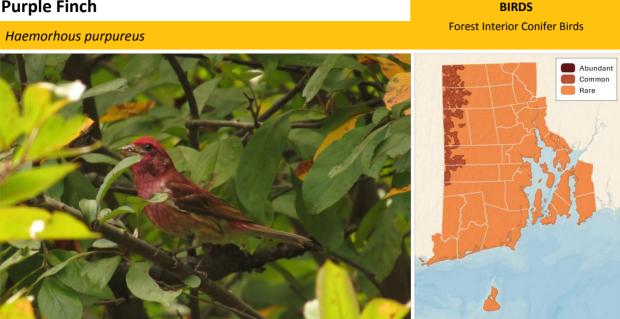
Actions: • Site/area protection; Work with state and local non profits to conserve suitable habitat. Rank: 3

#### Threat 3 - Residential and commercial development; Loss of stopover habitat

- Actions: Land/water protection. Rank: 3
  - Land/water management. Rank: 3

Refer to the Community: Mixed Oak/White Pine Forest - Habitat Profile for additional threats to this species.

# **Purple Finch**



Imaae: Brian Wulke

See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Purple Finch has a short-distance Nearctic migrant that nests from Maritime Canada across sub-boreal North America to the Pacific Coast and southward in the coastal mountain ranges. This species winters in the eastern United States. It is apparently more common in eastern Canada and the west coast than elsewhere in its range. In the mid-1980s, Purple Finches were apparently declining but were still widespread across Rhode Island. Recent surveys suggests this species continues to decline in the State. This agrees with regional trends; in New England and Mid-Atlantic states the species is exhibiting a rapid decline (annual trend = -6.5 [95% CI = -4.9 to -6.1]}, whereas the rate of decline is less steep throughout eastern North America (annual trend = -1.4 [95% CI = -0.8 to -2.2]). In Rhode Island, Purple Finches nest primarily in western Rhode Island in large stands of mature conifers, including White Pine and Eastern Hemlock. Purple Finches are near the southern edge of their breeding range in this area in Rhode Island, so climate change may lead to a northward retraction. Purple Finches display periodic irruptions and can be fairly common during fall migration and winter at feeders. In the spring, flocks can be found eating birch catkins in deciduous woods. Despite the irregular fluctuations shown by this species, significant counts of birds at any season have been rare for at least 15 years. Conservation actions include protecting and monitoring larger stands of White Pines and Eastern Hemlocks as prime nesting habitat.

Habitat Community: Mixed Oak/White Pine Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S3B,SZN. GRANK: G5. PIF BCPSN: Tier II A. CODES: B. Res/B: 1. GRP: 11. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

#### Threats and Actions

#### Threat 1 - Natural system modifications; Loss of mature forest

- Actions: Site/area management; Maintain mature forest stands. Rank: 3
  - Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management. Rank: 2
  - Land/water protection. Rank: 3
  - Land/water management. Rank: 3

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands

Actions: • Site/area protection; Work with state and local non profits to conserve suitable habitat. Rank: 3

Threat 3 - Residential and commercial development; Loss of stopover habitat

- Actions: Land/water protection. Rank: 3
  - Land/water management. Rank: 3

Refer to the Community: Mixed Oak/White Pine Forest - Habitat Profile for additional threats to this species.



Image: Peter WC Paton

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Yellow-rumped Warbler is widespread Nearctic and Neotropical migrant, whose breeding distribution encompasses most of the sub-arctic region of North America and much of the western United States. This species winters in the southern United States and in Central America and the Caribbean. In Rhode Island this species is a rare breeding resident that only occurs in the western mainland. Their preferred nesting habitat is the tallest trees in stands of mature White Pine (e.g., Arcadia, Buck Hill and George Washington Management Areas), which are also utilized by other locally rare nesting birds. Usually only 1-2 singing males are detected per survey point. Stands of suitable nesting trees are rare and many have been degraded because of recent hurricane blow-down and disease. Breeding Bird Surveys from 1966-2011 suggest a non-significant population trends, with New England and Mid-Atlantic states showing an increase (annual trend = 1.0 [95% CI = -1.2 to 3.4]) and a similar non-significant trend in eastern North America (annual trend = 0.68 [95% CI = -0.5 to 1.6]). As a migrant the Yellow-rumped Warbler is an iconic, sometimes abundant inhabitant of coastal shrub thickets. However Christmas Bird Counts and other local surveys show that this species has been declining for many years. Appropriate conservation actions include mapping and protection of stands of mature White Pine, landscape planning that protects these in larger tracts of forest, and preservation and management of coastal scrub habitat, especially bayberry.

Habitat Community: Mixed Oak/White Pine Forest

#### Status

FED: FWS. SRANK: S2B,SZN. GRANK: G5. CODES: B. Res/B: 1. GRP: 111. PRIOR: 1. Climate Change Vulnerability: Unknown

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of mature forest

- Actions: Site/area management; Maintain mature forest stands. Rank: 3
  - Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2
  - Land/water protection. Rank: 3
  - Land/water management. Rank: 3

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands

Actions: • Site/area protection; Work with state and local non profits to conserve suitable habitat. Rank: 3

#### Threat 3 - Residential and commercial development; Loss of stopover habitat

- Actions: Land/water protection. Rank: 3
  - Land/water management. Rank: 3

Refer to the Community: Mixed Oak/White Pine Forest - Habitat Profile for additional threats to this species.

#### **Blackburnian Warbler**

#### BIRDS

Setophaga fusca

Forest Interior Conifer Birds



Image: Carlos Pedro

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Blackburnian Warbler is a long-distance migrant whose breeding range extends in a narrow band from the Canadian Maritime Provinces westward to Alberta and southward in the Appalachian Mountains to Georgia. This species winters in northwestern South America. In Rhode Island, this rare nesting species specializes in tall stands of mature White Pine in western sections of the State, but also is detected in Eastern Hemlock and other species of conifers. Suitable nesting habitat is rare in Rhode Island and may have been degraded because of recent hurricane blow-down and disease. Usually only solitary males are detected at survey points in suitable habitat. Blackburnian Warblers formerly occupied forest stands in Arcadia and George Washington Management Areas, and the Scituate Reservoir watershed, but these sites have not been surveyed recently and present occupancy is unknown. The Blackburnian Warbler is one of several species found exclusively in this habitat. Population trend estimates are uncertain in the region, with Breeding Bird Survey trend estimates in New England and Mid-Atlantic states suggesting a non-significant decline (annual trend = -1.8 [95% CI = -5.2 to (1.7) and a stable population throughout eastern North America (annual trend = 0.6 [95% = -0.34 to (1.5)]. Timber cutting rotations in Rhode Island are typically not long enough to maintain the mature stands used by this species, and deforestation of its winter habitat is also occurring. In Rhode Island, appropriate conservation actions include resurveying birds in former habitats, identifying high-quality suitable habitats, and incorporating this information into landscape planning to reduce the effects of habitat loss and fragmentation. This species is an uncommon migrant in Rhode Island.

Habitat Community: Mixed Oak/White Pine Forest

#### Status

FED: FWS. STSTAT: ST. SRANK: S1B,S1N. GRANK: G5. RSGCN: L-H. PIF NALCP: Tier II.c. PIF BCPSN: Tier II C. AJV BCR: M. CODES: B. Res/B: 1. GRP: 44. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of mature forest

Actions: • Site/area management; Maintain mature forest stands. Rank: 3

- Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
- Education and awareness; Education of landowners about appropriate land management . Rank: 2
- Land/water protection. Rank: 3
- Land/water management. Rank: 3

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands

Actions: • Site/area protection; Work with state and local non profits to conserve suitable habitat. Rank: 3

#### Threat 3 - Residential and commercial development; Loss of stopover habitat

- Actions: Land/water protection. Rank: 3
  - Land/water management. Rank: 3

Refer to the Community: Mixed Oak/White Pine Forest - Habitat Profile for additional threats to this species.

#### **Blue-headed Vireo**

#### Vireo solitarius

BIRDS Forest Interior Conifer Birds



Image: Carlos Pedro

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Blue-headed Vireo is a long-distance Neotropical migrant whose extensive breeding range extends from maritime Canada westward to Saskatchewan and southward in the Appalachian Mountains to Georgia. The wintering range is relatively broad and extends from the coastal plain of North Carolina southward through Central America. Based on BBS routes from 1966-2012, the status of Blue-headed Vireo breeding populations are uncertain in New England and Mid-Atlantic state (annual trend = 0.98; 95% Cl = -1.1 to 2.9, whereas their population appears to be increasing in eastern North America (annual trend = 3.7 [95% CI = 2.6 to 4.5]). The extensive breeding range and lack of significant declines range-wide suggest that this species is not a high priority for regional conservation. However, this species is extremely localized in Rhode Island and is a habitat specialist that utilizes an unusual vegetation type. Blue-headed Vireos only nest in western Rhode Island in mature stands of coniferous trees, usually White Pine but also Eastern Hemlock and other coniferous species. This species is localized and uncommon, recorded usually as a single bird per survey point. It reaches modest densities only in the Arcadia and Buck Hill Management Areas. While probably not threatened regionally, in this area the Blue-headed Vireo is part of a cohort of species that use mature conifer stands. No specific conservation is indicated except to protect existing habitat and prevent additional fragmentation of habitat patches. Blue-headed Vireos are moderately common as stopover migrants and tend to occur during fall in coastal thickets.

Habitat Community: Mixed Oak/White Pine Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S3B,SZN. GRANK: G5. CODES: B. Res/B: 1. REV: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of mature forest

- Actions: Site/area management; Maintain mature forest stands. Rank: 3
  - Resource and habitat protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2
  - Land/water protection. Rank: 3
  - Land/water management. Rank: 3

#### Threat 2 - Housing and urban areas; Impacts of urbanization on mature stands

Actions: • Site/area protection; Work with state and local non profits to conserve suitable habitat. Rank: 3

Threat 3 - Residential and commercial development; Loss of stopover habitat

- Actions: Land/water protection. Rank: 3
  - Land/water management. Rank: 3

Refer to the Community: Mixed Oak/White Pine Forest - Habitat Profile for additional threats to this species.

#### **Canada Warbler**

**BIRDS** Forest Interior Wetlands Birds

Cardellina canadensis



Image: Carlos Pedro

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Canada Warbler is a long-distance migrant whose breeding range in the sub-arctic extends from the Canadian Maritimes westward to Saskatchewan and southward along the Appalachian Mountains to Georgia. The wintering range is in South America. In Rhode Island, Canada Warblers are shy and cryptic residents of deep forested wetlands that feature a thick understory of Spicebush, Mountain Laurel and other shrubs, with scattered hummocks of Sphagnum and sedges. Because Canada Warblers nest in inaccessible habitats, they are not well-covered by past point count surveys. They nest primarily in the western mainland and may be more common in southwestern and northwestern Rhode Island where large swamp basins occur (e.g. Great Swamp probably contain the largest breeding population in the State). Based on Breeding Bird Surveys from 1966-2011, their populations have declined in New England and the Mid-Atlantic States (annual trend = -5.7 [95% CI = -2.7 to -8.1] and throughout eastern NA (annual trend = -2.2 [95% CI = -1.4 to -3.2]). Canada Warblers are considered to be area-sensitive with respect to patch size of breeding habitat (Miller). Forest maturation that reduces understory cover may diminish nesting habitat quality. Beaver activity may also reduce nesting habitat quality. Canada Warblers are probably secure only in the largest forested wetland complexes in Rhode Island, therefore this species a useful umbrella species around which to plan the preservation of large cores of forested wetlands. Canada Warblers are rarely encountered as stopover migrants in Rhode Island.

Habitat Community: Forested Swamp, Type: Red Maple Swamp

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S4B,SZN. GRANK: G5. RSGCN: L-VH. PIF NALCP: Tier !. PIF BCPSN: Tier II C. AJV BCR: M. CODES: B. Res/B: 1. GRP: 29. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Residential and commercial development; Loss of breeding and stopover habitats

- Actions: Resource and habitat protection. Rank: 3
  - Land/water management; Manage forest habitat for breeding season. Rank: 3
  - Site/area management. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Agriculture and aquaculture; Loss of breeding and stopover habitats

- Actions: Land/water protection; Manage for shrub stopover habitat. Rank: 3
  - Land/water management; Conserve stopover habitat. Rank: 3
    - Education and awareness. Rank: 2

#### Threat 3 - Pollution; Habitat degradation from impairment of water quality

- Actions: Data collection and analysis; Assess effects of sedimentation. Rank: 2
  - Data collection and analysis; Assess effects of stream bank disturbance. Rank: 2
  - Data collection and analysis; Assess effects of water withdrawals. Rank: 2
  - Data collection and analysis; Evaluate water quality effects on priority species. Rank: 2
  - Planning; Develop strategies to mitigate aquatic degradation. Rank: 2

#### Threat 4 - Housing and urban areas; Impacts of urbanization

- Actions: Site/area protection. Rank: 3
  - Resource and habitat protection. Rank: 3

Refer to the Community: Forested Swamp, Type: Red Maple Swamp - Habitat Profile for additional threats to this species.

# <image>

# **Distribution & Abundance**

The Northern Waterthrush is a long-distance migrant whose vast breeding range extends from Newfoundland westward to Alaska. This species winters in Central America, the Caribbean and northern South America. In Rhode Island, they nest primarily in the western mainland and may be more common in southwestern and northwestern Rhode Island than elsewhere. The Northern Waterthrush specializes in nesting in closed-canopy deciduous or coniferous forested wetlands that have a dense understory of Spicebush, Mountain Laurel and other shrubs, with scattered hummocks of Sphagnum and sedges. Based on Breeding Bird Surveys from 1966 to 2011, population trends are uncertain, with a non-significant decline in New England and Mid-Atlantic states (annual trend = -0.98 [95% CI =-3.2 to 1.3]), and a non-significant increase in eastern North America (annual trend = 0.93 [95% CI = -0.16 to 1.9]). Because Northern Waterthrush nest in inaccessible habitats, few point count surveys were conducted in suitable habitat, although their loud ringing song enhanced detection probabilities. Northern Waterthrushes co-occur with Canada Warblers and are also considered area-sensitive with respect to breeding patch size (Miller year). Beaver activity can make forested wetlands unsuitable for this species. Because the Northern Waterthrush is area sensitive, this species is expected to be secure only in the largest forested wetland complexes in the state (e.g., Great Swamp), therefore this species a useful umbrella species around which to plan the preservation of large cores of forested wetlands. Northern Waterthrush have a prolonged migration, especially in fall, and are moderately common as stopover migrants in Rhode Island, where they are encountered they are in coastal thickets.

Habitat Community: Forested Swamp, Type: Red Maple Swamp

#### Status

FED: FWS. SRANK: S4B,SZN. GRANK: G5. NALCC: X (B). CODES: B. Res/B: 1. GRP: 7. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Residential and commercial development; Loss of breeding and stopover habitats

- Actions: Land/water protection; Conserve forest habitat especially during key breeding season. Rank: 3
  - Land/water management; Manage forest habitat for breeding and stopover season. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Site/area management. Rank: 3
  - Education and awareness. Rank: 2

Threat 2 - Natural system modifications; Loss of shrub stopover habitat during migration and loss of breeding habitat

- Actions: Land/water management; Manage for shrub stopover habitat. Rank: 3
  - Land/water protection; Conserve stopover habitat. Rank: 3
    - *Resource and habitat protection. Rank: 3*
    - Education and awareness. Rank: 2

#### Threat 3 - Pollution; Habitat degradation from impairment of water quality

- Actions: Data collection and analysis; Assess effects of sedimentation. Rank: 2
  - Data collection and analysis; Assess effects of stream bank disturbance. Rank: 2
  - Data collection and analysis; Assess effects of stream bank disturbance. Rank: 2
  - Data collection and analysis; Assess effects of water withdrawals. Rank: 2
  - Data collection and analysis; Evaluate water quality effects on priority species. Rank: 2
  - Planning; Develop strategies to mitigate aquatic degradation. Rank: 2

#### Threat 4 - Residential and commercial development; Impacts of urbanization

- Actions: Site/area protection. Rank: 3
  - Resource and habitat protection. Rank: 3

Refer to the Community: Forested Swamp, Type: Red Maple Swamp - Habitat Profile for additional threats to this species.

#### **Prothonotary Warbler**

#### BIRDS

Protonotaria citrea

Forest Interior Wetlands Birds



Image: Robert Wadma

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Prothonotary Warbler nests throughout the southeastern United States and winters across eastern Central America and northwestern South America. This species is a beautiful and iconic denizen of swamps and floodplains of the southern United States, and their nesting habitat in Rhode Island is mature deciduous forests along river floodplains. This species range has been gradually expanding northeastward for several decades and was first documented nesting in Rhode Island during 1994. A small nesting population occurs within the Great Swamp, but lately there have been signs of continued range expansion. Based on Breeding Bird Surveys, the population trends for Prothonotary Warbler are non-significant in New England and Mid-Atlantic states (annual trend = 0.1 [95% CI = -1.0 to 1.2]), but interestingly this species is declining throughout eastern North America (annual trend = -0.9 [95% - -0.4 to -1.4]). Their preferred nesting habitat also supports dense concentrations of other high-priority GCN nesting birds, including the Veery and American Redstart. Therefore, the Prothonotary Warbler is a useful indicator species in identification of high quality forested wetland habitat. Prothonotary Warblers are rare as stopover migrants during both spring and fall migration.

Habitat Community: Forested Swamp, Type: Red Maple Swamp

#### Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,S1N. GRANK: G5. STATE: E-1(3-5). RSGCN: L-VH. AJV BCR: H. CODES: B. Res/B: 1. GRP: 32. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Fragmentation of suitable nesting and breeding habitats

Actions: • Land/water management; Conserve wet mature forest habitat. Rank: 3

- Resource and habitat protection. Rank: 3
- Land/water protection. Rank: 3
- Site/area management. Rank: 3
- Education and awareness. Rank: 2

#### Threat 2 - Residential and commercial development; Loss of breeding and stopover habitats

Actions: • Land/water protection. Rank: 3

- Land/water management. Rank: 3
- Education and awareness. Rank: 2

#### Threat 3 - Pollution; Habitat degradation from impairment of water quality

Actions: • Data collection and analysis; Assess effects of sedimentation. Rank: 2

- Data collection and analysis; Assess effects of stream bank disturbance. Rank: 2
- Data collection and analysis; Evaluate water quality effects on priority species. Rank: 2
- Planning; Develop strategies to mitigate aquatic degradation. Rank: 2

#### Threat 4 - Housing and urban areas; Impacts of urbanization

- Actions: Site/area protection. Rank: 3
  - Resource and habitat protection. Rank: 3

Refer to the Community: Forested Swamp, Type: Red Maple Swamp - Habitat Profile for additional threats to this species.

# **Northern Parula**

**BIRDS** Forest Interior Wetlands Birds

Setophaga americana

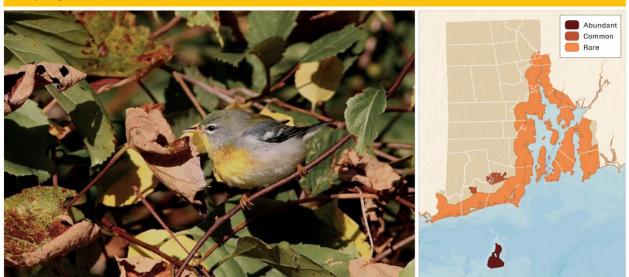


Image: Carlos Pedro

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Northern Parula is a long-distance migrant that breeds throughout the eastern United States and southern Canada. Within this range, large areas no longer support breeding birds, and the highest concentrations now occur in the Northeast and the southeastern US. The winter range is in Central America and the Caribbean. In Rhode Island, the Northern Parula was thought to be extirpated as a local breeder in the mid-1900s, until rediscovered during the Bird Atlas Project in the mid-1980's (Enser 1992). This species specializes in forested swamps or bottomland hardwood forests dominated by mature, large trees covered with epiphytes. In the Northeast, the primary nesting material is a pendulous species of Usnea lichen that were formerly eliminated from many forests due to air pollution. The Northern Parula is therefore an indicator species of high quality deciduous swamp habitats. Based on BBS trend estimates from 1966-2011, populations appear to be stable in New England and the Mid-Atlantic states (annual trend = 0.98 [95% CI = 0.06 to 1.9]) and across eastern North America (annual trend = 1.2 [95% CI = 0.7 to 1.6]). In Rhode Island, the nesting population also seems stable, with the State's entire population occupying two protected swamps in Charlestown and South Kingstown. No specific conservation strategy is indicated, but for recognition of their specialized habitat preferences and prevention of the loss or fragmentation of these swamps. The Northern Parula is sometimes common as a stopover migrant and can be regularly found during fall in coastal thickets.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. STSTAT: ST. SRANK: S1B,S1N. GRANK: G5. STATE: E-1(3-5). RSGCN: L-H. PIF BCPSN: Tier V. CODES: B. Res/B: 1. GRP: 24. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of breeding and stopover habitats

Actions: • Site/area management; Maintain mature forest stands. Rank: 3

- Resource and habitat protection; Work with state and local non profits and federal entities to conserve suitable habitat. Rank: 3
- Education and awareness; Education of landowners about appropriate land management . Rank: 2
- Land/water protection. Rank: 3
- Land/water management. Rank: 3

#### Threat 2 - Residential and commercial development; Loss of breeding and stopover habitats

Actions: • Land/water protection. Rank: 3

- Land/water management. Rank: 3
- Education and awareness. Rank: 2

#### Threat 3 - Pollution; Habitat degradation from impairment of water quality

- Actions: Data collection and analysis; Assess effects of sedimentation. Rank: 2
  - Data collection and analysis; Assess effects of stream bank disturbance. Rank: 2
  - Data collection and analysis; Assess effects of water withdrawals. Rank: 2
  - Data collection and analysis; Evaluate water quality effects on priority species. Rank: 2
  - Planning; Develop strategies to mitigate aquatic degradation. Rank: 2

#### Threat 4 - Housing and urban areas; Impacts of urbanization

- Actions: Site/area protection. Rank: 3
  - Resource and habitat protection. Rank: 3

#### **Freshwater Waterfowl**

**BIRDS** 

#### Description

Rhode Island has many ponds, most of which have been created by impounding rivers and streams. However, it has long been noted that few ponds support dense and diverse populations of waterfowl and other birds, while most do not. Although pond habitat quality has not been extensively studied in Rhode Island with respect to most bird species, it is likely that some part of their value to wildlife is due to the types and quantity of aquatic vegetation. Additional research and delineation of the ponds most important to waterfowl and other birds is desirable.

#### **Species**

Wood Duck (Aix sponsa) Northern Pintail (Anas acuta) American Wigeon (Anas americana) Canada Goose - Atlantic Population (Branta canadensis) Canada Goose - North Atlantic Population (Branta canadensis) Hooded Merganser (Lophodytes cucullatus) Ruddy Duck (Oxyura jamaicensis)

# Wood Duck

Aix sponsa

BIRDS Freshwater Waterfowl



Image: Carlos Pedro

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Wood Duck nests throughout forested regions of the eastern and western United States, with some migratory individuals nesting in southern Canada. This species winters throughout much of the eastern and western US, and into southern Mexico. In Rhode Island, this species primarily occurs from late-February to mid-November, with a pulse of migrants from mid-March to early May in spring and mid-September to mid-October in the fall. This species primarily nests in artificial nest boxes in Rhode Island which have been erected throughout the state in a variety of freshwater ponds, lakes, and rivers by RI Division of Fish and Wildlife. During the 1982-87 breeding bird atlas project, this species was widespread across the state, including Block Island and urbanized areas in the Blackstone and Pawtuxet River valleys (61 grid cells, 34 cells confirmed; Enser 1992). Conservation concerns previously were the lack of suitable nest sites, but with forest maturation more natural cavities are now available. Although some wood ducks are harvested in RI, their harvest levels are probably sustainable for this fast, secretive species. Management actions include maintaining nest boxes throughout the state and using adaptive management to assess the impact of harvest on current populations.

Habitat Community: Forested Swamp, Type: Red Maple Swamp

#### Status

IUCN Rank: LC. SRANK: S4B,S4N. GRANK: G5. AJV BCR: M. Climate Change Vulnerability: Unknown (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Residential and commercial development; Loss and disturbance of habitat

Actions: • Site/area management; Minimize disturbance to habitat or maximize drawdown and impoundment management. Rank: 3

#### Threat 2 - Recreational activities; Disturbance to habitat due to human activities

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Private sector standards and codes; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 1

#### Threat 3 - Natural system modifications; Habitat degradation

- Actions: Invasive/problematic species control; Phragmites control. Rank: 2
  - Site/area management; Water quality improvement; Maximize drawdown and impoundment management. Rank: 3
    - Policies and regulations; Improve water quality standards. Rank: 3

#### Threat 4 - Habitat shifting and alteration; Loss of foraging and nesting habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of foraging and nesting habitat. Rank: 3

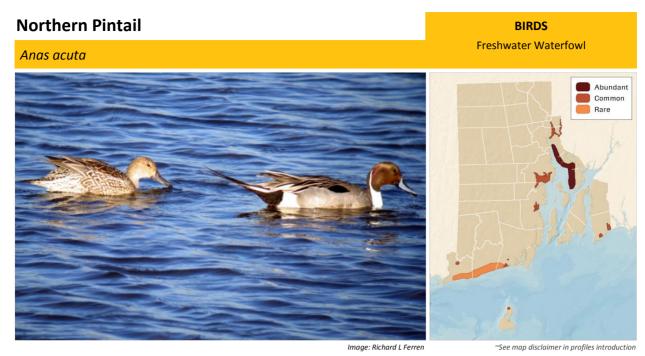
#### Threat 5 - Household sewage and urban waste water

- Actions: Policies and regulations. Rank: 3
  - Land/water protection. Rank: 3
  - Education and awareness. Rank: 2

#### **Threat 6 - Lack of information**

Actions: • Data collection and analysis. Rank: 3

Refer to the Community: Forested Swamp, Type: Red Maple Swamp - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Northern Pintail nests throughout the Prairie Pothole Region (PPR), northwestern Canada, Alaska, and parts of eastern Canada. This species winters throughout the southern US and south to northwestern South America. Some birds also winter as far north as Massachusetts and central British Columbia. This species population has been below the long-term average (~5.8 million birds) since 1980 (www.flyway.us). In Rhode Island, this uncommon species is primarily detected in coastal ponds along the southern coast, in Upper Narragansett Bay, and at a few interior lakes and ponds. Pintails occur in the winter months from early September to late-April. The number of migrants passing through the state peaks from October-November and during March. Conservation concerns primarily are focused on breeding habitat conditions in the PPR. However, disturbance to foraging sites on their wintering grounds is the most relevant issue in Rhode Island, as well as harvest levels in the Atlantic Flyway. Management actions include minimizing disturbance at coastal wintering sites, and insuring long-term adaptive management for harvest levels.

Habitat Community: Lake, Type: Shallow

#### Status

SRANK: SNA. GRANK: G5. AJV BCR: M. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Residential and commercial development; Loss and disturbance of habitat

Actions: • Site/area management; Minimize disturbance to habitat. Rank: 3

#### Threat 2 - Recreational activities; Disturbance to habitat due to human activities

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Private sector standards and codes; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 1

#### Threat 3 - Natural system modifications; Habitat degradation

- Actions: Invasive/problematic species control; Phragmites control. Rank: 2
  - Site/area management; Water quality improvement. Rank: 2
  - Policies and regulations; Improve water quality standards. Rank: 3

#### Threat 4 - Habitat shifting and alteration; Loss of foraging and nesting habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of foraging and nesting habitat. Rank: 3

#### Threat 5 - Household sewage and urban waste water

- Actions: Policies and regulations. Rank: 3
  - Land/water protection. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 6 - Lack of information

Actions: • Data collection and analysis. Rank: 3

Refer to the Community: Lake, Type: Shallow - Habitat Profile for additional threats to this species.

# 

Image: Carlos Pedro

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The American Wigeon nests throughout the Prairie Pothole Region, northwestern Canada, and much of Alaska. This species winters throughout much of the central US, and along the Pacific and Atlantic Coasts, as well as throughout Central America. Throughout North America, this species population fluctuates widely as of 2013 is just below the long-term average of about 3 million birds in the traditional survey area (www.flyway.us). In Rhode Island, this species is more abundant during fall (mid-Sept to mid-December) than spring (early March to mid-April) migration. This species is uncommon in Rhode Island during the winter (mid-Jan to early March). In Rhode Island, this uncommon species is primarily detected in coastal ponds along the southern coast, in Upper Narragansett Bay, and rarely at a few interior lakes and ponds. Conservation concerns primarily are focused on breeding habitat conditions in the PPR. However, disturbance to foraging sites on their wintering grounds is the most relevant issue in Rhode Island, as well as harvest levels in the Atlantic Flyway. Management actions include minimizing disturbance at coastal wintering sites, and insuring long-term adaptive management for harvest levels.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

# Status

SRANK: SNA. GRANK: G5. AJV BCR: M. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# **Threats and Actions**

Threat 1 - Residential and commercial development; Loss and disturbance of habitat

Actions: • Site/area management; Minimize disturbance to habitat. Rank: 3

Threat 2 - Recreational activities; Disturbance to habitat due to human activities

Actions: • Awareness and communications; Educate public about disturbance factors. Rank: 2

• Private sector standards and codes; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 1

#### Threat 3 - Natural system modifications; Habitat degradation

- Actions: Invasive/problematic species control; Phragmites control. Rank: 2
  - Site/area management; Water quality improvement. Rank: 2
    - Policies and regulations; Improve water quality standards. Rank: 3

#### Threat 4 - Habitat shifting and alteration; Loss of foraging and nesting habitat due to climate change

Actions: • Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3

• Habitat and natural process restoration; Restoration of foraging and nesting habitat. Rank: 3

#### Threat 5 - Household sewage and urban waste water

- Actions: Policies and regulations. Rank: 3
  - Land/water protection. Rank: 3
  - Education and awareness. Rank: 2

#### **Threat 6 - Lack of information**

Actions: • Data collection and analysis. Rank: 3

Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.



Distribution & Abundance

mage: Jay Osenkowski

~See map disclaimer in profiles introductior

This subpopulation nests from from Labrador and Newfoundland westward to the Ungava Peninsula of Quebec, with nesting concentrations around Ungava Bay and along the northeastern shore of Hudson Bay. This subpopulation winters from southern Ontario eastward to Prince Edward Island and southward to North Carolina. This population used to winter primarily in the southern portions of the Atlantic Flyway, but since the 1960s, wintering concentrations occur mainly in the Chesapeake Bay Region and extend northward to New Jersey and New York (from

https://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/cangeese/apcangse.html). The Atlantic Population (AP) of Canada Geese once was the largest Canada Goose population in North America, with an estimated one million birds in the mid-1980s. From 1986 and 1995, the number of wintering Canada geese in the Atlantic Flyway declined from 900,000 to 650,000, although there was a simultaneous increase in the "resident" Canada geese. In northern Quebec, the number of nesting pairs declined from 118,000 in 1988 to 29,000 pairs in 1995. The low annual survival was caused by high harvest pressure, and substantially below average gosling production were the primary factors responsible for the AP decline. Hunting regulations were modified as early as 1988, and again in 1992, to reduce harvest rates and increase survival, but these measures proved ineffective in encouraging population growth. Management actions include monitoring movement ecology and spatially-explicit abundance estimates of AP Canada Geese in Rhode Island. Current understanding of movement ecology of AP Canada Geese suggests they primarily occur south of RT 102 in Rhode Island. In addition, adaptive management to insure harvest levels are sustainable are critical.

Habitat Community: Lake, Type: Shallow

#### Status

SRANK: S4B. GRANK: G5. AJV BCR: HH. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Residential and commercial development; Loss and disturbance of habitat

Actions: • Site/area management; Minimize disturbance to habitat. Rank: 3

#### Threat 2 - Recreational activities; Disturbance to habitat due to human activities

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Private sector standards and codes; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 1

#### Threat 3 - Natural system modifications; Habitat degradation

Actions: • Invasive/problematic species control; Phragmites control. Rank: 2

- Site/area management; Water quality improvement. Rank: 2
- Policies and regulations; Improve water quality standards. Rank: 3

#### Threat 4 - Habitat shifting and alteration; Loss of foraging and nesting habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of foraging and nesting habitat. Rank: 3

#### Threat 5 - Household sewage and urban waste water

- Actions: Policies and regulations. Rank: 3
  - Land/water protection. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 6 - Lack of information

Actions: • Data collection and analysis. Rank: 3

#### Threat 7 - Hunting and collecting terrestrial animals

- Actions: Education and awareness. Rank: 3
  - Compliance and enforcement. Rank: 2

Refer to the Community: Lake, Type: Shallow - Habitat Profile for additional threats to this species.

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# **Distribution & Abundance**

The North Atlantic Population (NAP) of Canada geese is defined as all Canada geese breeding in Labrador, Newfoundland, western Greenland, and portions of eastern Quebec

(http://s3.amazonaws.com/zanran\_storage/www.dnr.state.md.us/ContentPages/4876404.pdf). In 1996, both the US Fish and Wildlife Service and the Canadian Wildlife Service formally recognized the NAP as a separate population in the Atlantic Flyway from the Atlantic Population (AP). This population now winters from New England north to Nova Scotia (it used to winter as far south at North Carolina). In New England, this population first arrives in early October, but most birds arrive in November and December, where they remain until spring migration in March. Many of these birds stage on Prince Edward Island during migration. Newfoundland. Most of the population (80%) winters in New England. Long-term survey data on NAP geese do not exist, with some indication that birds are wintering farther north since the 1970s. The current management goal is to maintain the NAP population to 2001-2005 levels, which will primarily be done through adaptive management of hunting regulations. In Rhode Island, many of these birds foraging turf fields, so managers should work with turf farmers to minimize disturbance to foraging birds and insure long-term persistence of key foraging sites.

Habitat Community: Lake, Type: Shallow

#### Status

SRANK: S4B. GRANK: G5. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Residential and commercial development; Loss and disturbance of habitat

Actions: • Site/area management; Minimize disturbance to habitat. Rank: 3

Threat 2 - Recreational activities; Disturbance to habitat due to human activities

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Private sector standards and codes; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 1

#### Threat 3 - Natural system modifications; Habitat degradation

- Actions: Invasive/problematic species control; Phragmites control. Rank: 2
  - Site/area management; Water quality improvement. Rank: 2
  - Policies and regulations; Improve water quality standards. Rank: 3

#### Threat 4 - Habitat shifting and alteration; Loss of foraging and nesting habitat due to climate change

Actions: • Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank:

- 3
- Habitat and natural process restoration; Restoration of foraging and nesting habitat. Rank: 3

#### Threat 5 - Household sewage and urban waste water

- Actions: Policies and regulations. Rank: 3
  - Land/water protection. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 6 - Lack of information

Actions: • Data collection and analysis. Rank: 3

#### Threat 7 - Hunting and collecting terrestrial animals

- Actions: Education and awareness. Rank: 3
  - Compliance and enforcement. Rank: 2

Refer to the Community: Lake, Type: Shallow - Habitat Profile for additional threats to this species.

# **Hooded Merganser**





Image: Carlos Pedro

See map disclaimer in profiles introduction

BIRDS **Freshwater Waterfowl** 

# **Distribution & Abundance**

The Hooded Merganser occurs only in North America in two separate populations, with birds breeding throughout forested regions of eastern North America and Pacific Northwest. This species primarily winters in the southeastern US, but also occurs as far north as Massachusetts and British Columbia. Their population size is estimated at 300,000 to 400,000 individuals, and current crude trend estimates suggest their population is stable or potentially increasing (seaduckjv.org). In Rhode Island, this cavity nester prefers remote wooded swamps and impoundments, but they also will often use Wood Duck nest boxes. During the 1982-87 Breeding Atlas study (Enser 1992), this species was only documented nesting in one area in the northwestern corner of the state. The current status of Hooded Mergansers during the breeding season is unclear as there are few records during June and July. In the winter, Hooded Mergansers are mainly detected within 10 miles of the coast, and there are few interior records (primarily because these water bodies are frozen most years). Historically, this species was negatively impacted by harvesting mature forests throughout the region, with reduced the number of available nesting cavities. As forests have matured in the region, the number of natural nesting cavities has increased, thus this limiting factor is minimized. However, the nest box program could be continued to increase the number of nesting sites for this species and Wood Ducks. Management actions suggest that more needs to be learned about the current distribution of breeding birds and wintering birds, habitat requirements, prey/habitat interactions, contaminants, and the impact of hunting on this species (an estimated 90,000 individuals are harvested annually, mainly in the Mississippi Flyway; seaduckjv.org).

Habitat Community: Freshwater Emergent Marsh, Type: Semi-permanently Flooded (Deep) Marsh

# Status

STSTAT: C. SRANK: S1B. GRANK: G5. AJV BCR: M. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

#### Threat 1 - Residential and commercial development; Loss and disturbance of habitat

Actions: • Site/area management; Minimize disturbance to habitat. Rank: 3

#### Threat 2 - Recreational activities; Disturbance to habitat due to human activities

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Private sector standards and codes; Policy regulations on buffer zones and land use or ٠ enforcement of existing policies including wetland buffer. Rank: 1

#### Threat 3 - Natural system modifications; Habitat degradation

- Invasive/problematic species control; Phragmites control. Rank: 2 Actions: •
  - Site/area management; Water quality improvement. Rank: 2

• Policies and regulations; Improve water quality standards. Rank: 3

#### Threat 4 - Habitat shifting and alteration; Loss of foraging and nesting habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of foraging and nesting habitat. Rank: 3

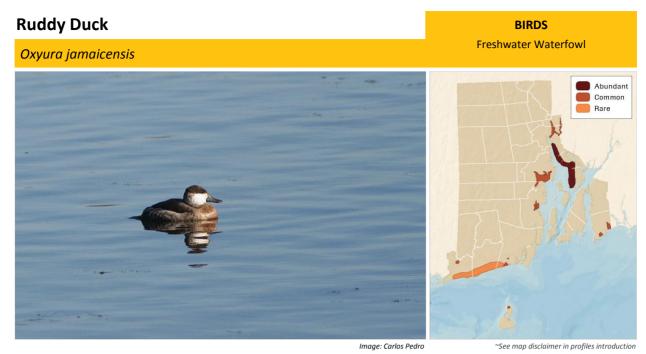
#### Threat 5 - Household sewage and urban waste water

- Actions: Policies and regulations. Rank: 3
  - Land/water protection. Rank: 3
    - Education and awareness. Rank: 2

#### **Threat 6 - Lack of information**

Actions: • Data collection and analysis. Rank: 3

Refer to the Community: Freshwater Emergent Marsh, Type: Semi-permanently Flooded (Deep) Marsh - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Ruddy Duck nests throughout the Prairie Pothole Region. This species winters throughout the southern US into southern Mexico. Population estimates for this species are not available from the long-term surveys conducted by USFWS in the traditional or eastern survey area, thus population trends throughout North America are uncertain. In Rhode Island, Ruddy Ducks are primarily detected in coastal ponds on the south coast or in Upper Narragansett Bay, and they are rarely detected at interior wetlands. Migrants typically arrive in Rhode Island in early September, with peak abundance between mid-September to mid-December during fall, and late-Feb to early April in spring. In addition, some individuals winter in Rhode Island. Conservation concerns primarily are focused on breeding habitat conditions in the PPR. However, disturbance to foraging sites on their wintering grounds is the most relevant issue in Rhode Island, as well as harvest levels in the Atlantic Flyway. Management actions include minimizing disturbance at coastal wintering sites, and insuring long-term adaptive management for harvest levels.

Habitat Community: Salt Pond, Type: Coastal Salt Pond

# Status

SRANK: SNA. GRANK: G5. AJV BCR: M. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

#### Threat 1 - Residential and commercial development; Loss and disturbance of habitat

Actions: • Site/area management; Minimize disturbance to habitat. Rank: 3

#### Threat 2 - Recreational activities; Disturbance to habitat due to human activities

- Actions: Awareness and communications; Educate public about disturbance factors. Rank: 2
  - Private sector standards and codes; Policy regulations on buffer zones and land use or enforcement of existing policies including wetland buffer. Rank: 1

#### Threat 3 - Natural system modifications; Habitat degradation

- Actions: Invasive/problematic species control; Phragmites control. Rank: 2
  - Site/area management; Water quality improvement. Rank: 2
  - Policies and regulations; Improve water quality standards. Rank: 3

#### Threat 4 - Habitat shifting and alteration; Loss of foraging and nesting habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of foraging and nesting habitat. Rank: 3

#### Threat 5 - Household sewage and urban waste water

- Actions: Policies and regulations. Rank: 3
  - Land/water protection. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 6 - Lack of information

Actions: • Data collection and analysis. Rank: 3

Refer to the Community: Salt Pond, Type: Coastal Salt Pond - Habitat Profile for additional threats to this species.

# **Grassland Birds**

BIRDS

#### Description

The National Audubon Society's 2009 State of the Birds report concluded that grassland birds continue to be among the fastest and most consistently declining group of birds in North America, with 55% showing significant declines (National Audubon Society 2009). (Grassland habitats in Rhode Island are primarily agricultural hayfields and pastures). According to the Conservation Status Assessment (Anderson and Olivero Sheldon 2011), of the 22 bird species that preferentially breed in grasslands, fields and field edges, 17 have experienced persistent, widespread declines. These include Eastern Meadowlark, Field Sparrow, Northern Bobwhite, Ringnecked Pheasant, Brown Thrasher, Song Sparrow, Common Yellowthroat, Grasshopper Sparrow, Red-winged Blackbird, Killdeer, Savannah Sparrow, Golden-winged Warbler, Vesper Sparrow, Yellow-breasted Chat, Bluewinged Warbler, Prairie Warbler, and Bobolink. This trend probably reflects the expansion of these species' habitat during the period of widespread farming and pasturing followed by agricultural abandonment and a return of the land to forest.

Partners in Flight (PIF) has identified upland Sandpiper, Grasshopper Sparrow, and Bobolink as priority species for these habitats in Southern New England (Dettmers and Rosenberg 2000; Rosenberg 2004) and all of these species have been selected as GCN species for Rhode Island (Table 1.4). PIF has recommended doubling the state's populations of Grasshopper Sparrow; there are an estimated 130 breeding bobolink in Rhode Island, and PIF has set a target population of 200 individuals as the state's contribution to the continental recovery of the species (Rosenberg 2004).

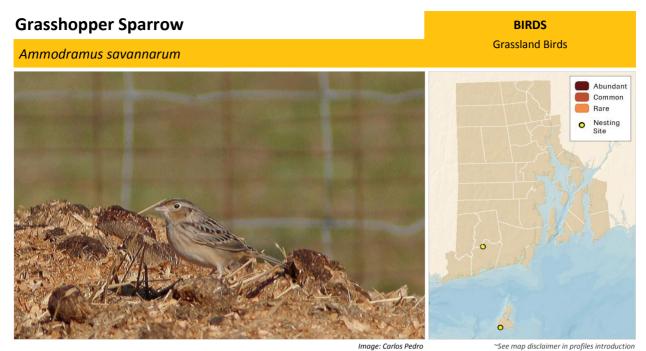
Grassland-nesting birds have been a priority for survey and conservation work since the origination of the Natural Heritage Program in 1979. This is because grassland bird species have exhibited more dramatic population declines than most other avian guilds, and Partners in Flight classifies grassland birds among the top conservation priorities in the region (Rosenberg and Wells 2005). Based on Breeding Bird Surveys, at least 16 of 19 species of grassland specialists have documented declining trends (Askins 1997). Askins (1997, 2000) provides an interesting summary of the historical ecology of grassland specialists in the region, and it is evident that many species of grassland birds occurred in eastern North America prior to European settlement including the now extinct Heath Hen (Tympanuchus cupido cupido). Grassland specialists undoubtedly thrived during the agricultural era from the mid-1800s to early 1900, and then their populations crashed with the reversion of former farms to scrub lands and forests. The distribution of grasslands birds during the mid-1980s was summarized in the RI Breeding Bird Atlas (Enser 1992). From 1997-2000, Shriver et al. (2005) conducted point counts at 1,140 sites throughout New England and New York, including much of the remaining grassland habitat in Rhode Island (except high quality hayfields in Tiverton/Little Compton), where they detected three species (Bobolinks, Savannah Sparrows, and Eastern Meadowlarks; data were also digitized and geo-referenced by RIDFW).

Since 2000, large expanses of grasslands that formerly supported high-quality bird habitat were developed for commercial and residential buildings (e.g., West Greenwich Industrial Park, West Wrentham Road, Cumberland). Also, acres of grassland were converted to turf or corn, which provides no nesting habitat and marginal wintering habitat. Airports were once significant refuge for many species, but the risk of aircraft-bird strikes has resulted in more frequent mowing, hazing, and shooting birds. In fact, aggressive bird remediation programs on many airports will create sink habitats (i.e., birds will be attracted to the habitat but reproductive success will be poor, thus populations will not be sustained). The historical pattern of grassland-obligate species has been that populations have cycled in relationship to local and regional agriculture patterns. The Henslow's Sparrow was once a common resident of tall weedy fields along the south shore of Rhode Island, but birds disappeared by 1960 following a dramatic retraction of their breeding range. The Vesper Sparrow, another species that required large areas of field habitats (including potato farms) was thought extirpated by 1980, was subsequently relocated in 2-3 sites, and disappeared after about 1984 when these habitats were converted to turf. By the time the Breeding Bird Atlas was published (Enser 1992), the Vesper Sparrow was no longer nesting in Rhode Island. The Upland Sandpiper is also extirpated as a breeding species in the state and is rarely detected during migration. Upland Sandpipers were last detected at 3-4 sites (a large field near I-95 that was developed as an industrial park, on Block Island, and airfields around the state) in the mid-1980s. Several other grassland or early successional specialists (e.g., Cliff Swallow and Sedge Wren) have also disappeared as breeding species in Rhode Island, whereas others are still present but declined dramatically and face extirpation. Many grassland birds are area-sensitive, and grasslands need to be over 500 acres to support a diverse grassland fauna (Vickery et al.

1997), which will be extremely challenging to achieve in Rhode Island. The continued presence of grassland obligate birds species in Rhode Island will likely hinge on the ability to manage existing agricultural fields, including crop lands leased by RI DEM, to provide useful habitat for these species. Promotion of hayfield or forage crops like alfalfa, rather than row-crops or turf, would be necessary and mowing intervals would likely have to be lengthened (see Vickery and Dunwiddie 1997).

#### **Species**

Grasshopper Sparrow (Ammodramus savannarum) Short-eared Owl (Asio flammeus) Northern Harrier (Circus cyaneus) Northern Flicker (Colaptes auratus) Bobolink (Dolichonyx oryzivorus) Horned Lark (Eremophila alpestris) Savannah Sparrow (Passerculus sandwichensis) Eastern Meadowlark (Sturnella magna) Barn Owl (Tyto alba)



# **Distribution & Abundance**

The Grasshopper Sparrow is a short-distance Nearctic-Neotropical that nests throughout the eastern half of the United States and winters across the southern United States and Central America. This area-sensitive (minimum field size = 30 acres) species prefers grasslands in well-drained upland sites that are dominated by short bunch grasses (4-12" tall; little bluestem) with minimal litter and grass cover and short shrubs for song perches (Jones and Vickery 2000). In Rhode Island, nesting often occurs in abandoned agriculture fields or barren brown-fields (e.g., Ninigret Airfield, Charlestown, and an abandoned field at Quonset Point). This species used to be widespread and locally common in the mid-1900s. Subsequently, there has been a steady diminution of the state-wide population, which mirror regional trends. In New England and Mid-Atlantic states, the annual trend (-3.8 [95% CI = -2.8 to -4.7]) suggests steep decline throughout the region, and trend estimates are even more pronounced in eastern North America (annual trend = -5. 9(95 Cl = -4.7 to -7.9). There are presently only two known sites in Rhode Island totaling 3-4 territorial birds (i.e., TNC's Carter Preserve and Lewis-Dickens Preserve on Block Island), which are actively managed by annual mowing or grazing. Given the regional retraction of the breeding range, the future of this bird in Rhode Island seems problematic. However, the coastal grasslands favored for nesting by Grasshopper Sparrows also support several other rate species, including several rare Lepidoptera, and are also important wintering habitat for raptors and other sparrow species. Grasshopper Sparrows are shy and reclusive stopover migrants that are only rarely observed (i.e. 1-2 records annually) in fall in Rhode Island.

Habitat Community: Agricultural Lands, Type: Pasture

#### Status

IUCN Rank: LC. FED: FWS. STSTAT: ST. SRANK: S1B,S1N. GRANK: G5. STATE: E-1(3-3). RSGCN: L-VH. PIF NALCP: Tier II.c. PIF BCPSN: Tier V. GrassBrd: 1. AJV BCR: M. CODES: B. Res/B: 1. GRP: 72. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of early successional habitat

- Actions: Habitat and natural process restoration; Create and maintain early successional habitat. Rank: 3
  - Land/water protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Education and awareness. Rank: 2

Threat 2 - Residential and commercial development; Loss of early successional habitat due to development

Actions: • Land/water protection; Conserve early successional habitat. Rank: 3

#### Threat 3 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

Refer to the Community: Agricultural Lands, Type: Pasture - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Short-eared Owl is a Nearctic migrant that nest throughout much of Canada and some northern states in the US. This species winters throughout the United States and northern Mexico. In Rhode Island, this species has never been documented as a breeding species. However, birds are detected during migration (especially fall) and during the winter. Short-eared Owls are somewhat irruptive; annual totals vary considerably from year to year. Trend estimate for eastern North America suggest a significant population decline (annual trend = -6.1 [95% CI = -13.8 to 0.9]), therefore they are a conservation concern. They tend to occur in coastal areas where grasslands are present, primarily along the south shore, between Napatree Point and Pt Judith, and on the east side of Narragansett Bay in Tiverton and Little Compton. On Aquidneck Island, Sachuest Point NWR is the best place to see them during the winter, where vegetation is consistently managed for grassland, thus this refuge consistently supports wintering populations of raptors and other species that require early successional habitat. This type of active management needs to take place elsewhere throughout the state to ensure long-term persistence of grassland specialists.

Habitat Community: Coastal Beach and Dune, Type: Maritime Herbaceous Dune

#### Status

CITES: II. IUCN Rank: LC. FED: FWS. SRANK: S1N. GRANK: G5. RSGCN: L-VH. Shrbrd: 1. PIF NALCP: Tier I. PIF BCPSN: Tier II C. GrassBrd: 1. AJV BCR: M. CODES: M. Res/B: 0. GRP: 58. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Loss of early successional habitat

- Actions: Habitat and natural process restoration; Create and maintain early successional habitat. Rank: 3
  - Land/water protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Education and awareness. Rank: 2

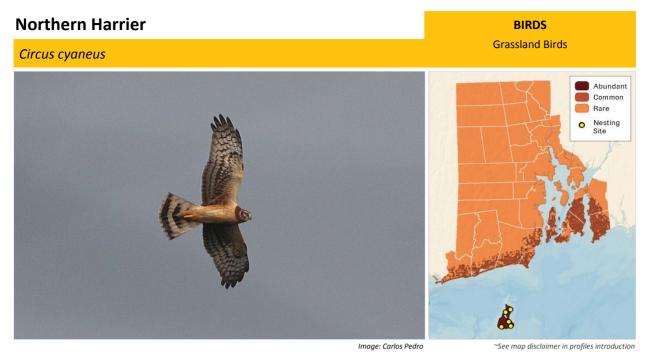
#### Threat 2 - Residential and commercial development; Loss of early successional habitat due to development

Actions: • Land/water protection; Conserve early successional habitat. Rank: 3

#### Threat 3 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

Refer to the Community: Coastal Beach and Dune, Type: Maritime Herbaceous Dune - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Northern Harrier is a widespread species that nests throughout much of the northern United States and most Canadian provinces. This species winters throughout much of the United States, Central America and NW South America. In Rhode Island, this species is extirpated as a nesting species on the mainland and is known to nest only on Block Island, where there is suitable nesting habitat (a mixture of grass and shrub vegetation, an ample small mammal prey base, and an absence mammalian predators). The current number of breeding pairs on Block Island is uncertain, but there are signs of declines in recent years. Their population trends are uncertain in New England and Mid-Atlantic states (annual trend = -0.9 [95% CI = -5.0 to 2.6]), whereas they appear to declining throughout eastern North America (annual trend = -2.0 [95% CI = -1.0 to -3.4]). This species is still common as a stopover migrant and birds regularly winter in grasslands in southern Rhode Island (e.g., Aquidneck Island, the south shore, and Block Island). Migration counts of raptors have not been done consistently for many years, but the wintering population is adequately surveyed by the Christmas Bird Count. During winter, most harriers hunt agricultural fields and coastal grasslands for their primary prey of small birds and mammal. As with other grassland specialists, active management of grasslands throughout the state will enhance habitat suitable.

Habitat Community: Freshwater Emergent Marsh, Type: Freshwater Emergent Marsh

# Status

CITES: II. IUCN Rank: LC. FED: FWS. STSTAT: SE. SRANK: S1B,S3N. GRANK: G5. STATE: E-1(3-3). RSGCN: L-VH. PIF BCPSN: Tier V. GrassBrd: 1. CODES: B. Res/B: 1. PELAG: BI. GRP: 10. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of early successional habitat

- Actions: Habitat and natural process restoration; Create and maintain early successional habitat. Rank: 3
  - Land/water protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Residential and commercial development; Loss of early successional habitat due to development

Actions: • Land/water protection; Conserve early successional habitat. Rank: 3

#### Threat 3 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

Refer to the Community: Freshwater Emergent Marsh, Type: Freshwater Emergent Marsh - Habitat Profile for additional threats to this species.



#### Image: Carlos Pedro

~See map disclaimer in profiles introduction

#### **Distribution & Abundance**

The Northern Flicker is a short-distance Nearctic migrant that nest throughout much of North America and are permanent residents in much of the United States into Central America. In the 1980s, this species was ubiquitous throughout the State. This species prefer open country and agricultural mosaics with scattered large trees surrounded by fields. In the last few decades, Northern Flickers have obviously declined in Rhode Island as open habitats have been lost and forests have matured. This mirrors the steep declines documented in New England and Mid-Atlantic states based on BBS trends from 1966-2011 (annual trend = -3.4 [95% CI = -2.9 to - 3.9]), whereas the rate of decline is less dramatic throughout eastern North America (annual trend = -1.5 [95% CI = -1.1 to -1.8]). Flickers are obvious diurnal migrants and are most likely to be detected during September and October moving along the coast after cold fronts. Flickers also spend the winter in this area, where they prefer open areas near the coast. Conservation actions include managing for open country habitats preferred by this species.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S5B,S5N. GRANK: G5. PIF NALCP: Tier II.a. AJV BCR: H. CODES: B. Res/B: 1. REV: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Loss of early successional habitat

- Actions: Habitat and natural process restoration; Create and maintain early successional habitat. Rank: 3
  - Land/water protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Residential and commercial development; Loss of early successional habitat due to development

Actions: • Land/water protection; Conserve early successional habitat. Rank: 3

#### Threat 3 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

Refer to the Community: Oak Forest, Type: Oak Forest - Habitat Profile for additional threats to this species.

# Bobolink Dolichonyx oryzivorus Crassland Birds

# **Distribution & Abundance**

The Bobolink is a long-distance Neotropical migrant that nests throughout much of the Northeastern US and SE Canada as far west as British Columbia. This species winters in central South America. As with other grassland specialists, this species was abundant in Rhode Island during the agricultural peak from the 1850s to mid-1900s. They have since decline dramatically with habitat loss and more intensive use of agricultural lands. In New England and Mid-Atlantic states, this species is declining rapidly (annual trend = -2.7 [95% CI = -1.6 to -3.9]), and they are declining more rapidly throughout eastern North America (annual trend = -3.4 [95% Cl = -3.1 to -4.6]). Bobolinks are less area-sensitive than other grassland specialists, using upland meadows/pastures, wet meadows, or old fields that are at least 5-10 acres. They will use moist hayfields, alfalfa and clover that have mixed grass (8-12") with relatively sparse ground cover that is a mosaic of grasses, sedges, and scattered broadleaved forbs with <25% shrub cover (Jones and Vickery 2002). Bobolinks are gregarious and tend to occur in small colonies in pockets of suitable habitat. In Rhode Island, the few breeding birds now reside at in suitable habitat at just a few sites (i.e., Little Compton, Conanicut Island, and Washington County). Because Bobolinks require agricultural fields over 5 acres, it is uncertain whether their populations can be maintained in Rhode Island for perpetuity unless active management strategies are initiated. Where suitable hayfield habitats remain, harvesting hay later in the summer, after the young have fledged, will be necessary to permit successful nesting. Flocks of up to 100 Bobolinks can be detected during fall migration, often in old fields where weed and grass seeds are prevalent or in coastal grasslands.

Habitat Community: Agricultural Lands, Type: Hayfields

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S3B,SZN. GRANK: G5. STATE: E-1(3-3). RSGCN: L-VH. NALCC: X (B). PIF NALCP: Tier II.c. PIF BCPSN: Tier III. CODES: B. Res/B: 1. REV: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Loss of early successional habitat

- Actions: Habitat and natural process restoration; Create and maintain early successional habitat. Rank: 3
  - Land/water protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Education and awareness. Rank: 2

Threat 2 - Residential and commercial development; Loss of early successional habitat due to development

Actions: • Land/water protection; Conserve early successional habitat. Rank: 3

#### Threat 3 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

Refer to the Community: Agricultural Lands, Type: Hayfields - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Horned Lark is a widespread short-distance Nearctic migrant that nests throughout Canada and the United States, and winters throughout much of the United States. This species is characteristic of prairie habitats in the Midwest that likely expanded eastward with agricultural development. Horned Larks are probably among Rhode Island's rarest grassland species because they prefer large expanses of scarified ground with very short vegetation. In southern New England, only airports provide enough suitable habitat to support breeding populations. Horned Larks nested at the Quonset Airfield, but there have been no surveys in recent years and bird-strike mitigation at local airfields may have discouraged nesting. Territorial larks were formerly detected along beaches and parking lots, but this species appears to be extirpated as a breeding species from Rhode Island. Regional trend estimates in New England and Mid-Atlantic states are uncertain based on BBS routes from 1966-2012 (annual trend = 0.1 (95% CI = -0.8 to 1.2), whereas across eastern North America their population is in steep decline (annual trend = -3.0 [95% CI = -2.4 to -3.8). Although the nesting population is virtually gone in Rhode Island, Horned Larks are common during fall migration. Flocks of several hundred birds consistently winter in Rhode Island, where they can be detected using large coastal grasslands and scarified areas (i.e., turf farms and corn fields) that few other avian species use during winter. Preservation of agricultural lands and coastal grasslands, with appropriate management, is needed to preserve Horned Larks in Rhode Island.

Habitat Community: Ruderal Forest, Type: Ruderal Forest

# Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,SZN. GRANK: G5. RSGCN: L-H. PIF BCPSN: Tier V. CODES: B. Res/B: 1. GRP: 43. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of early successional habitat

- Actions: Habitat and natural process restoration; Create and maintain early successional habitat. Rank: 3
  - Land/water protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Residential and commercial development; Loss of early successional habitat due to development

Actions: • Land/water protection; Conserve early successional habitat. Rank: 3

#### Threat 3 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

Refer to the Community: Ruderal Forest, Type: Ruderal Forest - Habitat Profile for additional threats to this species.

# Savannah Sparrow

Passerculus sandwichensis



Imaae: Peter WC Pator

"See map disclaimer in profiles introduction

BIRDS **Grassland Birds** 

# **Distribution & Abundance**

The Savannah Sparrow is a short-distance Nearctic-Neotropical migrant that nests throughout much of North America between 32° to 47° latitude. This species winters across the southern United States and into southern Mexico. In Rhode Island, this species was common during the mid-1800s to mid-1900s during the peak of agricultural development in the region. Savannah Sparrow populations have declined in recent decades with loss and conversion of grasslands throughout the region. In New England and Mid-Atlantic states from 1966-2012 based on BBS trend estimates, this species has declined substantially (annual trend = -2.8 (95% CI = -5.6 to 0.1), as well as across eastern North America (annual trend = -2.2 (95% Cl = -1.8 to -2.6). Savannah Sparrows prefer to nest in upland meadows (e.g., pastures, hay and alfalfa crops, successional fields, coastal grasslands, airports). They prefer moist grasslands at least 20 acres in size with dense ground vegetation that has a mixture of short and tall grasses (1-25") and a thick layer of dead grass (Jones and Vickery 2000). Only a few large agricultural grasslands in Rhode Island now meet these habitat requirements and have nesting birds in Rhode Island (e.g., Watson Farm on Jamestown, the Lewis-Dickens Preserve on Block Island, and private/public farms in Tiverton and Little Compton). To maintain this species into perpetuity in Rhode Island, active management of contiguous agricultural lands as hay fields will probably be the primary means to support this species. This includes managing the SW corner of Block Island and state and federal holdings along the south shore. Grant and tax-relief programs that encourage the persistence of agriculture on private lands will also be necessary to maintain these habitats. Savannah Sparrows are common and sometimes abundant as migrants, especially during the fall. Birds passing through Rhode Island are rarely identified to race, but it is likely that populations from several regions of North America migrate along the Atlantic Coast in the fall. Of these, the Ipswich Sparrow (P. s. princeps) has perhaps the highest conservation priority because their small population nests only on Sable Island, Nova Scotia. During winter this race occupies coastal beach dunes grasslands that are also important to other wintering species (e.g., Northern Harrier and Short-eared Owl).

Habitat Community: Agricultural Lands, Type: Hayfields

# Status

IUCN Rank: LC. FED: FWS. SRANK: S2S3B,SZN. GRANK: G5. STATE: E-1(3-3). PIF BCPSN: Tier V. GrassBrd: 1. CODES: B. Res/B: 1. GRP: 88. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of early successional habitat

- Actions: Habitat and natural process restoration; Create and maintain early successional habitat. Rank: 3
  - Land/water protection; Work with state and local non profits to conserve suitable habitat.

Rank: 3

- Resource and habitat protection. Rank: 3
- Education and awareness. Rank: 2

#### Threat 2 - Residential and commercial development; Loss of early successional habitat due to development

Actions: • Land/water protection; Conserve early successional habitat. Rank: 3

#### Threat 3 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

Refer to the Community: Agricultural Lands, Type: Hayfields - Habitat Profile for additional threats to this species.

#### **Eastern Meadowlark**

# BIRDS **Grassland Birds** Sturnella magna Rare

Image: Robert Wo

"See map disclaimer in profiles introductior

# **Distribution & Abundance**

The Eastern Meadowlark has migratory and resident populations, with short-distance Nearctic migrant breeding throughout the northeastern United States and southeastern Canada. This species winters in the southeastern United States, with resident individuals ranging throughout the southern US to northern South America. The Eastern Meadowlark requires large (15-20 acres) moist fields for nesting that have sparse to dense grassdominated cover (10-20" tall), with a thick layer of dead grass and some scattered shrubs (Jones and Vickery 2000). During the Grassland Bird survey in 1997, this species was recorded at ten locations, with 1-3 males detected per survey point. Recent surveys suggest that meadowlarks no longer nest at many of these sites, although the habitat seemed suitable. This may be linked to a wider pattern of retrenchment. In New England and Mid-Atlantic States, trend estimates (annual decline = -6.9 [95% CI = -6.2 to -7.7]) based on BBS from 1966-2012 suggest a steeper decline (i.e., a 50% decline over a decade) than virtually all other species in the region; rangewide in eastern North America their population is also declining at a rapid rate (annual trend = 3.8 (95% CI = -3.6 to -3.9). Additional survey work is needed to assess the current status of this now rare breeding species in the state. Conservation actions for Eastern Meadowlarks are similar to other grassland birds, with efforts focusing on managing larger hayfield that should be ungrazed for at least two years to create suitably nesting habitat for this species and other grassland specialists. Eastern Meadowlarks are uncommon as migrants, usually during the late fall, and a few winter in the state. Migratory and winter habitats also include beach dunes, short grass fields and salt marshes, and these habitats also support other rare species.

Habitat Community: Agricultural Lands, Type: Hayfields

# Status

IUCN Rank: LC. FED: FWS. SRANK: S3B,SZN. GRANK: G5. STATE: E-1(3-3). RSGCN: L-VH. NALCC: X (B, NB). GrassBrd: 1. CODES: B. Res/B: 1. GRP: 102. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Loss of early successional habitat

- Actions: Habitat and natural process restoration; Create and maintain early successional habitat. Rank: 3
  - Land/water protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Education and awareness. Rank: 2

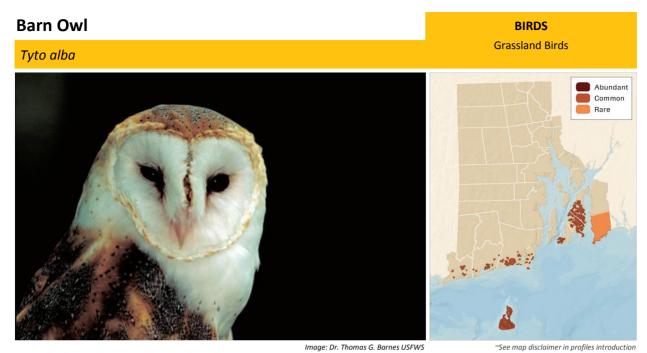
Threat 2 - Residential and commercial development; Loss of early successional habitat due to development

Actions: • Land/water protection; Conserve early successional habitat. Rank: 3

#### Threat 3 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

Refer to the Community: Agricultural Lands, Type: Hayfields - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Barn Owl is a non-migratory species that occurs throughout the United States, Central and South America. This species is a grassland specialist that preys preferentially on the Meadow Vole (Microtus). Barn Owls require sheltered nesting areas (e.g., old buildings, hollow trees, nest boxes) with large areas of suitable foraging habitat nearby. Barn Owls were first documented in Rhode Island in the early 1900s, with the first nest found in 1938. Their population expanded in coastal areas (e.g., Bristol, Tiverton and Little Compton, Aquidneck Island, and Block Island) where derelict buildings, old silos, and bluffs provided favorable nesting sites. By the mid-1980s, Barn Owls had declined and only nested on Aquidneck Island and Block Island. In recent years, a nest-box program run by volunteers has improved the nesting population on Aquidneck Island. The Barn Owl is at the northern edge of its breeding range in southern New England, and can suffer high mortality during particularly harsh winters with deep snow cover. Nonetheless, with appropriate shepherding and conservation of coastal meadows, this species seems to have stabilized for the time being. Regional trend estimates are unavailable for this nocturnal species that is not adequately surveyed by the diurnal Breeding Bird Survey.

Habitat Community: Ruderal Grassland/Shrubland, Type: Old Field

#### Status

CITES: II. IUCN Rank: LC. FED: FWS. STSTAT: SE. SRANK: S1B,S1N. GRANK: G5. STATE: E-1(3-3). RSGCN: L-VH. PIF BCPSN: Tier V. GrassBrd: 1. CODES: B. Res/B: 1. GRP: 4. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Loss of early successional habitat

- Actions: Habitat and natural process restoration; Create and maintain early successional habitat. Rank: 3
  - Land/water protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Education and awareness. Rank: 2
  - Species management; Educate landowners about barns for nesting sites. Rank: 3

#### Threat 2 - Residential and commercial development; Loss of early successional habitat due to development

Actions: • Land/water protection; Conserve early successional habitat. Rank: 3

#### Threat 3 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

Refer to the Community: Ruderal Grassland/Shrubland, Type: Old Field - Habitat Profile for additional threats to this species.

# **Intertidal and Mudflat Birds**

**BIRDS** 

#### Description

This category of birds includes species found primarily as migrants. The U.S. Shorebird Conservation Plan and the Northern Atlantic Regional Shorebird Plan assess the conservation needs of shorebirds, prioritize species for conservation, and outline specific conservation actions to maintain and improve the status of shorebirds and their habitats (Brown et al. 2001; Clark and Niles 2000). Several shorebird plans have been developed that provide updates on specific species, including the American Oystercatcher and Red Knot Business Plans (add citations)

Populations of migratory shorebirds were decimated by unregulated market gunning during the 200 years after widespread colonial settlement. By 1900, continental populations of many shorebird species were severely reduced and one, the Eskimo Curlew, was on the verge of extinction. With the passage of protective legislation in 1918, shorebird populations began to recover, albeit not to their ancestral numbers. In recent decades it has become obvious that populations are again declining. Most shorebirds are long-distance migrants that depend on a variety of wetland habitat types for staging and foraging during their migration. Therefore, although the threat from hunting pressure has diminished, but shorebirds are still vulnerable a numerous factors on their breeding and wintering grounds, as well as migration stopover sites (US Shorebird Conservation Plan 2001). In 1974, Manomet Bird Observatory initiated the International Shorebird Survey (ISS), which was the first attempt to survey shorebird populations by focusing on migratory stopover sites. There is limited information on population sizes and trends for most species of shorebirds in North America, but available information suggests that 46% of the 72 species in North America are apparently declining, and population trend estimates are uncertain for another 53% of the species; only 2 species have populations that are apparently increasing (US Shorebird Conservation Plan 2001) Therefore, there was a pressing need to initiate more systematic surveys of shorebirds to effectively track populations. This led to the development of the United States Shorebird Conservation Plan and the Program for Regional and International Shorebird Monitoring (PRISM). These efforts are designed to estimate breeding population sizes and trends, spatial distribution and abundance at stopover sites, and to assess habitat use patterns for 72 species of shorebirds nesting in North America. (Bart et al. 2002). More importantly, results from this research effort can be used to develop effective conservation strategies and action plans to help stabilize shorebirds. Rhode Island is included within the North Atlantic Regional Shorebird Plan (Clark et al. 2000).

In general, there are sufficient data to assess the season phenology, spatial distribution and abundance, habitat use, and relative abundance of staging and breeding shorebird populations in Rhode Island. Richard Ferren (unpublished manuscript, The Birds of Rhode Island) summarized historical records up to about 1995. Two sites are presently monitored by the ISS; Napatree Point and the Charlestown Breachway. In conjunction with the ISS, additional surveys have occurred at Napatree Point since 1980 (CJRaithel) and the Field Notes of Rhode Island Birds have compiled many other shorebird records since the 1960s. Rhode Island does not have sufficient staging habitat to support large numbers of shorebird populations compared to adjacent areas in southern New England (e.g., Monomoy NWR, Koch and Paton 2012). Mixed species flocks of more than 1000 birds at staging sites are unusual here. However, the needs of migratory shorebirds are obvious in the state because few places provide high-quality stopover habitat. Part of the reason that shorebird concentrations are so rare in the state is because of the past stabilization and development of the coastline. Even though coastal habitats are regulated by the CRMC, dredging projects, development, human disturbance, and more recently, rising sea levels threaten prime shorebird habitat. So, Rhode Island shorebirds need protection and defense of the few remaining coastal habitats that can support them. Freshwater shorebirds would also benefit from periodic draw-downs of wildlife impoundments on State management areas.

#### Species

Ruddy Turnstone(Arenaria interpres)Sanderling(Calidris alba)Dunlin(Calidris alpina)Red Knot(Calidris canutus)White-rumped Sandpiper(Calidris fuscicollis)Purple Sandpiper(Calidris maritima)Least Sandpiper(Calidris maritima)Semipalmated Sandpiper(Calidris pusilla)Semipalmated Plover(Charadrius semipalmatus)Short-billed Dowitcher(Limnodromus griseus)Black-bellied Plover(Sterna dougallii)Greater Yellowlegs(Tringa melanoleuca)

# Ruddy Turnstone BIRDS Arenaria interpres Intertidal and Mudflat Birds

Image: Peter WC Pator

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Ruddy Turnstone is a long-distance migrant that nests in the high Arctic and winters along the coasts of North and South America. This species is a common spring and fall migrant in Rhode Island. This species tends to co-occur Red Knots and Dunlin at preferred staging sites. This species has relatively short migration windows, with peak numbers during spring migration in from late May into mid-June. A few stragglers remain during the summer months. Southbound migration is initiated by mid-July, with peak migration from in mid to late August, although some birds remain until October. A few hardy individuals remain throughout the winter in most years. Ruddy Turnstones are rarely detected away from the coastal intertidal zone, where they prefer stone-covered beaches used by nesting horseshoe crabs, where they can forage on their eggs. They also stage and forage in saltmarshes and on sandy beaches. The Ruddy Turnstone is more abundant in spring than fall in coastal New England, which is atypical of most species of migratory shorebirds in eastern North America. Since 2005 there have been four counts of more than 300 birds, all in late May to early June and most at Napatree Point. As with other migratory shorebirds, conservations actions include developing a standardized survey protocol to assess this species use of key staging sites. In addition, protection of prime staging sites, including minimizing human disturbance at these sites, is indicated for this species.

Habitat Community: Intertidal Shore, Type: Sand Flat

# Status

IUCN Rank: LC. FED: FWS. SRANK: S4N. GRANK: G5. RSGCN: L-VH. Shrbrd: 1. USSCP: HC. AJV BCR: HH. CODES: M. Res/B: 0. GRP: 118. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

#### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

Actions: • Site/area management; Minimize human disturbance at stopover sites. Rank: 3

- Site/area protection; Protect stopover sites. Rank: 3
- Awareness and communications; Educate public about the importance of stopover sites. Rank:

#### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management regarding mitigation of sea level rise on coastal property. Rank: 2

#### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

#### Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

Refer to the Community: Intertidal Shore, Type: Sand Flat - Habitat Profile for additional threats to this species.

# 

Image: Carlos Pedro

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Sanderling is a long-distance migrant that breeds in the high Arctic and winters along the coasts of North and South America. This species occurs in Rhode Island as both a spring and fall migrant, as well as a common species during winter. Because birds winter in Rhode Island, it is difficult to discern a clear migratory window. During spring, numbers gradually increase during from late March, with peak abundance from the first to third week of May. A few nonbreeders are present in Rhode Island during the summer. Southbound migrants reappear abruptly in mid-July, and then a protracted fall migration period extends from late July to late September. Sanderlings are almost always detected along the coast, where they prefer large mudflats and intertidal areas that support many other species of shorebirds. However, they also use the intertidal zone of sandy barrier beaches, a habitat type that hosts few other shorebird species. Sanderlings are among the most conspicuous shorebirds in Rhode Island because they have high detection probabilities on beaches. Like most migratory shorebird species, Sanderlings exhibit an elliptical migration and are more common in fall than spring. Since 2005, there have been only 18 counts in excess of 200 birds, all of which occurred in the fall. As with other migratory shorebirds, conservations actions include developing a standardized survey protocol to assess this species use of key staging and wintering sites. In addition, protection of prime staging and wintering sites, including minimizing human disturbance at these sites, is indicated for this species. Included as a SGCN because this species is classified as a moderate-high conservation priority in the US Shorebird Plan for the Northern Atlantic Region (http://www.shorebirdplan.org/wp-content/uploads/2013/01/NATLAN4.pdf.)

Habitat Community: Intertidal Shore, Type: Sand Flat

### Status

IUCN Rank: LC. FED: FWS. SRANK: SZN. GRANK: G5. RSGCN: L-H. Shrbrd: 1. USSCP: HC. AJV BCR: HH. CODES: M. Res/B: 0. GRP: 13. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

2

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

Actions: • Site/area management; Minimize human disturbance at stopover sites. Rank: 3

- Site/area protection; Protect stopover sites. Rank: 3
- Awareness and communications; Educate public about the importance of stopover sites. Rank:

### Threat 2 - Other; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management

regarding mitigation of sea level rise on coastal property. Rank: 2

### Threat 3 - Lack of planning

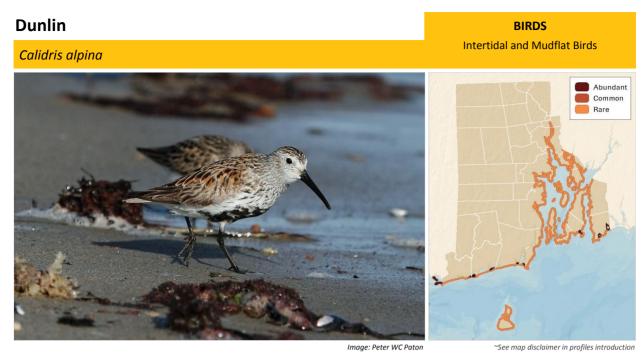
Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

### Threat 4 - Other; Potential oil spill

Actions: • Policies and regulations. Rank: 2

• Compliance and enforcement. Rank: 2

Refer to the Community: Intertidal Shore, Type: Sand Flat - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Dunlin is a long-distance migrant that nests in the high Arctic and winters on both coasts of the United States. This species occurs in Rhode Island as a both spring and fall migrant. In addition, this species is common throughout the winter in Rhode Island, therefore it is difficult to discern migratory peaks. In spring, numbers gradually increase through March and April, and peak between early April and early May. Southbound migrants reappear rather late, usually in early September and peak from early November to early December. Dunlin are restricted the coast, with few inland records. They occur on large mudflats and intertidal areas that support many other species of shorebirds, including Sanderlings and Red Knots. Dunlins are among the most common shorebirds in Rhode Island, with nine counts in excess of 200 birds since 2005. Unlike most migratory shorebird species in Rhode Island, they appear to be as abundant in spring as fall. As with other migratory shorebirds, conservations actions include developing a standardized survey protocol to assess this species use of key staging and wintering sites. In addition, protection of prime staging and wintering sites, including minimizing human disturbance at these sites, is indicated for this species

Habitat Community: Intertidal Shore, Type: Sand Flat

### Status

IUCN Rank: LC. FED: FWS. SRANK: SZN. GRANK: G5. Shrbrd: 1. AJV BCR: H. CODES: M. Res/B: 0. GRP: 12. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

Actions: • Site/area management; Minimize human disturbance at stopover sites. Rank: 3

- Site/area protection; Protect stopover sites. Rank: 3
- Awareness and communications; Educate public about the importance of stopover sites. Rank: 2

### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management regarding mitigation of sea level rise on coastal property. Rank: 2

### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

Refer to the Community: Intertidal Shore, Type: Sand Flat - Habitat Profile for additional threats to this species.

# Red Knot BIRDS Calidris canutus Intertidal and Mudflat Birds

# **Distribution & Abundance**

The Red Knot is a long-distance migrant that breeding in the high Arctic. Some populations winter in along the coast in the southern United States, whereas another population winters in southern South America. The rapidly declining "rufa" population was recently proposed for listing as a threatened species by the USFWS [final rule pending 2014]. Loss of foraging resources during spring migration at key staging grounds in the Mid-Atlantic states, especially Horseshoe Crab eggs, has exacerbated their recent decline. In Rhode Island, Red Knots are primarily a spring and fall migrant, with birds occasionally wintering here. Northbound migrants first appear by mid-May, with peak numbers between the third week of May and the first week of June, which usually coincides with full or new moon when Horseshoe Crabs deposit eggs in the intertidal zone. Stragglers are occasionally present during the summer. The first fall migrants are evident by mid-July, with peak numbers between the first to third weeks of August. Red Knots use intertidal areas with substrates range in size from sand to cobble, where they often associate with Sanderlings, Semipalmated Sandpipers, Dunlin, and Black-bellied Plovers. This species also forages on small crustaceans on mudflats and the wrack zone on beaches. Red Knots have never been abundant in Rhode Island, but there is evidence of additional declines in recent years. At Napatree Point, where peak numbers are documented in Rhode Island, counts have exceeded 20 birds on only six occasions since 2005, which have all occurred during fall migration except for one occasion. Conservation actions include gaining a clearer understanding of the distribution and abundance of horseshoe crabs in the state, and an assessment of harvesting rates of horseshoe crabs in the state. In addition, steps may need to be taken to minimize human disturbance at key staging sites throughout the state.

Image: USFWS

"See map disclaimer in profiles introduction

Habitat Community: Intertidal Shore, Type: Sand Flat

### Status

IUCN Rank: LC. FEDSTAT: PT. FED: FWS. SRANK: S3N. GRANK: G5. RSGCN: 1. Shrbrd: 1. USSCP: HI. AJV BCR: HH. CODES: M. Res/B: 0. GRP: 110. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

- Actions: Site/area management; Minimize human disturbance at stopover sites. Rank: 3
  - Site/area protection; Protect stopover sites. Rank: 3
  - Awareness and communications; Educate public about the importance of stopover sites. Rank: 2

### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

Actions: • Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3

• Education and awareness; Education of landowners about appropriate land management regarding mitigation of sea level rise on coastal property. Rank: 2

### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

### Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

Refer to the Community: Intertidal Shore, Type: Sand Flat - Habitat Profile for additional threats to this species.

# White-rumped Sandpiper BIRDS Calidris fuscicallis Intertidal and Mudflat Birds

Image: Peter WC Pato

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The White-rumped Sandpiper is a long-distance migrant that nests in the high Arctic and winters along the coast in southern South America. This species occurs in Rhode Island only as an uncommon spring and fall migrant; no birds winter here. The first northbound migrants are evident by early May, and peak between the last week of May to early June, which is concurrent with the main flight of Sanderlings, Dunlin, Ruddy Turnstones, and Semipalmated Sandpipers. Some individuals can remain well into June. The first southbound migrants appear in early August and peak between late August and late September, with a secondary peak between mid-October and early November that probably consists primarily of juvenile birds. White-rumped Sandpipers are restricted to the coast, where they use the intertidal zone on beaches with substrates that range in size from sand to cobble that are also preferred by Ruddy Turnstones and Dunlin. This species also will use pools in salt marshes. At most staging sites only small flocks are detected, but at Napatree Point, where the largest flocks have been documented in Rhode Island, there has only been one count in late fall that exceeded 20 birds. As with other migratory shorebirds, conservations actions include developing a standardized survey protocol to assess this species use of key staging sites. In addition, protection of prime staging sites, including minimizing human disturbance at these sites, is indicated for this species.

Habitat Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub

# Status

IUCN Rank: LC. FED: FWS. SRANK: S3N. GRANK: G5. Shrbrd: 1. USSCP: LC. AJV BCR: H. CODES: M. Res/B: 0. GRP: 112. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

Actions: • Site/area management; Minimize human disturbance at stopover sites. Rank: 3

- Site/area protection; Protect stopover sites. Rank: 3
- Awareness and communications; Educate public about the importance of stopover sites. Rank:

### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management regarding mitigation of sea level rise on coastal property. Rank: 2

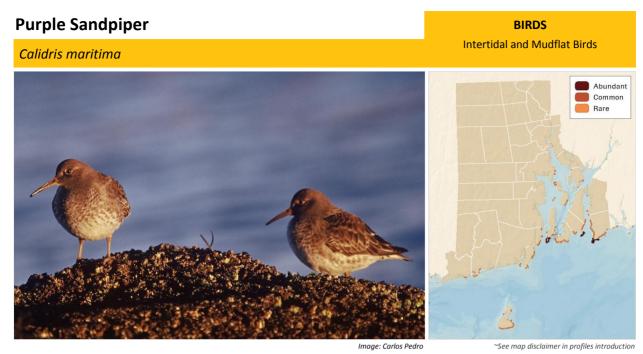
### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

### Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

Refer to the Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Purple Sandpiper is a long-distance Nearctic migrant that breeds in northeastern Canada, and winters along the Atlantic Coast from Newfoundland to Florida. In Rhode Island, this species occurs from November through mid-May, with peak detection rates during the winter months. It is difficult to determine based on available data how many migrants are seen dispersing through the state, so it is assumed that most individuals detected in Rhode Island spend the winter here. From early December, the statewide population is roughly stable until early May. Purple Sandpipers are only observed along the coast using rocky shorelines that feature algae-covered ledges and boulders (e.g., Sachuest NWR, Beavertail, Point Judith), which is a habitat type that is rarely occupied by other shorebirds. This species is difficult to survey because they tend to move into the intertidal zone at low tide and roost at inaccessible areas when not feeding. Purple Sandpipers are relatively common in appropriate habitats. Since 2005 there have been eight counts of more than 100 birds, which includes data from Christmas Bird Counts. Conservation actions include developing a standardized systematic survey protocol to assess the distribution and abundance of this species. Since the utilize inhospitable habitats in winter, human disturbance is generally not an issue for this species currently, but the potential impact of oil spills could be a management concern.

Habitat Community: Intertidal Shore, Type: Rocky Shore

# Status

IUCN Rank: LC. FED: FWS. SRANK: SZN. GRANK: G5. RSGCN: L-VH. NALCC: X (NB). Shrbrd: 1. USSCP: M. AJV BCR: H. CODES: M. Res/B: 0. GRP: 109. PRIOR: 1. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

Actions: • Site/area management; Minimize human disturbance at stopover sites. Rank: 3

- Site/area protection; Protect stopover sites. Rank: 3
- Awareness and communications; Educate public about the importance of stopover sites. Rank:

### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management regarding mitigation of sea level rise on coastal property. Rank: 2

### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

### Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

Refer to the Community: Intertidal Shore, Type: Rocky Shore - Habitat Profile for additional threats to this species.

# Least Sandpiper BIRDS Calidris minutilla Intertidal and Mudflat Birds

Image: Peter WC Paton

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Least Sandpiper is a widespread Nearctic-Neotropical migrant that breeds throughout the tundra of northern Canada to Alaska. This species winters in the southern United States south to northern South America. In Rhode Island, this species is a common migrant during spring and fall. In spring, their numbers peak between the second to fourth week of May, whereas in fall the peak period occurs between the second to fourth week of May, whereas in fall the peak period occurs between the second to fourth week of July. By early October, most Least Sandpipers have dispersed south of Rhode Island. Least Sandpipers are most often detected on mudflats and intertidal areas with many other species of shorebirds, where they probe for their invertebrate prey. They also use vegetated salt marshes and interior wetlands more than many other species. As with most shorebirds, fall counts are much higher than during spring. Since 2005 there have been only three counts of more than 300 birds, all during July. Conservation actions include continuing systematic surveys to assess trends in use of key staging sites. In addition, prime shorebird foraging habitats need to be protected, including salt marshes. Impoundment management also has potential to create additional habitat.

Habitat Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub

### Status

IUCN Rank: LC. FED: FWS. SRANK: SZN. GRANK: G5. Shrbrd: 1. USSCP: M. AJV BCR: M. CODES: M. Res/B: 0. GRP: 5. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

Actions: • Site/area management; Minimize human disturbance at stopover sites. Rank: 3

- Site/area protection; Protect stopover sites. Rank: 3
- Awareness and communications; Educate public about the importance of stopover sites. Rank: 2

### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management regarding mitigation of sea level rise on coastal property. Rank: 2

### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

Refer to the Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Semipalmated Sandpiper is a long-distance migrant that nests in the high Arctic and winters along both coasts of northern South America and the Caribbean. In Rhode Island, this species occurs in only as a spring and fall migrant. The first northbound migrants are detected by late April, and peak between late May to mid-June, which is concurrent with the main flight of Sanderlings, Dunlin, Ruddy Turnstones, and White-rumped Sandpipers. Fall migrants are usually evident by mid-July and peak between mid-July to early August, although a few Semipalmated Sandpipers linger into October and November. Semipalmated Sandpipers usually occur along the coast, where they utilize sand to cobble substrates in the intertidal, as well as mudflats that are favored by Ruddy Turnstones and Dunlin. They are typically not found in salt marshes or on barrier beaches, and they occasionally are found inland using flooded agricultural lands or muddy impoundments. Semipalmated Sandpipers are the most abundant shorebird that migrates through Rhode Island and are much more common during fall than in spring. There have been three counts in excess of 1000 birds in late July. As with other migratory shorebirds, conservations actions include developing a standardized survey protocol to assess this species use of key staging sites. In addition, protection of prime staging sites, including minimizing human disturbance at these sites, is indicated for this species.

Habitat Community: Intertidal Shore, Type: Sand Flat

### Status

IUCN Rank: NT. FED: FWS. SRANK: SZN. GRANK: G5. RSGCN: L-H. NALCC: X (NB). Shrbrd: 1. USSCP: M. AJV BCR: H. CODES: M. Res/B: 0. GRP: 55. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

Actions: • Site/area management; Minimize human disturbance at stopover sites. Rank: 3

- Site/area protection; Protect stopover sites. Rank: 3
- Awareness and communications; Educate public about the importance of stopover sites. Rank:

### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management regarding mitigation of sea level rise on coastal property. Rank: 2

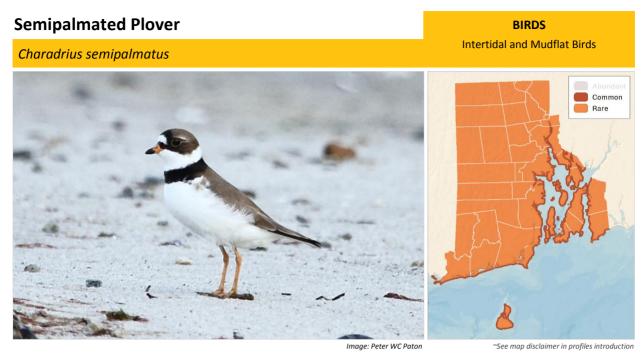
### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

### Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

Refer to the Community: Intertidal Shore, Type: Sand Flat - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Semipalmated Plover is a widespread long-distance migrant that breeds in the northern tundra of Canada and Alaska. This species winters along coastal regions throughout North and South America. The Semipalmated Plover is common spring and fall migrant in Rhode Island. Individuals do not winter at this latitude and a few non-breeders individuals are detected each summer. The first northbound migrants occur in early May, and peak during the third to fourth week of May. Southbound migrants are first detected in mid-July, and peak between the first to fourth week of August, and subsequently diminish gradually into November in most years. This species prefers to forage and stage on large expanses of mudflats (e.g., Charlestown Breachway and Quicksand Pond), but they also use salt marshes and intertidal zone along beaches, where they glean and probe for invertebrates. They also occasionaly use sites away from the coast, such as rainwater pools in upland turf fields or in muddy impoundments. Semipalmated Plovers are about three times more common during fall than spring in Rhode Island. Since 2005 there have been nine counts of more than 200 birds in July or August. As with other migratory shorebirds, conservations actions include developing a standardized survey protocol to assess this species use of key staging sites. In addition, protection of prime staging sites, including minimizing human disturbance at these sites, is indicated for this species.

Habitat Community: Intertidal Shore, Type: Sand Flat

### Status

IUCN Rank: LC. FED: FWS. SRANK: SZN. GRANK: G5. Shrbrd: 1. USSCP: LC. AJV BCR: M. CODES: M. Res/B: 0. GRP: 30. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

Actions: • Site/area management; Minimize human disturbance at stopover sites. Rank: 3

- Site/area protection; Protect stopover sites. Rank: 3
- Awareness and communications; Educate public about the importance of stopover sites. Rank:

### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management regarding mitigation of sea level rise on coastal property. Rank: 2

### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

### Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

Refer to the Community: Intertidal Shore, Type: Sand Flat - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Short-billed Dowitcher is a long-distance migrant that breeds throughout central Canada and winters along the both coasts of North and South America. This species a moderately common migrant that occurs in Rhode Island during both spring and fall; they do not winter this far north. The number of spring migrants is erratic, with the first northbound migrants evident by mid-April or early May, and peak between the third to fourth week of May. Stragglers can remain through the summer. The number of fall migrants is more consistent among years, with the first individuals detected by early July and peak from mid to late July, with a few birds remaining through August. In Rhode Island, Short-billed Dowitchers are usually detected along the coast, but sometimes individuals are seen at interior sites (e.g., muddy impoundments or ponds following drawn down). Short-billed Dowitchers probe for invertebrate prey in sandy to cobble substrate intertidal areas and mudflats, but also forage in pools salt marshes and stage in seaweed wrack. Short-billed Dowitchers are more abundant in fall, with about six counts in excess of 200 birds, all during July. As with other migratory shorebirds, conservations actions include developing a standardized survey protocol to assess this species use of key staging sites. In addition, protection of prime staging sites, including minimizing human disturbance at these sites, is indicated for this species.

Habitat Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub

# Status

IUCN Rank: LC. FED: FWS. SRANK: SZN. GRANK: G5. Shrbrd: 1. USSCP: HC. AJV BCR: H. CODES: M. Res/B: 0. GRP: 6. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

Actions: • Site/area management; Minimize human disturbance at stopover sites. Rank: 3

- Site/area protection; Protect stopover sites. Rank: 3
- Awareness and communications; Educate public about the importance of stopover sites. Rank:

### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management regarding mitigation of sea level rise on coastal property. Rank: 2

### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

### Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

Refer to the Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub - Habitat Profile for additional threats to this species.

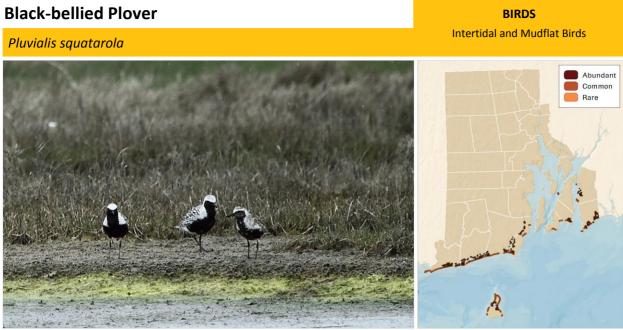


Image: Peter WC Pator

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Black-bellied Plover is a long-distance migrant that breeds in the high Arctic in Canada and Alaska. This species winters on the east and west coasts of North and South America. Black-bellied Plovers are a relatively uncommon spring and fall migrant in Rhode Island and some individuals winter in the State. Because a few individuals winter in Rhode Island, the spring migratory window is not abrupt. The first spring migrants are evident by mid-April, with peak abundance between the first to fourth week of May. Some non-breeders usually are detected in Rhode Island during the summer months. Southbound migration is evident by early August, with the peak of fall migration between mid-August and early November. Black-bellied Plovers utilize a broad array of habitats as staging sites in Rhode Island including mudflats, the intertidal zone of beaches, barren patches within salt marshes and upland grasslands with relatively short vegetation (e.g., turf fields). Black-bellied Plovers are about twice as abundant during fall as in spring, which is typical for many species of long-distance migratory shorebirds that exhibit elliptical migration. Since 2005 there have been twelve counts of more than 40 birds, all in late fall and most on Block Island. Conservations actions include developing a standardized survey protocol to assess this species use of key staging sites. In addition, protection of prime staging sites, including minimizing human disturbance at these sites, is indicated for this species.

Habitat Community: Intertidal Shore, Type: Sand Flat

### Status

IUCN Rank: LC. FED: FWS. SRANK: SZN. GRANK: G5. Shrbrd: 1. USSCP: M. AJV BCR: H. CODES: M. Res/B: 0. GRP: 27. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

Actions: • Site/area management; Minimize human disturbance at stopover sites. Rank: 3

- Site/area protection; Protect stopover sites. Rank: 3
- Awareness and communications; Educate public about the importance of stopover sites. Rank:

### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management regarding mitigation of sea level rise on coastal property. Rank: 2

### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

### Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

Refer to the Community: Intertidal Shore, Type: Sand Flat - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

Image: Peter WC Pator

See map disclaimer in profiles introduction

The Roseate Tern is a long-distance Neotropical migrant that nests on offshore islands throughout the Northeast into Nova Scotia, Canada. This species winters off of Brazil. This species was federally-listed as endangered by the USFWS in 1987. Their populations were depressed during the shooting era of late 1800s, but rebounded and several moderately-sized nesting colonies were documented along the Rhode Island coast in the 1930s and 1940s. By 1950, this species was rare as a breeding species in Rhode Island, apparently due to a variety of factors including increases in the number of nesting gulls. Only 1-2 pairs nested at scattered sites until 1981, when the last nesting record was documented. This species is still seasonally common as a migrant, particularly during post-breeding dispersal (e.g., from Great Gull Island in Long Island Sound where the largest nesting colony in North America is located to Cape Cod where terns throughout the region stage before fall migration). Roseate Terns are consistently recorded staging at a few coastal sites including Trustom Pond, Charlestown Breachway, Great Salt Pond on Block Island, and at Napatree Point (where hundreds of adults and fledged young occur, usually during August). There is high conservation concern for this species due to the limited population size (<15,000 breeding birds) and recent population declines (North American Waterbird Plan 2007). Conservation issues in Rhode Island include protection of staging birds from disturbance and coordinated monitoring and research activities with adjacent states.

Habitat Community: Coastal Shrubland and Grassland, Type: Maritime Grassland

# Status

IUCN Rank: LC. FEDSTAT: FE. FED: FWS. STSTAT: SH. SRANK: SHB,S1N. GRANK: G4. STATE: E-1(3-1). RSGCN: H-VH. PIF BCPSN: Tier IV . NATerns: 1. AJV BCR: HH. CODES: B. Res/B: 1. GRP: 54. PRIOR: 1. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

- Site/area management; Minimize human disturbance at stopover sites. Rank: 3 Actions: •
  - Site/area protection; Protect stopover sites. Rank: 3
  - Awareness and communications; Educate public about the importance of stopover sites. Rank:

### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management ٠ regarding mitigation of sea level rise on coastal property. Rank: 2

### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

### Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

### Threat 5 - Natural system modifications; Loss of sand lance, which is primary prey

Actions: • Species management; Develop management plan for sand lance. Rank: 3

Refer to the Community: Coastal Shrubland and Grassland, Type: Maritime Grassland - Habitat Profile for additional threats to this species.

# **Greater Yellowlegs**



Image: Richard L Ferrer

"See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Greater Yellowlegs is long-distance Neotropical migrant that nests throughout the boreal forests of Canada and southern Alaska and winters in the southern United States and throughout Central and South America. In Rhode Island, this species occurs only as a migrant in spring and fall. The first northbound migrants occur in March, with the peak numbers between the first and third week of May. Some stragglers are present during summer, with the first apparent southbound migrants detected in July, with peak numbers between mid-July and early September. Some individuals linger into late December with occasional records on Christmas Bird Counts. Greater Yellowlegs are usually detected as either solitary bird or in small flocks, with only four records of more than 30 birds at Napatree Point since 2005. This species uses a variety of habitat types for foraging including mud flats, salt marshes and occasionally in interior wetlands. They often forage on nekton (small fish), thus have flexibility in where they can successfully forage. Contrary to most shorebird species, high counts occur during spring migration. Conservation actions include developing a systematic survey protocol to assess the spatial distribution and abundance of this species in the state to determine where key staging sites are located. Then management protocols should be developed to minimize human disturbance to these staging sites.

Habitat Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub

# Status

IUCN Rank: LC. FED: FWS. SRANK: SZN. GRANK: G5. Shrbrd: 1. USSCP: M. AJV BCR: H. CODES: M. Res/B: 0. GRP: 57. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

### Threat 1 - Recreational activities; Increased human disturbance at stopover migration sites

- Actions: Site/area management; Minimize human disturbance at stopover sites. Rank: 3
  - Site/area protection; Protect stopover sites. Rank: 3
  - Awareness and communications; Educate public about the importance of stopover sites. Rank: 2

### Threat 2 - Habitat shifting and alteration; Loss of stop over sites due to sea level rise

- Actions: Site/area protection; Land protection to allow for stop over foraging habitat migration. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management regarding mitigation of sea level rise on coastal property. Rank: 2

### Threat 3 - Lack of planning

Actions: • Data collection and analysis; Initiate monitoring of primary resources. Rank: 2

### Threat 4 - Other; Potential oil spill

- Actions: Policies and regulations. Rank: 2
  - Compliance and enforcement. Rank: 2

Refer to the Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub - Habitat Profile for additional threats to this species.

# Marine Inshore Birds

**BIRDS** 

### Description

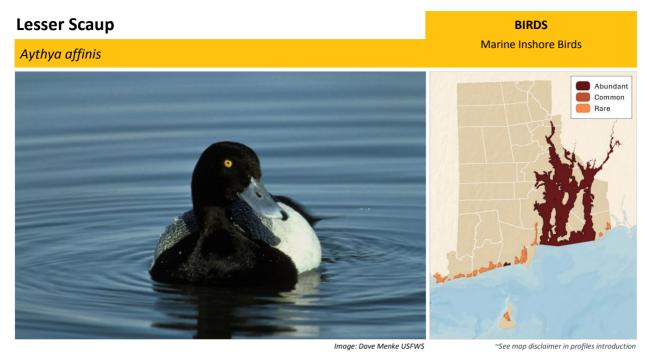
Another group of birds found in the ocean was also added to this iteration of the SWAP. The distinction between these species and the previous category is subtle but in general these birds occur closer to shore than pelagic species and occupy marine habit

In 2009, the North American Bird Conservation Initiative identified threats to wintering habitats as one possible reason for the population declines of several species of sea ducks, and accordingly nine of these birds are included on the GCN list. As par

The Narragansett Bay Winter Waterfowl Survey coordinated by the US EPA Atlantic Ecology Division and the NBNERR, initiated in the winter of 2001-2002, has been conducted annually through 2013. In 2013, a total of 67 locations throughout Narragansett Bay

### **Species**

Lesser Scaup	(Aythya affinis)
Greater Scaup	(Aythya marila)
Canvasback	(Aythya valisineria)
Atlantic Brant	(Branta bernicla)
Bufflehead	(Bucephala albeola)
Common Goldeneye	(Bucephala clangula)
Common Loon	(Gavia immer)
Harlequin Duck	(Histrionicus histrionicus)
Black Scoter	(Melanitta americana)
White-winged Scoter	(Melanitta deglandi)
Surf Scoter	(Melanitta perspicillata)
Red-breasted Merganser	(Mergus serrator)
Horned Grebe	(Podiceps auritus)
Common Eider	(Somateria mollissima)



# **Distribution & Abundance**

The Lesser Scaup nests throughout the Prairie Pothole region in central North America and northward into western Canada and Alaska. This species winters along the Atlantic and Pacific coasts and in the southern United States and throughout Central America. Changes in the winter distribution of scaup are probably related to changes in food resources, as there have been significant declines in the number of scaup wintering in Long Island Sound, Connecticut, and New Jersey (http://www.npwrc.usgs.gov/resource/birds/blubill/populata.htm). The number of scaup (Lesser and Greater combined) has been below the long-term average in the traditional survey area since 1985 (www.flyways.us), thus there is concern about their population status. In Rhode Island, this species typically occurs from early October to late April. This uncommon species in Rhode Island is mainly found in upper Narragansett Bay and coastal ponds. Based on long-term population estimates from the USFWS, scaup numbers are near the long-term average after two decades of declining populations. Conservation concerns include the negative impacts of urbanization on water quality, oil spills, human disturbance affecting foraging and roosting birds, and uncertainty about harvest levels of this species. Management actions include minimizing the impacts of urbanization through better treatment of urban runoff, minimizing the potential for negative impacts of oil spills on marine birds (e.g., double-hulled barges), developing and implementing a standardized survey to track long-term population trends, and gaining a clearer understanding of harvest levels.

Habitat Community: Coastal Plain Pond/Pondshore, Type: Coastal Plain Pond/Pondshore

### Status

IUCN Rank: LC. SRANK: SNA. GRANK: G5. AJV BCR: H. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

### Threat 1 - Lack of information

Actions: • Data collection and analysis. Rank: 3

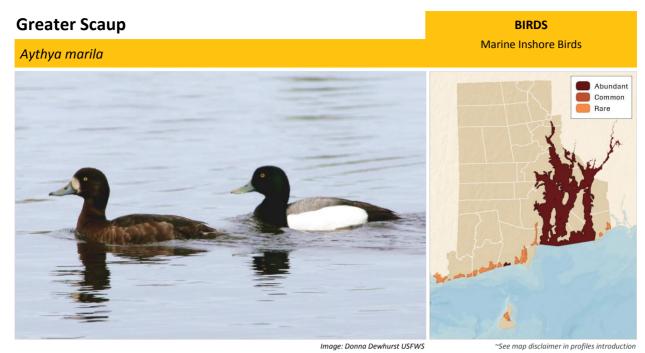
### Threat 2 - Human intrusions and disturbance; Loss of wintering habitat

- Actions: Education and awareness. Rank: 2
  - Land/water protection. Rank: 3

### Threat 3 - Invasive non-native/alien species

- Actions: Invasive/problematic species control. Rank: 3
  - Species management. Rank: 2
  - Education and awareness. Rank: 2

Refer to the Community: Coastal Plain Pond/Pondshore, Type: Coastal Plain Pond/Pondshore - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Greater Scaup breeds throughout northern Canada and Alaska. This species primarily winters in saltwater habitats along the east and west coasts of North America. The number of scaup (Lesser and Greater combined) has been below the long-term average in the traditional survey area since 1985 (www.flyways.us), thus there is concern about their population status. In Rhode Island, this species typically occurs from early October to early April. This common species in Rhode Island is mainly found in upper and eastern Narragansett Bay, and coastal ponds. There has been a long-term decline in the number of Greater Scaup wintering in Rhode Island. Currently, this species is the most abundant duck in Narragansett Bay, accounting for over 11227 of 29241 waterfowl counted in the bay in 2010 (R. McKinney, US EPA, unpubl. data). Reasons for this decline in Rhode Island are uncertain. Conservation concerns include the negative impacts of urbanization on water quality, oil spills, human disturbance affecting foraging and roosting birds, and uncertainty about harvest levels of this species. Management actions include minimizing the impacts of oil spills on marine birds (e.g., double-hulled barges), developing and implementing a standardized survey to track long-term population trends, and gaining a clearer understanding of harvest levels.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### Status

IUCN Rank: LC. SRANK: SNA. GRANK: G5. AJV BCR: H. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

### Threat 1 - Lack of information

Actions: • Data collection and analysis. Rank: 3

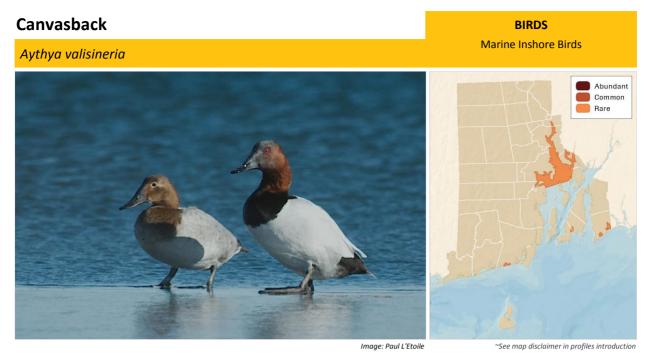
Threat 2 - Human intrusions and disturbance; Loss of wintering habitat

- Actions: Education and awareness. Rank: 2
  - Land/water protection. Rank: 3

### Threat 3 - Invasive non-native/alien species

- Actions: Invasive/problematic species control. Rank: 3
  - Species management. Rank: 2
  - Education and awareness. Rank: 2

Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Canvasback nests throughout the Prairie Pothole Region (PPR) of central and western North America. This diving duck winters throughout the southern United States into southern Mexico, as well as northward along both the East and West Coasts. Based on long-term population trends from the USFWS annual aerial May and July surveys, the number of Canvasback in North America fluctuates widely and is currently 33% above the long-term average of 600,000 birds (flyways.us). In Rhode Island, this species is uncommon during the winter months, with individuals wintering from mid-October to early April, and migrants passing through the state during November and March. This species usually detected in coastal ponds or in Upper Narragansett Bay. Conservation concerns primarily are focused on habitat conditions on their breeding grounds throughout the PPR, the negative impacts lead poisoning from ingestion of lead shot on birds (this should diminish with the ban of lead shot), and overharvesting of individuals. Management actions include protection of nesting habitat in the PPR, minimizing disturbance at wintering sites, maintaining the ban on lead shot, and continued adaptive management to reduce sport harvest when harvest levels appear to be too high.

Habitat Community: Salt Pond, Type: Coastal Salt Pond

### Status

SRANK: SNA. GRANK: G5. AJV BCR: H. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# **Threats and Actions**

### Threat 1 - Lack of information

- Actions: Data collection and analysis. Rank: 3
- Threat 2 Human intrusions and disturbance; Loss of wintering habitat
  - Actions: Education and awareness. Rank: 2
    - Land/water protection. Rank: 3

### Threat 3 - Invasive non-native/alien species

- Actions: Invasive/problematic species control. Rank: 3
  - Species management. Rank: 2
  - Education and awareness. Rank: 2

Refer to the Community: Salt Pond, Type: Coastal Salt Pond - Habitat Profile for additional threats to this species.

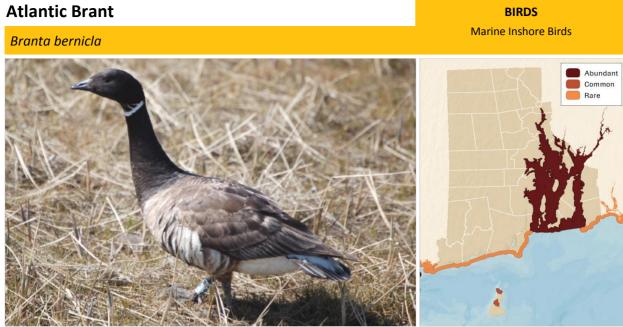


Image: Don Becker USGS, USFWS

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Brant nests on islands in the eastern Canadian Arctic. This species winters in nearshore marine habitats along the Atlantic (Massachusetts to North Carolina) and Pacific Coasts of North America. This abundant small goose is dependent on specific foods (e.g., eelgrass), therefore their populations are vulnerable to starvation and temporary breeding failure. The Atlantic Brant population was estimated at 111,800 in 2013 which was 25% lower than the 2012 estimate (www.flyways.us), however the trend from 2004 to 2013 suggests a stable population in Rhode Island, this species is a migrant and some individuals winter in the state. Birds occur in Rhode Island from early October to the end of May. This species occurs primarily along the southern coast and in Upper Narragansett Bay. Loss of winter habitat is one of the critical threats to Atlantic Brant, as they are more dependent on natural wintering habitat than most other goose species (www.agjv.ca). Therefore, their populations are vulnerable to industrial and residential development, as well as recreational activities. In addition, oil spills and long-term impacts of climate change are conservation concerns. Management actions include minimizing development of key foraging sites, reducing disturbance at foraging sites, and insuring oil spills are not an issue. In addition, identifying the links between breeding, staging, and wintering and describing/monitoring key foraging sites are important.

Habitat Community: Intertidal Shore, Type: Sand Flat

### Status

IUCN Rank: LC. SRANK: SNA. GRANK: G5. AJV BCR: HH. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

### Threat 1 - Lack of information

Actions: • Data collection and analysis. Rank: 3

Threat 2 - Human intrusions and disturbance; Loss of wintering habitat

- Actions: Education and awareness. Rank: 2
  - Land/water protection. Rank: 3

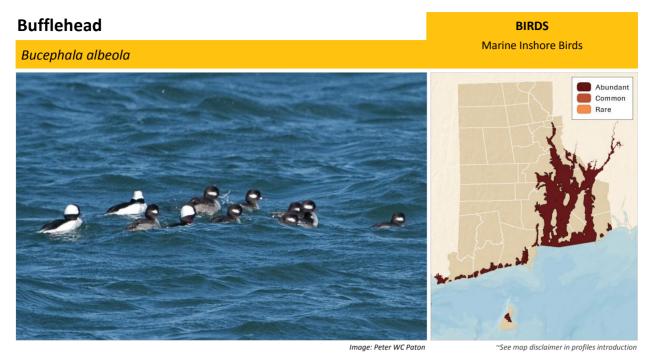
### Threat 3 - Invasive non-native/alien species

- Actions: Invasive/problematic species control. Rank: 3
  - Species management. Rank: 2
  - Education and awareness. Rank: 2

### Threat 4 - Hunting and collecting terrestrial animals

- Actions: Education and awareness. Rank: 3
  - Compliance and enforcement. Rank: 2

Refer to the Community: Intertidal Shore, Type: Sand Flat - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Bufflehead nests in cavities throughout the boreal forests of Canada and southern Alaska. This species winters throughout much of the contiguous United States except in the northern Great Plains, Appalachian Mountains, and much of the Northeast. The continental population is estimated at 1.4 million birds, with nationwide surveys suggesting a substantial population increase since the 1950s (seaduckjv.org). Current estimates suggest 162,000 individuals are shot annually by hunters, with 75% of the harvest in the Mississippi and Atlantic Flyways. Females exhibit high site philopatry to natal nesting areas, and both males and females are site faithful to wintering areas, thus recolonization of areas that are overharvested might be a slow process (seaduckjv.org). In Rhode Island, this common wintering species occurs in the state from late-October to late-April, with peak abundance from mid-November to mid-March. They are most abundant in coastal ponds, quiet coves throughout Narragansett Bay, and deeper interior lakes and ponds, where usually small flocks (15-20 birds, occasionally up to 100) are observed. Conservation concerns include the negative impacts of urbanization on water quality, oil spills, human disturbance affecting foraging and roosting birds, and uncertainty about harvest levels of local populations of this species. Management actions include reducing the loss of mature forests on their breeding grounds, minimizing the impacts of urbanization through better treatment of urban runoff, minimizing the potential for negative impacts of oil spills on marine birds (e.g., double-hulled barges), developing and implementing a standardized survey to track long-term population trends, and gaining a clearer understanding of harvest levels of sea ducks.

Habitat Community: Salt Pond, Type: Coastal Salt Pond

### Status

SRANK: SNA. GRANK: G5. AJV BCR: H. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

Threat 1 - Lack of information; Population data needed	
Actions: • Data collection and analysis. Rank: 3	
Threat 2 - Renewable energy; Wind turbines	
Actions: • Policies and regulations. Rank: 3	
Threat 3 - Pollution; Specifically oil	
Actions: • Policies and regulations. Rank: 3	
Threat 4 - Fishing and harvesting aquatic resources; By-catch	
Actions: • Policies and regulations. Rank: 3	
Threat 5 - Human intrusions and disturbance	

Actions: • Site/area management. Rank: 2

Threat 6 - Habitat shifting and alteration; Due to climate change

Actions: • Site/area protection. Rank: 2

Refer to the Community: Salt Pond, Type: Coastal Salt Pond - Habitat Profile for additional threats to this species.

# <section-header><table-row> Common Goldeneye BRDS Jaccephala clangula Marine Instruction Image: Common Goldeneye Image: Common Goldeneye

# **Distribution & Abundance**

The Common Goldeneye is a Nearctic migrant that nests near lakes and rivers throughout much of the spruce-fir forests of Canada and Alaska. This species winters throughout the conterminous United States and coastal Alaska. An estimated 1 million Common Eider nest in North America, with some indication of a population decline along the Atlantic Coast (seaduckjv.org). This species is one of the last migratory waterfowl to reach Rhode Island during late fall. In Rhode Island, they occur in small flocks (usually < 20 birds) in most open water areas, including throughout Narragansett Bay, coastal ponds, and rarely at inland lakes that are not frozen. This species is not surveyed annually by the USFWS during aerial surveys, so accurate population trend estimates for North America are unavailable. The US EPA has coordinated a waterfowl survey in Narragansett Bay every January for the last decade, in 2013 Common Goldeneye accounted for 1,123 of 19,936 individuals detected. Conservation concerns include the negative impacts of urbanization on water quality, oil spills, human disturbance affecting foraging and roosting birds, and uncertainty about harvest levels of this species (most of the harvest of this species occurs in the Mississippi Flyway, followed by the Atlantic and Pacific Flyways, seaduckjv.org). Management actions include reducing the loss of mature forests on their breeding grounds (the availability of nesting cavities limits their populations; seaduckjv.org), minimizing the impacts of urbanization through better treatment of urban runoff, minimizing the potential for negative impacts of oil spills on marine birds (e.g., double-hulled barges), developing and implementing a standardized survey to track long-term population trends, and gaining a clearer understanding of harvest levels of sea ducks. This species is sensitive to changes in food quality, thus they are a good bio-monitor to assess changes in environmental quality (seaduckjv.org).

Habitat Community: Salt Pond, Type: Coastal Salt Pond

### Status

SRANK: SNA. GRANK: G5. AJV BCR: M. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# **Threats and Actions**

Threat 1 - Lack of information; Population data needed

Actions: • Data collection and analysis. Rank: 3

Threat 2 - Renewable energy; Wind turbines

Actions: • Policies and regulations. Rank: 3

### Threat 3 - Pollution; Specifically oil

Actions: • Policies and regulations. Rank: 3

Threat 4 - Fishing and harvesting aquatic resources; By-catch

Actions: • Policies and regulations. Rank: 3

Threat 5 - Human intrusions and disturbance

Actions: • Site/area management. Rank: 2

Threat 6 - Habitat shifting and alteration; Due to climate change

Actions: • Site/area protection. Rank: 2

Refer to the Community: Salt Pond, Type: Coastal Salt Pond - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Common Loon is a short-distance Nearctic migrant that nests throughout much of Canada and Alaska, with some individuals breeding in the northeastern United States. This species winters in nearshore and offshore water on the Pacific, Atlantic, and Gulf Coasts. In Rhode Island, this species is common in the winter months, with most individuals detected between October to June, with peak abundance from December to May. In contrast to Red-throated Loons, this species has a flightless molt from January to March in Rhode Island waters. Common Loon regularly use coastal pond breachways, where they forage for crabs. However, most individuals use nearshore (100 m to 3 km off the mainland) and offshore (3 km to 40+ km offshore), with approximately 5000+ individuals wintering in Rhode Island and Block Island Sounds (Winiarski et al. 2013). Management actions include continued offshore surveys to assess annual variation in the spatial distribution and abundance of this uncommon species in nearshore and offshore waters. The potential for development of offshore wind resources is a potential concern for this species. In addition, oil spills during the winter months could impact populations (e.g., large numbers of Common Loons were killed during the North Cape oil spill).

Habitat Community: Intertidal Shore, Type: Sand Flat

# Status

IUCN Rank: LC. SRANK: SNA. GRANK: G5. RSGCN: L-VH. Climate Change Vulnerability: Unknown

# **Threats and Actions**

Threat 1 - Lack	of information; Population data needed
Actions: •	Data collection and analysis. Rank: 3
Threat 2 - Rene	wable energy; Wind turbines
Actions: •	Policies and regulations. Rank: 3
Threat 3 - Pollu	tion; Specifically oil
Actions: •	Policies and regulations. Rank: 3
Threat 4 - Fishi	ng and harvesting aquatic resources; By-catch
Actions: •	Policies and regulations. Rank: 3
Threat 5 - Hum	an intrusions and disturbance
Actions: •	Site/area management. Rank: 2
Refer to the Comm	unity: Intertidal Shore, Type: Sand Flat - Habitat Profile for additional threats to this species.

# 

### maae: Jav Osenkows

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

There are two separate populations of Harlequin Ducks in North America, the eastern population nests along fast-moving streams in eastern Canada (primarily Newfoundland and northern Quebec), whereas the western population occurs throughout British Columbia, Alaska, and south into Montana and Washington. This species winters along the Atlantic Coast (New Jersey to Nova Scotia) and Pacific Coast (northern California to the Aleutian Islands). The eastern population is estimated at about 10,000 birds and population trends are unclear (seaduckjv.org), although possible declines in the eastern population in the 1980s resulted in the designation of this species as endangered by the Canadian Wildlife Service in 1990, but later downgraded to a species of concern in 2001. In Rhode Island, this species occurs from early November to late April, with peak abundance from mid-November to mid-March. Approximately 100-150 individuals winter in Rhode Island annually. This species primarily winters on rocky headlands at Sachuest Point NWR and Beavertail (south end of Conanicut Island), with smaller flocks detected off Sakonnet Point, the southern end of Aquidneck Island, Point Judith, Charlestown Breachway, and Napatree Spit. Over the past two decades, there has been a shift in the distribution of Harlequin Ducks, with Sachuest formerly the dominant wintering site 15 years ago and now a majority of Harlequins winter at Beavertail. There also appears to have been a decline in the number of Harlequins wintering in Rhode Island over the past 20 years. Conservation concerns include the apparent decline in Harlequins wintering in Rhode Island, although the reasons for this decline are uncertain. In addition, this species is vulnerable to oil spills and human disturbance at wintering sites. No hunting of this species is allowed in Rhode Island, although some hunters may mistakenly harvest this species. Management actions include continuation of surveys by the USFWS at Sachuest to monitor use of this key site. Also, steps need to be taken to minimize the potential for negative impacts of oil spills on marine birds (e.g., double-hulled barges).

Habitat Community: Intertidal Shore, Type: Rocky Shore

### Status

IUCN Rank: LC. FED: FWS. SRANK: S1N. GRANK: G4. RSGCN: L-VH. Shrbrd: 1. AJV BCR: M. CODES: M. Res/B: 0. GRP: 97. PRIOR: 1. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# **Threats and Actions**

### Threat 1 - Lack of information; Population data needed

Actions: • Data collection and analysis. Rank: 3

Threat 2 - Renewable energy; Wind turbines

Actions: • Policies and regulations. Rank: 3

Threat 3 - Pollution; Specifically oil

Actions: • Policies and regulations. Rank: 3

Threat 4 - Fishing and harvesting aquatic resources; By-catch

Actions: • Policies and regulations. Rank: 3

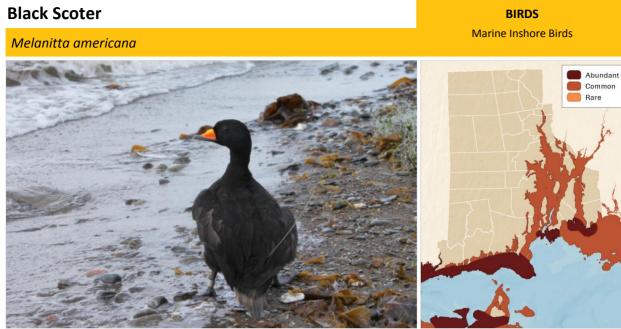
Threat 5 - Human intrusions and disturbance

Actions: • Site/area management. Rank: 2

Threat 6 - Habitat shifting and alteration; Due to climate change

Actions: • Site/area protection. Rank: 2

Refer to the Community: Intertidal Shore, Type: Rocky Shore - Habitat Profile for additional threats to this species.



### Image: Jay Osenkowski

~See map disclaimer in profiles introductior

# **Distribution & Abundance**

The Black Scoter has two populations in North America, the eastern population nests in Newfoundland and the southeastern shores of Hudson Bay, whereas the western population nests throughout much of Alaska. The species winters along the Atlantic and Pacific Coasts of North America, as well as along the Gulf Coast. Relatively little is known about habitat preferences for breeding, molting, staging, or wintering areas, although recent satellite- telemetry studies by Loring et al. (2014) have assessing habitat preferences and movement ecology on wintering grounds in southern New England. Approximately 250,000 Black Scoters are thought to winter off the Atlantic Coast of North America, with an apparent 50% decline in the population since the 1950s (seaduckjv.org). Peak abundance along the East Coast occurs from southern New England to Delaware Bay, Chesapeake Bay, and off of North Carolina (Silverman et al. 2013). In Rhode Island, this species primarily is found from early November to mid-April in nearshore habitats along the southern coast and southwest of Block Island, this species is rarely observed in Upper Narragansett Bay. Conservation concerns include the negative impacts of urbanization on water quality, oil spills, human disturbance affecting foraging and roosting birds, and uncertainty about harvest levels of this species (i.e., approximately 80% of the sport harvest (11,000 individuals annually) is thought to occur in the Atlantic Flyway (seaduckjv.org). Management actions include minimizing the impacts of urbanization through better treatment of urban runoff, minimizing the potential for negative impacts of oil spills on marine birds (e.g., double-hulled barges), developing and implementing a standardized survey to track long-term population trends, and gaining a clearer understanding of harvest levels of sea ducks.

Habitat Community: Intertidal Shore, Type: Rocky Shore

### Status

IUCN Rank: NT. SRANK: SNA. GRANK: G5. AJV BCR: H. Climate Change Vulnerability: high = by 2030 (Habitat loss)

# Threats and Actions

Threat 1 - Lack of information; Population data needed
Actions: • Data collection and analysis. Rank: 3
Threat 2 - Renewable energy; Wind turbines
Actions: • Policies and regulations. Rank: 3
Threat 3 - Pollution; Specifically oil
Actions: • Policies and regulations. Rank: 3
Threat 4 - Fishing and harvesting aquatic resources; By-catch
Actions: • Policies and regulations. Rank: 3

### Threat 5 - Human intrusions and disturbance

Actions: • Site/area management. Rank: 2

Threat 6 - Habitat shifting and alteration; Due to climate change

Actions: • Site/area protection. Rank: 2

Threat 7 - Hunting and collecting terrestrial animals; Adult survival threatened

- Actions: Education and awareness. Rank: 3
  - Compliance and enforcement. Rank: 2

Refer to the Community: Intertidal Shore, Type: Rocky Shore - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The White-winged Scoter nests on freshwater and brackish lakes in the boreal forests throughout western Canada and Alaska. The species winters in saltwater habitats along the Atlantic and Pacific Coasts of North America, as well as along the Gulf Coasts. The North American population is estimated at approximately 500,000 to 800,000 individuals, with an apparently 50% decline in their breeding population since the 1950s (seaduckjv.org). Along the east coast, peak densities occur in southern New England (Silverman et al. 2013). In Rhode Island, this species primarily is found from early October to late-April in nearshore habitats along the southern coast and southwest of Block Island, and rarely detected in Upper Narragansett Bay. Conservation concerns include the negative impacts of urbanization on water quality, oil spills, human disturbance affecting foraging and roosting birds, and uncertainty about harvest levels of this species (i.e., an estimated 30,000 individuals are harvested annually with 80% of the sport harvest in the Atlantic Flyway). Management actions include minimizing the impacts of oil spills on marine birds (e.g., double-hulled barges), developing and implementing a standardized survey to track long-term population trends, and gaining a clearer understanding of harvest levels of sea ducks.

Habitat Community: Intertidal Shore, Type: Rocky Shore

### Status

IUCN Rank: LC. SRANK: SNA. GRANK: G5. AJV BCR: H. Climate Change Vulnerability: High = by 2030 (Habitat loss)

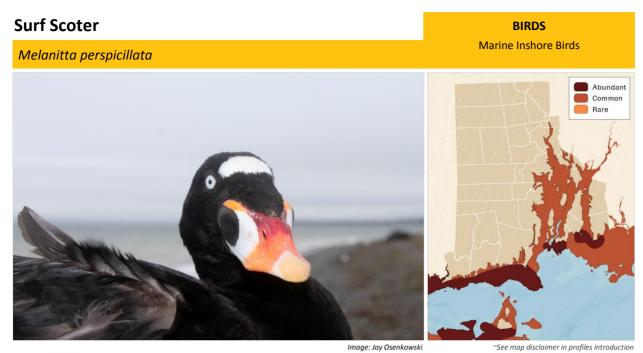
# **Threats and Actions**

Threat 1 - Lack of information; Population data needed
Actions: • Data collection and analysis. Rank: 3
Threat 2 - Renewable energy; Wind turbines
Actions: • Policies and regulations. Rank: 3
Threat 3 - Pollution; Specifically oil
Actions: • Policies and regulations. Rank: 3
Threat 4 - Fishing and harvesting aquatic resources; By-catch
Actions: • Policies and regulations. Rank: 3
Threat 5 - Human intrusions and disturbance
Actions: • Site/area management. Rank: 2

### Threat 6 - Habitat shifting and alteration; Due to climate change

Actions: • Site/area protection. Rank: 2

Refer to the Community: Intertidal Shore, Type: Rocky Shore - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Surf Scoter breed at low densities only in North America across the boreal forests of Canada from Newfoundland to British Columbia and throughout Alaska. The species winters along the Atlantic and Pacific Coasts of North America, as well as along the Gulf Coasts. Current crude estimate the population size is 600,000 to 1 million birds, with the majority breeding in western North America (seaduckjv.org). There is some indication that their population has declined by 50% since the 1950s (seaduckjv.org). There has been significant decline in the number of immature birds harvested in the Atlantic Flyway since the 1960s. Peak densities along the east coast occur from Delaware Bay to Chesapeake Bay (Silverman et al. 2013). In Rhode Island, this species primarily occurs from early November to late- April in nearshore habitats along the southern coast and southwest of Block Island; this species typically only is detected in the southern half of Narragansett Bay. Conservation concerns include the negative impacts of urbanization on water quality, oil spills, human disturbance affecting foraging and roosting birds, and uncertainty about harvest levels of this species (i.e., an estimated 25,000 to 30,000 individuals are harvested annually, with 80% of the sport harvest in the Atlantic Flyway; seaduckjv.org). The impact of climate change on this species is uncertain. Management actions include minimizing the impacts of urbanization through better treatment of urban runoff, minimizing the potential for negative impacts of oil spills on marine birds (e.g., double-hulled barges), developing and implementing a standardized survey to track long-term population trends, and gaining a clearer understanding of harvest levels of sea ducks.

Habitat Community: Intertidal Shore, Type: Rocky Shore

### Status

IUCN Rank: LC. SRANK: SNA. GRANK: G5. AJV BCR: H. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

Threat 1 - Lack of information; Population data needed
Actions: • Data collection and analysis. Rank: 3
Threat 2 - Renewable energy; Wind turbines
Actions: • Policies and regulations. Rank: 3
Threat 3 - Pollution; Specifically oil
Actions: • Policies and regulations. Rank: 3
Threat 4 - Fishing and harvesting aquatic resources; By-catch
Actions: • Policies and regulations. Rank: 3
Threat 5 - Human intrusions and disturbance

Actions: • Site/area management. Rank: 2

Threat 6 - Habitat shifting and alteration; Due to climate change

Actions: • Site/area protection. Rank: 2

Refer to the Community: Intertidal Shore, Type: Rocky Shore - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Red-breasted Merganser nests in artic and subarctic regions throughout the northern hemisphere; in North America they breed in Canada from Nova Scotia to northern British Columbia and Alaska, the Great Lakes Region, and northeastern states. This species primarily winters in saltwater habitats along the entire coastline of North America in coastal bays, calm open-water areas, estuaries, and harbors. An estimated 250,000 individuals nest in North America, but population trends are unclear due to difficulties in surveying this species. In Rhode Island, this common, piscivorous species winters in nearshore habitats throughout Narragansett Bay, along the southern coast and in coastal ponds, whereas this species is rarely detected at inland lakes. Redbreasted Mergansers are most common from mid-November to mid-April in southern New England. Conservation concerns include the negative impacts of urbanization on water quality, oil spills, human disturbance affecting foraging and roosting birds, and uncertainty about harvest levels of this species (the annual harvest of this species is estimated at 30,000 birds in North America; seaduckjv.org). Management actions include minimizing the impacts of urbanization through better treatment of urban runoff, minimizing the potential for negative impacts of oil spills on marine birds (e.g., double-hulled barges), developing and implementing a standardized survey to track long-term population trends, and gaining a clearer understanding of harvest levels of sea ducks.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

# Status

SRANK: SNA. GRANK: G5. AJV BCR: M. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

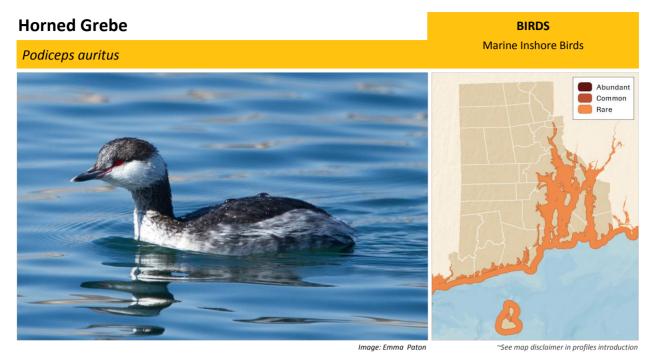
# **Threats and Actions**

Threat 1 - Lack of information; Population data needed
Actions: • Data collection and analysis. Rank: 3
Threat 2 - Renewable energy; Wind turbines
Actions: • Policies and regulations. Rank: 3
Threat 3 - Pollution; Specifically oil
Actions: • Policies and regulations. Rank: 3
Threat 4 - Fishing and harvesting aquatic resources; By-catch
Actions: • Policies and regulations. Rank: 3
Threat 5 - Human intrusions and disturbance
Actions: • Site/area management. Rank: 2

Threat 6 - Habitat shifting and alteration; Due to climate change

Actions: • Site/area protection. Rank: 2

Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Horned Grebe is a short-distance Nearctic migrant that nests throughout western Canada and Alaska. This species winters along the East and West Coasts, as well as the southeastern United States. In Rhode Island, this species utilizes nearshore marine waters, and is typically detected less than 1 km offshore, or in coastal ponds or breachways. This relatively common species typically occurs in Rhode Island from early October to mid-May, with peak abundance from early November to mid-April. Little is known about the ecology of this species during the winter. Management actions include continued nearshore surveys to assess annual variation in the spatial distribution and abundance of this uncommon species in nearshore and offshore waters. The potential for development of offshore wind resources is a potential management concern for this species, although only a small fraction of their population probably migrates through Rhode Island offshore waters. Oil spills during the winter months could impact local populations.

Habitat Community: Salt Pond, Type: Coastal Salt Pond

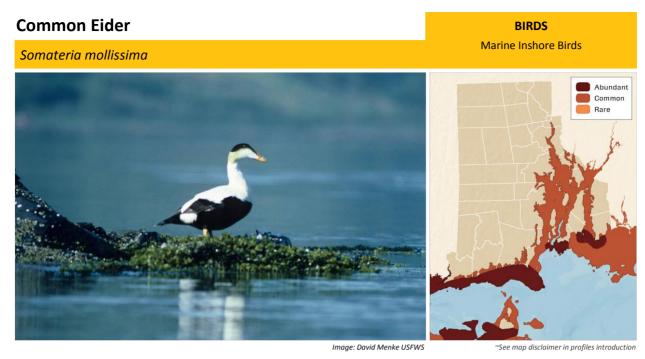
### Status

SRANK: SNA. GRANK: G5. AJV BCR: H. Climate Change Vulnerability: Med = by 2050 (Food web change/shift)

# **Threats and Actions**

Threat 1 - Lack of information; Population data needed
Actions: • Data collection and analysis. Rank: 3
Threat 2 - Renewable energy; Wind turbines
Actions: • Policies and regulations. Rank: 3
Threat 3 - Pollution; Specifically oil
Actions: • Policies and regulations. Rank: 3
Threat 4 - Fishing and harvesting aquatic resources; By-catch
Actions: • Policies and regulations. Rank: 3
Refer to the Community: Salt Pond, Type: Coastal Salt Pond - Habitat Profile for additional threats to

this species.



# **Distribution & Abundance**

The four races of Common Eider breed in dense colonies throughout northern coastal regions of North America from Maine, throughout Canada, and much of Alaska. This species winters in coastal, nearshore habitat in the Northeast and off of Alaska. Along the Atlantic Coast, peak densities occur in southern New England (Silverman et al. 2013). In Rhode Island, the American subspecies (S. m. dresseri) occurs from mid-November to early May. The American race is estimated at about 280,000 individuals in eastern Canada and 57,000 in the northeastern United States, with this population thought to be stable or increasing (seaduckjv.org). However, no standardized, robust surveys are conducted annually for this species, therefore accurate estimates of population trends are lacking. This species is primarily detected in nearshore rocky habitats off the southern coast and off Block Island. Recent satellite-telemetry studies by Beuth et al. (2014) have documented habitat selection and movement ecology of this species in southern New England. Conservation concerns include the negative impacts of urbanization on water quality, oil spills, human disturbance affecting foraging and roosting birds, and uncertainty about harvest levels of this species (an estimated 23,000 birds are harvested annually in New England, and harvest levels in Greenland (80,000) are not sustainable; seaduckjv.org). Management actions include minimizing the impacts of urbanization through better treatment of urban runoff, minimizing the potential for negative impacts of oil spills on marine birds (e.g., double-hulled barges), developing and implementing a standardized survey to track long-term population trends, and gaining a clearer understanding of harvest levels of sea ducks.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

### Status

SRANK: SNA. GRANK: G5. RSGCN: L-H. AJV BCR: H. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

Threat 1 - Lack of information; Population data needed
Actions: • Data collection and analysis. Rank: 3
Threat 2 - Renewable energy; Wind turbines
Actions: • Policies and regulations. Rank: 3
Threat 3 - Pollution; Specifically oil
Actions: • Policies and regulations. Rank: 3
Threat 4 - Fishing and harvesting aquatic resources; By-catch
Actions: • Policies and regulations. Rank: 3
Threat 5 - Human intrusions and disturbance

Actions: • Site/area management. Rank: 2

Threat 6 - Habitat shifting and alteration; Due to climate change

Actions: • Site/area protection. Rank: 2

Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.

# Marine Pelagic Birds

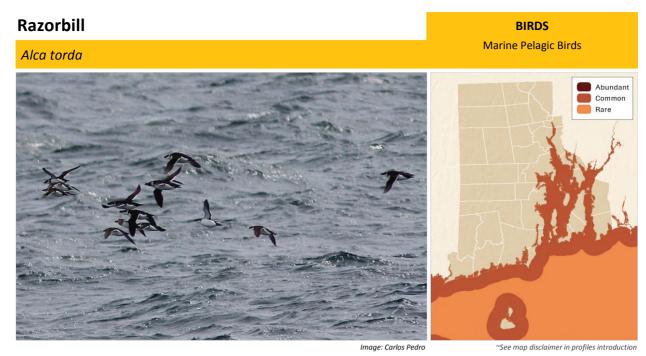
**BIRDS** 

# Description

Pelagic birds were not included in the 2005 SWAP, in part because they do not nest in state waters but also because local populations vary temporally and spatially. However, such species are still at risk from a variety of threats, including loss of habitat or mortality from ocean wind turbines, oil spills, and by-catch in fishing gear. The RI Ocean Special Area Management Plan (citation) was the first study to systematically document the status and distribution of pelagic species in Rhode Island waters.

# **Species**

Razorbill (Alca torda) Cory's Shearwater (Calonectris diomedea) Red-throated Loon (Gavia stellata) Northern Gannet (Morus bassanus) Great Shearwater (Puffinus gravis)



# **Distribution & Abundance**

The Razorbill is a short-distance Nearctic migrant that nests in small, coastal colonies throughout northeastern Canada into Maine. The species is pelagic in the winter months, with most birds wintering between New England and northeastern Canada, with some individuals dispersing far offshore. This relatively uncommon species (i.e., there are an estimated 38,000 breeding pairs in North America) is one of the rarest breeding colonial seabirds in North America. In Rhode Island, this species typically is detected in offshore waters from early November to mid-April, with peak abundance in mid-December to early February. During offshore survey for the Rhode Island Ocean SAMP research project (Paton et al. 2010), this species was regularly detected in Rhode Island and Block Island Sound from 1-10 miles offshore. Of the three species of alcids that regularly winter in Rhode Island, Razorbills were most likely to be detected close to land. Management actions include continued offshore surveys to assess annual variation in the spatial distribution and abundance of this uncommon species in nearshore and offshore waters. The potential for development of offshore wind resources is a potential concern for this species, particularly the proposed large wind facility in the Area of Mutual Interest (AMI) in Rhode Island Sound. In addition, oil spills during the winter months could impact populations.

Habitat Community: Pelagic, Type: Marine Pelagic

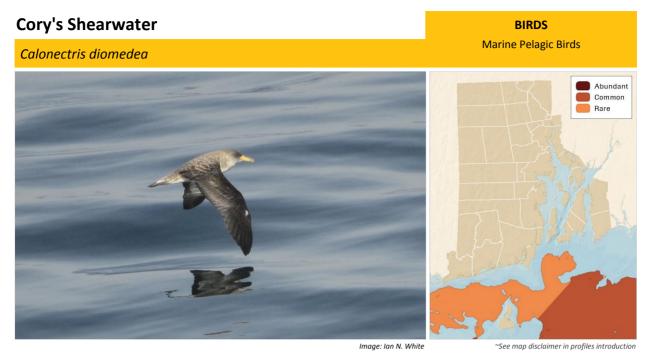
### Status

SRANK: SNA. GRANK: G5. AJV BCR: M. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# **Threats and Actions**

Threat 1 - Indu	strial and military effluents; Oil pollution
Actions: •	Policies and regulations; Double-hulled barges. Rank: 2
Threat 2 - Rene	ewable energy; Wind energy
Actions: •	Policies and regulations; Proper placement. Rank: 3
Threat 3 - Fishi	ng and harvesting aquatic resources; By-catch
Actions: •	Policies and regulations. Rank: 2
Threat 4 - Lack of information	
Actions: •	Data collection and analysis.

Refer to the Community: Pelagic, Type: Marine Pelagic - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Cory's Shearwater is a long-distance migrant that nests in colonies on islands and cliffs in the Mediterranean and the North Atlantic (Azores to Cape Verde). During the winter, this species is pelagic and migrates throughout the Atlantic Ocean south of Africa and central South America. Large numbers migrate through New England's offshore waters from mid-May to mid-November with peak abundance from July to September. This species is most abundant in Rhode Island Sound approximately 10 miles and farther offshore. Management actions include continued offshore surveys to assess annual variation in the spatial distribution and abundance of this uncommon species in nearshore and offshore waters. The potential for development of offshore wind resources is a potential management concern for this species, although only a small fraction of their population probably migrates through Rhode Island offshore water during the summer months. This species also serves an umbrella species for other pelagic species that use offshore waters during the summer months (e.g., Wilson's Storm-Petrel).

Habitat Community: Pelagic, Type: Marine Pelagic

### Status

SRANK: SNA. GRANK: G5. AJV BCR: M. Climate Change Vulnerability: Med = by 2050 (Food web change/shift)

# **Threats and Actions**

Threat 1 - Industrial and military effluents; Oil pollution
Actions: • Policies and regulations; Double-hulled barges. Rank: 2

Threat 2 - Renewable energy; Wind energy

Actions: • Policies and regulations; Proper placement. Rank: 3

Threat 3 - Fishing and harvesting aquatic resources; By-catch

Actions: • Policies and regulations. Rank: 2

Refer to the Community: Pelagic, Type: Marine Pelagic - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Red-throated Loon is a short-distance Nearctic migrant that nests at high latitudes throughout Canada and Alaska. This species winters in nearshore and offshore waters on both the East and West Coasts of North America. In Rhode Island, this species winters in nearshore and offshore waters from mid-October to May, with peak abundance in December. During spring (March to late May) and fall (October to January) large number of migrants pass through coastal waters. This species is common in nearshore and offshore waters throughout Rhode Island and Block Island Sounds, with individuals documented foraging just off beaches to 20+ miles offshore (Paton et al. 2010). Red-throated Loons have declined in parts of their range in North America, thus this species is a conservation concern. The molt cycle of this species differs from Common Loon, as Red-throated Loon complete their basic molt before leaving their breeding grounds in the fall, therefore this species does not experience flightless molt when in Rhode Island. Management actions include continued offshore surveys to assess annual variation in the spatial distribution and abundance of this uncommon species in nearshore and offshore waters. The potential for development of offshore wind resources is a potential concern for this species. In addition, oil spills during the winter months could impact populations.

Habitat Community: Marine Soft Sediment, Type: Nearshore Soft Sediment

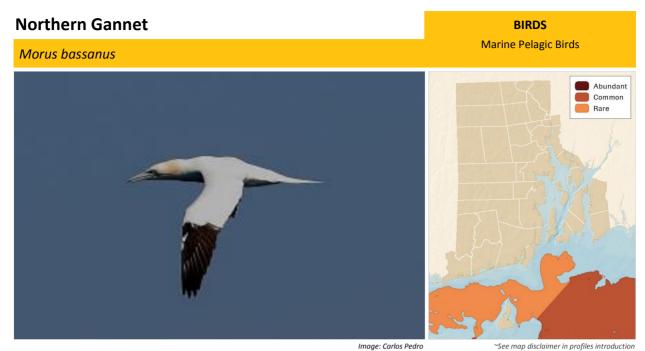
### Status

SRANK: SNA. GRANK: G5. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

Threat 1 - Lack of information; Population data needed
Actions: • Data collection and analysis. Rank: 3
Threat 2 - Renewable energy; Wind turbines
Actions: • Policies and regulations. Rank: 3
Threat 3 - Pollution; Specifically oil
Actions: • Policies and regulations. Rank: 3
Threat 4 - Fishing and harvesting aquatic resources; By-catch
Actions: • Policies and regulations. Rank: 3
Threat 5 - Human intrusions and disturbance
Actions: • Site/area management. Rank: 2

Refer to the Community: Marine Soft Sediment, Type: Nearshore Soft Sediment - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Northern Gannet is a short-distance Nearctic migrant that breeds in a few colonies in northeastern Canada. This species is pelagic in the non- breeding season, with individuals dispersing as far south as the Gulf Coast and hundreds of kilometers offshore of the northeast coast. Large number of this species migrate through Rhode Island and Block Island Sounds, with peak numbers in fall (mid-Oct to mid-Dec) as birds disperse south and spring (mid-March to mid-April) as birds return to breeding colonies. In Rhode Island, gannets are often detected following fishing vessels where they forage on bycatch released by boats, thus their distribution it highly correlated with where fishing vessels are active. This species typically used 3 miles or farther offshore, but can be detected nearshore under certain wind conditions. Management actions include continued offshore surveys to assess annual variation in the spatial distribution and abundance of this common species in nearshore and offshore waters. The potential for development of offshore wind resources is a potential management concern for this species, although only a small fraction of their population probably migrates through Rhode Island offshore waters.

Habitat Community: Pelagic, Type: Marine Pelagic

### Status

SRANK: SNA. GRANK: G5. AJV BCR: H. Climate Change Vulnerability: Med = by 2050 (Food web change/shift)

# **Threats and Actions**

### Threat 1 - Industrial and military effluents; Oil pollution

Actions: • Policies and regulations; Double-hulled barges. Rank: 2

- Threat 2 Renewable energy; Wind energy
  - Actions: Policies and regulations; Proper placement. Rank: 3

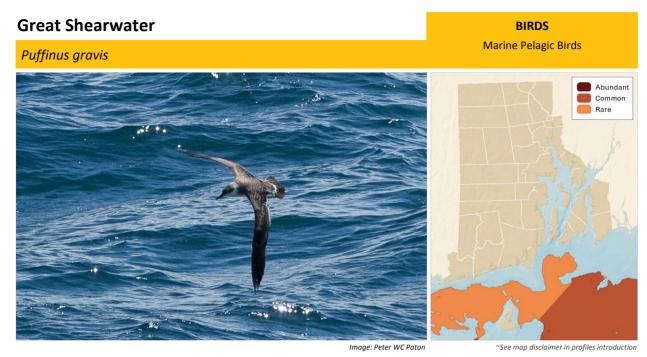
### Threat 3 - Pollution; Habitat degradation from impairment of water quality

- Actions: Data collection and analysis; Assess effects of sedimentation. Rank: 2
  - Data collection and analysis; Assess effects of stream bank disturbance. Rank: 2
  - Data collection and analysis; Assess effects of water withdrawals. Rank: 2
  - Data collection and analysis; Evaluate water quality effects on priority species. Rank: 2
  - Planning; Develop strategies to mitigate aquatic degradation. Rank: 2

### Threat 4 - Housing and urban areas; Impacts of urbanization

- Actions: Site/area protection. Rank: 3
  - Resource and habitat protection. Rank: 3

Refer to the Community: Pelagic, Type: Marine Pelagic - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Great Shearwater is a long-distance migrant that nests on isolated islands in the Southern Hemisphere between Africa and South America. This species is one of the few species that migrates from the Southern Hemisphere and winters in the Northern Hemisphere. Great Shearwaters have a circular migration route that follows the east coast of South America, north along the Atlantic Coast of North America, they winter along coastlines in the Arctic Circle, before migrating south along the European and north African coastlines. In Rhode Island, has a migration phenology that is very similar to Cory's Shearwater, with individuals likely to be detected from mid-May to late November with peak detection rates from July to mid-October. Management actions include continued offshore surveys to assess annual variation in the spatial distribution and abundance of this uncommon species in nearshore and offshore waters. The potential for development of offshore wind resources is a potential management concern for this species, although only a small fraction of their population probably migrates through Rhode Island offshore water during the summer months. This species also serves an umbrella species for other pelagic species that use offshore waters during the summer months (e.g., Wilson's Storm-Petrel).

Habitat Community: Pelagic, Type: Marine Pelagic

### Status

SRANK: SNA. GRANK: G5. AJV BCR: H. Climate Change Vulnerability: Med = by 2050 (Food web change/shift)

# **Threats and Actions**

Threat 1 - Industrial and military effluents; Oil pollution
Actions: • Policies and regulations; Double-hulled barges. Rank: 2
Threat 2 - Renewable energy; Wind energy
Actions: • Policies and regulations; Proper placement. Rank: 3
Threat 3 - Fishing and harvesting aquatic resources; By-catch

Actions: • Policies and regulations. Rank: 2

Refer to the Community: Pelagic, Type: Marine Pelagic - Habitat Profile for additional threats to this species.

# **Freshwater Marsh Birds**

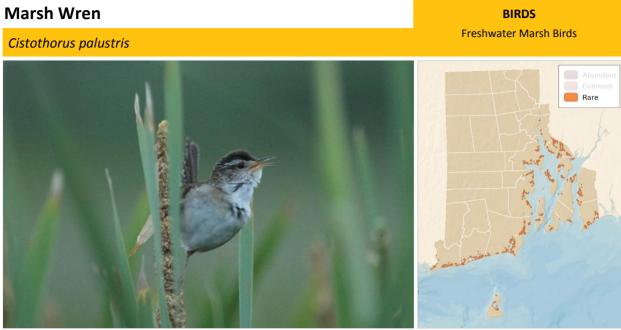
**BIRDS** 

## Description

Freshwater marshes are also discrete and relatively uncommon features of the Rhode Island landscape. Several birds, including most species of rails, Marsh Wren, bitterns and others prefer to nest in the thick emergent vegetation of such habitats. As with salt marshes, freshwater marshes receive some degree of regulatory protection in Rhode Island, but several issues still plague them, including contaminants and invasive species such as Phragmites and Purple Loosestrife. Where urban areas brush up near marshes, birds that attempt to use them can be affected by subsidized predators, domestic pets, and other traumas.

# **Species**

Marsh Wren (Cistothorus palustris) Wilson's Snipe (Gallinago delicata) Least Bittern (Ixobrychus exilis) Pied-billed Grebe (Podilymbus podiceps) Sora (Porzana carolina) King Rail (Rallus elegans) Virginia Rail (Rallus limicola)



### Image: Peter WC Pator

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Marsh Wren is widespread and nests across much of temperate and sub-boreal North America, from New England westward through the Great Lakes and to the Pacific Coast. This species generally winters in southern portions of both coasts and southward into Mexico. During the period of the RI Breeding Bird Atlas, Marsh Wrens were suspected of nesting in about fifteen large marshes with tall emergent vegetation that tended to located in coastal areas. They were usually detected in dense stands of cattail, but were sometimes documented in stands of common reed or rice cutgrass. Marsh Wrens are part of the suite of species that occupies higher quality freshwater emergent marshes, which are not common in Rhode Island. There has been little recent survey effort for this species, therefore conservation actions include implementing systematic surveys designed to assess the current distribution of Marsh Wrens in the state, as well as mapping the distribution of potential nesting habitat. Marsh Wrens are somewhat overlooked during migration but are sometimes relatively common during October, where they can be found in coastal marshes and beach vegetation. This species winters at marshes at some sites in Rhode Island, based on regularly detections during Christmas Bird Counts (e.g., detected on 6 of 10 CBC in South Kingstown from 2002-2012). Conservation actions include conducting systematic surveys in marshes throughout the state with stands of emergent persistent vegetation to gain a clearer understanding of the current spatial distribution and abundance. This information could be used to develop a management plan.

Habitat Community: Freshwater Emergent Marsh, Type: Semi-permanently Flooded (Deep) Marsh

### Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S2B,S3N. GRANK: G5. RSGCN: L-H. NALCC: X (B). PIF NALCP: Tier II.a. AJV BCR: H. CODES: B. Res/B: 1. GRP: 70. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

### Threat 1 - Invasive non-native/alien species; Increasing phragmites

- Actions: Invasive/problematic species control; Control phragmites. Rank: 2
  - Habitat and natural process restoration; Restore treated areas to natural function. Rank: 2

### Threat 2 - Housing and urban areas; Disturbance to habitat due to development

- Actions: Land/water protection; Work with state and nonprofits to conserve appropriate properties that contain habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2

• Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

### Threat 3 - Recreational activities; Increased human disturbance of nesting habitat

- Actions: Education and awareness; Education of landowners about appropriate land management . Rank: 1
  - Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

### Threat 4 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

### Threat 5 - Household sewage and urban waste water

- Actions: Education and awareness. Rank: 2
  - Policies and regulations. Rank: 3

Refer to the Community: Freshwater Emergent Marsh, Type: Semi-permanently Flooded (Deep) Marsh - Habitat Profile for additional threats to this species.

# Wilson's Snipe

Gallinago delicata

BIRDS Freshwater Marsh Birds



Imaae: Richard L Ferrei

See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Wilson's Snipe is a widespread species that nests throughout northern North America, and winters throughout much of the United States into northwestern South America. In Rhode Island, this species occurs only as migrant, with some individuals successful wintering in some years based on relatively high detection probabilities during local Christmas Bird Counts. Wilson's Snipe is probably overlooked because of its cryptic nature and inaccessibility of wetlands, therefore it is virtually impossible to determine how many migrants pass through Rhode Island each year. Annual trend estimates for eastern North American are uncertain based on Breeding Bird Surveys from 1966 to 2012 (annual trend = -0.1 (95% CI = -1.0 to 0.7). In Rhode Island, this species tends to utilize freshwater marshes, wet meadows and the edges of salt marshes habitats that are important for many other species. This species is often detected during Christmas Bird Counts along the coast when field observers tend to tramp through wet meadows looking for other unusual birds. In the last decade there have been five counts when more than 10 birds were detected between late March and early April at the Great Swamp Wildlife Management Area impoundment. Therefore, one conservation action would be to modify impoundment management to provide habitat for this species during migration. In addition, another conservation action would be to develop a systematic survey protocol to assess the spatial distribution and abundance of this species is suitable habitat throughout the state.

Habitat Community: Freshwater Emergent Marsh, Type: Freshwater Emergent Marsh

# Status

FED: FWS. SRANK: SZN. GRANK: G5. RSGCN: L-H. Shrbrd: 1. USSCP: M. AJV BCR: M. CODES: M. Res/B: 0. GRP: 15. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

### Threat 1 - Invasive non-native/alien species; Increasing phragmites

### Actions: • Invasive/problematic species control; Control phragmites. Rank: 2

Habitat and natural process restoration; Restore treated areas to natural function. Rank: 2

### Threat 2 - Housing and urban areas; Disturbance to habitat due to development

- Actions: Land/water protection; Work with state and nonprofits to conserve appropriate properties that contain habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management. Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

Threat 3 - Recreational activities; Increased human disturbance of nesting habitat

- Actions: Education and awareness; Education of landowners about appropriate land management . Rank: 1
  - Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

### Threat 4 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

### Threat 5 - Household sewage and urban waste water

- Actions: Education and awareness. Rank: 2
  - Policies and regulations. Rank: 3

Refer to the Community: Freshwater Emergent Marsh, Type: Freshwater Emergent Marsh - Habitat Profile for additional threats to this species.

# Least Bittern

BIRDS Freshwater Marsh Birds





# **Distribution & Abundance**

The Least Bittern is a small heron whose breeding range includes most of the eastern United States from coastal Maine westward to North Dakota and southward to the Gulf Coast. Disjunct populations also occur in the West. This species winters along the southern coasts of North America, as well as the Caribbean and Central America. Annual population trends based on Breeding Bird Surveys from 1966 to 2012 suggest this species might be declining throughout eastern North America (annual trend = -0.6 (95% CI = -3.3 to 2.1). In Rhode Island, Least Bitterns were suspected of nesting in about seven large marshes near the coast in stands of cattails during 1980s Breeding Bird Atlas. Since those surveys in the 1980s, there have been little systematic survey efforts, with the exception of surveys by staff from the USFWS. Least Bitterns are rarely encountered during migration. Conservation actions include conducting systematic surveys in marshes in coastal areas of the state with stands of emergent persistent vegetation to gain a clearer understanding of the current spatial distribution and abundance. This information could be used to develop a management plan.

Habitat Community: Freshwater Emergent Marsh, Type: Semi-permanently Flooded (Deep) Marsh

# Status

IUCN Rank: LC. FED: FWS. STSTAT: ST. SRANK: S2B,S2N. GRANK: G5. STATE: E-1(3-4). RSGCN: L-VH. PIF BCPSN: Tier V. AJV BCR: M. CODES: B. Res/B: 1. GRP: 22. PRIOR: 1. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# Threats and Actions

### Threat 1 - Invasive non-native/alien species; Increasing phragmites

Actions: • Invasive/problematic species control; Control phragmites. Rank: 2

Habitat and natural process restoration; Restore treated areas to natural function. Rank: 2

### Threat 2 - Housing and urban areas; Disturbance to habitat due to development

- Actions: Land/water protection; Work with state and nonprofits to conserve appropriate properties that contain habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management. Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

### Threat 3 - Recreational activities; Increased human disturbance of nesting habitat

Actions: • Education and awareness; Education of landowners about appropriate land management . Rank: 1

• Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

Threat 4 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

### Threat 5 - Household sewage and urban waste water

- Actions: Education and awareness. Rank: 2
  - Policies and regulations. Rank: 3

Refer to the Community: Freshwater Emergent Marsh, Type: Semi-permanently Flooded (Deep) Marsh - Habitat Profile for additional threats to this species.

# Pied-billed Grebe BRDS Podilymbus podiceps Teshwater Marsh Birds

Image: Richard L Ferren

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Pied-billed Grebe is a widely distributed species that has a large breeding range that stretches across much of temperate and sub-boreal North America, from New England westward through central Canada to the Pacific Coast and southward into Central and South America. During winter this species can be found nearly year-round in southern North America through South America. In Rhode Island, Pied-billed Grebes are a rare nesting species, with some individuals apparently wintering here if suitable conditions persist (i.e., coastal ponds do not completely freeze). They were not documented during the 1982-87 Breeding Bird Atlas, but a nesting record was confirmed recently at Trustom Pond NWR. Pied-billed Grebes nest in marshes with tall emergent vegetation, particularly cattail. This species is a common fall migrant, when they tend to be most abundant (e.g., up to 10 birds at Trustom Pond NWR) in freshwater ponds that also have large waterfowl flocks. Pied-billed Grebes have always been rather a rare breeding species in Rhode Island, but they are part of a cohort of marsh birds that have either declined or disappeared from the Rhode Island landscape. Population trend estimates for this species are uncertain in eastern North America based on Breeding Bird Surveys from 1966-2012 (annual trends = -1.2 (95% CI = -5.4 t 1.5). There has been little recent systematic survey effort for this species with the exception of surveys by USFWS RI Refuge Complex staff. Conservation actions include the initiation of systematic surveys to assess their abundance, spatial distribution, habitat preferences, and population trends. In addition, restoration efforts designed to enhance cattail marshes at larger wetlands are suggested.

Habitat Community: Brackish Marsh, Type: Brackish Marsh

### Status

STSTAT: SE. SRANK: S1B. GRANK: G5. RSGCN: L-VH. PIF BCPSN: Tier V. Climate Change Vulnerability: Unknown

# Threats and Actions

### Threat 1 - Invasive non-native/alien species; Increasing phragmites

- Actions: Invasive/problematic species control; Control phragmites. Rank: 2
  - Habitat and natural process restoration; Restore treated areas to natural function. Rank: 2

### Threat 2 - Housing and urban areas; Disturbance to habitat due to development

- Actions: Land/water protection; Work with state and nonprofits to conserve appropriate properties that contain habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

Threat 3 - Recreational activities; Increased human disturbance of nesting habitat

- Actions: Education and awareness; Education of landowners about appropriate land management . Rank: 1
  - Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

### Threat 4 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

### Threat 5 - Household sewage and urban waste water

- Actions: Education and awareness. Rank: 2
  - Policies and regulations. Rank: 3

Refer to the Community: Brackish Marsh, Type: Brackish Marsh - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Sora is a secretive rail of freshwater marshes that is the most widely distributed rail in North America. This species nests throughout much of North America except northern latitudes and the southeast. This species winters along the southern parts of both coasts of North America, as well as the Caribbean, Central America and northern South America. This species has declined in some portions of the range. Annual trend estimates based on Breeding Bird Surveys from 1966-2012 are uncertain (annual trend = 02. (-2.2 to 2.3), in part because the BBS is not focused on secretive marshbirds. During the 1982-87 Rhode Island Breeding Bird Atlas, Soras were suspected of nesting at eight large freshwater marshes that contained ample emergent aquatic vegetation, including cattails, arrowhead, and other cover types. This species was detected at interior wetlands, and all sites were located in areas containing circum-neutral bedrock, suggesting that pH may influence habitat quality for this species. These sites also tended to contain a diverse marsh-bird fauna and supported winter waterfowl. Therefore, the Sora is an umbrella species for other vertebrates associated with for high-quality emergent freshwater marsh habitats in Rhode Island. Conservation actions include the initiation of systematic surveys focused on secretive marsh birds include the Sora to gain a clearer understanding of their spatial distribution and abundance in Rhode Island and to develop specific management guidelines. There has been little recent systematic survey effort in Rhode Island, except for surveys by USFWS staff. This species is occasionally encountered during migration, usually in salt marshes.

Habitat Community: Freshwater Emergent Marsh, Type: Semi-permanently Flooded (Deep) Marsh

### Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,S1N. GRANK: G5. STATE: E-1(3-4). RSGCN: L-VH. AJV BCR: M. CODES: B. Res/B: 1. GRP: 67. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

### Threat 1 - Invasive non-native/alien species; Increasing phragmites

- Actions: Invasive/problematic species control; Control phragmites. Rank: 2
  - Habitat and natural process restoration; Restore treated areas to natural function. Rank: 2

### Threat 2 - Housing and urban areas; Disturbance to habitat due to development

- Actions: Land/water protection; Work with state and nonprofits to conserve appropriate properties that contain habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

### Threat 3 - Recreational activities; Increased human disturbance of nesting habitat

- Actions: Education and awareness; Education of landowners about appropriate land management . Rank: 1
  - Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

### Threat 4 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

### Threat 5 - Household sewage and urban waste water

- Actions: Education and awareness. Rank: 2
  - Policies and regulations. Rank: 3

Refer to the Community: Freshwater Emergent Marsh, Type: Semi-permanently Flooded (Deep) Marsh - Habitat Profile for additional threats to this species.

# King Rail BIRDS Rallus elegans Freshwater Marsh Birds

Image: Jim Rathert/MO Conservation; USFWS

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The King Rail nests throughout freshwater marshes in the eastern United States and winters in the southern United States, with resident populations in the Caribbean and Mexico. A conservation plan for the King Rail was prepared by the USFWS (Cooper 2008). Although cryptic marsh birds are difficult to census, this species has apparently suffered severe declines over at least parts of its breeding range. Annual trend estimate for eastern North America from Breeding Bird Surveys from 1966 to 2012 suggest substantial decline (annual trend = -3.7 (95% CI = -7.2 to 0.0). This species is extremely rare in Rhode Island, with nesting confirmed or suspected on only a few occasions in salt marshes and small freshwater ponds along the coast. Sporadic nesting report occurred up to the late 1980s, but there been no valid report of King Rail in the state since 2006, despite a vast increase in bird observers. Conservation actions include the initiation of systematic surveys targeting this species to gain a clearer understanding of their current spatial distribution and habitat preferences help to develop a focused management plan.

Habitat Community: Brackish Marsh, Type: Brackish Marsh

### Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,S1N. GRANK: G4G5. STATE: E-1(3-4). RSGCN: L-VH. PIF NALCP: Tier II.a. PIF BCPSN: Tier V. AJV BCR: M. CODES: B. Res/B: 1. GRP: 93. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

### Threat 1 - Invasive non-native/alien species; Increasing phragmites

Actions: • Invasive/problematic species control; Control phragmites. Rank: 2

• Habitat and natural process restoration; Restore treated areas to natural function. Rank: 2

### Threat 2 - Housing and urban areas; Disturbance to habitat due to development

- Actions: Land/water protection; Work with state and nonprofits to conserve appropriate properties that contain habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

### Threat 3 - Recreational activities; Increased human disturbance of nesting habitat

Actions: • Education and awareness; Education of landowners about appropriate land management . Rank: 1

• Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

Threat 4 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

### Threat 5 - Household sewage and urban waste water

- Actions: Education and awareness. Rank: 2
  - Policies and regulations. Rank: 3

Refer to the Community: Brackish Marsh, Type: Brackish Marsh - Habitat Profile for additional threats to this species.

# Virginia Rail

Rallus limicola

BIRDS Freshwater Marsh Birds



Image: Carlos Pedro

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Virginia Rail nests across North America from the Canadian Maritimes westward to the Pacific Coast. This species winters in the southern United States into Mexico. Virginia Rails are most widespread of all the marshobligate nesting birds in Rhode Island. During the RI Breeding Bird Atlas from 1982-87, Virginia Rails were suspected of nesting in nearly twenty localities in the state. Unlike many other marsh species, Virginia Rails were found on territory in several inland areas and also on Block Island. Virginia Rail nesting habitats included large coastal freshwater marshes that contained cattail and other emergent vegetation, as well as Tussock Sedge floodplains of rivers. Virginia Rails are only occasionally encountered during migration, usually in salt marshes. Population trend estimates are uncertain based on Breeding Bird Surveys from 1966 to 2012 (annual trend = 1.0 (95% CI = -2.0 to 3.9), which is due in part to the fact that BBS are not designed to monitor secretive marsh birds. They may remain in localized marshes well into late fall, with some individuals apparently successfully spending the winter in Rhode Island based on regular detections during local Christmas Bird Counts (e.g., detected during three winters from 2002 to 2012 in the South Kingstown CBC). There has been little recent systematic survey effort, with the exception of effort by USFWS Rhode Island Refuge Complex staff. Conservation actions include conducting systematic surveys in marshes throughout the state with stands of emergent persistent vegetation to gain a clearer understanding of the current spatial distribution and abundance. This information could be used to develop a management plan.

Habitat Community: Freshwater Emergent Marsh, Type: Freshwater Emergent Marsh

# Status

IUCN Rank: LC. SRANK: S2B,S2N. GRANK: G5. Climate Change Vulnerability: Unknown

# **Threats and Actions**

### Threat 1 - Invasive non-native/alien species; Increasing phragmites

- Actions: Invasive/problematic species control; Control phragmites. Rank: 2
  - Habitat and natural process restoration; Restore treated areas to natural function. Rank: 2

### Threat 2 - Housing and urban areas; Disturbance to habitat due to development

- Actions: Land/water protection; Work with state and nonprofits to conserve appropriate properties that contain habitat. Rank: 3
  - Education and awareness; Education of landowners about appropriate land management . Rank: 2
  - Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

Threat 3 - Recreational activities; Increased human disturbance of nesting habitat

- Actions: Education and awareness; Education of landowners about appropriate land management . Rank: 1
  - Policies and regulations; Policy regulations on buffer zones and land use. Rank: 3

### Threat 4 - Habitat shifting and alteration; Loss of nesting and foraging habitat due to climate change

- Actions: Land/water protection; Protection of conservation of lands to allow for marsh migration. Rank: 3
  - Habitat and natural process restoration; Restoration of feeding and nesting habitat. Rank: 3

### Threat 5 - Household sewage and urban waste water

- Actions: Education and awareness. Rank: 2
  - Policies and regulations. Rank: 3

Refer to the Community: Freshwater Emergent Marsh, Type: Freshwater Emergent Marsh - Habitat Profile for additional threats to this species.

# Salt Marsh Birds

**BIRDS** 

## Description

Salt marshes are universally considered to be among the most important wildlife habitats in North America, and Rhode Island's contribution to the regional distribution and conservation of this habitat is significant. PIF identified maritime marshes as the habitat harboring the largest number of high priority species in the region, and accordingly the National Audubon Society Important Bird Areas program designated 16 IBAs in Rhode Island (See: Table 1.x; Figure 1.2) that support saltmarsh sparrow and other species (National Audubon Society 2010). The saltmarsh sparrow is considered by PIF to be the species of highest conservation priority in this region because a significant proportion of the world's population of this species breeds in the coastal marshes of Southern New England (Rosenberg and Dettmers 2000).

Many salt marsh systems have already been heavily degraded by past ditching, filling, and associated coastal development. Although salt marshes now receive regulatory protection in Rhode Island, unless conservation actions are taken to mitigate the impact of sea level rise on the high marsh, birds that breed in salt marshes will be negatively affected. In 2011, a group of University and non-profit scientists in the Northeast formed a research group made up of over 25 partners known as the Saltmarsh Habitat and Avian Research Program (SHARP). This group coordinates and conducts assessments of the region-wide population status of marsh birds and their habitat across the Northeast. Through bird surveys, banding and nest monitoring, the SHARP group focuses on the study of breeding marsh birds and their survival and productivity. Scientists from URI and USFWS have conducted research in cooperation with the SHARP group in 2011 and 2012 in the state of Rhode Island. Much of this work has focused on the capture, banding, and nest monitoring of saltmarsh sparrows, the data being analyzed by researchers from the University of Connecticut, University of Delaware, and University of Maine to determine long-term survival probabilities for the saltmarsh sparrow. These studies will help determine how future changes in salt marsh habitat due to development and sea level rise could affect this sensitive bird species. A SHARP overview report for 2012 is available at http://www.tidalmarshbirds.net/ Although salt marshes receive regulatory protection in Rhode Island, unless conservation actions are taken to mitigate the impact of sea level rise on the high marsh, this species and other bird species that specialize in breeding in salt marshes will be negatively impacted due to the effects of sea level rise on reproductive success. There is extensive research being conducted on birds associated with saltmarshes along the Atlantic Coast from Delaware to Maine including Rhode Island (project SHARP, see www.tidalmarshbirds.org), with support from the USFWS Rhode Island National Wildlife Refuge Complex.

# **Species**

Nelson's Sparrow (Ammodramus nelsoni) Saltmarsh Sparrow (Ammodramus caudacutus) Seaside Sparrow (Ammodramus maritimus) American Black Duck (Anas rubripes) Clapper Rail (Rallus longirostris) Willet (Tringa semipalmata)



#### **Distribution & Abundance**

The Nelson's Sparrow, a superspecies with Saltmarsh Sparrow (AOU 1995), includes two subspecies occupy discrete breeding ranges throughout interior Canada (A. n. nelsoni and A. n. alterus), and a third subspecies (A. n. subvirgatus) that nests along the Atlantic Coast from eastern Quebec to southern Maine. This species winters from the mid- to southern Atlantic coast. Nelson's Sparrows nest in wet grasslands, prairies and coastal salt marshes, where their ground nests occur in thick thatch vegetation. This species breeds only north of Rhode Island, but all three subspecies are stopover migrants through the state. The interior races, nelsoni and alterus, are fairly common during fall migration in Rhode Island with peak abundance in October and November, where they can be found in salt marshes and adjacent dunes and meadows. Spring records for these two subspecies are rare in Rhode Island. Surprisingly, subvirgatus is the subspecies least likely to be detected in Rhode Island during migration, with valid records split equally between spring and fall migration. Because Nelson's Sparrows primarily utilize salt marshes during migration through Rhode Island, conservation of this habitat throughout the region is critical to their long-term persistence. Future research efforts should focus on the distribution, abundance and habitat utilization patterns of these three subspecies through Rhode Island, with an emphasis on determining the importance of low versus high marsh for all three subspecies.

Habitat Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub

#### Status

SRANK: SNA. GRANK: G5. AJV BCR: M. Climate Change Vulnerability: Med = by 2050 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Habitat shifting and alteration; Loss of habitat due to climate change

- Actions: Land/water protection; Conserve lands to allow for migration of salt marsh. Rank: 3
  - Education and awareness; Educate landowners with appropriate habitat. Rank: 3

#### Threat 2 - Pollution; Impact of mercury and other discharges

Actions: • Law and policy; Take action to modify discharges of pollutants. Rank: 2

#### Threat 3 - Invasive and other problematic species and genes; Specifically phragmites

- Actions: Invasive/problematic species control. Rank: 2
  - Habitat and natural process restoration. Rank: 2

Refer to the Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Saltmarsh Sparrow, a superspecies that was split from Nelson's Sparrow in 1995, has a restricted nesting distribution along the Atlantic Coast from southern Maine to North Carolina. This species winters in coastal marshes from New York (casually from Massachusetts) to Florida. Saltmarsh Sparrows are restricted to salt marshes, where they breed, forage, and stopover during migration. They nest in the high marsh (i.e., marsh inundated on highest tides and dominated by Spartina patens and Juncus gerardii), and forage in the low marsh (i.e., marsh inundated daily by tides that is dominated by Spartina alterniflora) (Diguinzio et al. 2002). Saltmarsh Sparrows are common stopover migrants, where they are only detected in saltmarsh habitat. In Rhode Island they occupy salt marshes throughout the state, but are more likely to be found nesting in larger marshes with patches of high marsh, including islands throughout Narragansett Bay and on Block Island. Although there currently is no strong evidence of a decline in population size of this species in southern New England, recent models developed by Elphick and colleagues (UConn, unpubl. data) suggest this species could become extinct by 2050-2070. Because this species is endemic to saltmarshes in New England, Saltmarsh Sparrows are among the highest conservation priority species for the US Fish and Wildlife Service in the region. Conservation actions in Rhode Island include ensuring that systematic monitoring of the distribution, abundance and reproductive success of this species takes place throughout the state. More importantly, strategies need to be developed to minimize the impact of sea level rise on Saltmarsh Sparrows. A prime example of this is the USFWS restoration of saltmarshes along the Narrow River specifically to create habitat for Saltmarsh Sparrows. In addition, there is a critical need to develop detailed spatially-explicit maps of the spatial distribution of low and high marsh habitats in salt marshes throughout the state. Juvenile Saltmarsh Sparrows are often confused for Nelson's Sparrows in August.

Habitat Community: Brackish Marsh, Type: Brackish Marsh

#### Status

IUCN Rank: VU. FED: FWS. SRANK: S3B,SZN. GRANK: G4. RSGCN: H-VH. NALCC: X (B). PIF NALCP: Tier I. PIF BCPSN: Tier I A. AJV BCR: HH. CODES: B. Res/B: 1. GRP: 52. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

#### Threat 1 - Habitat shifting and alteration; Loss of habitat due to climate change

- Actions: Land/water protection; Conserve lands to allow for migration of salt marsh. Rank: 3
  - Education and awareness; Educate landowners with appropriate habitat. Rank: 3

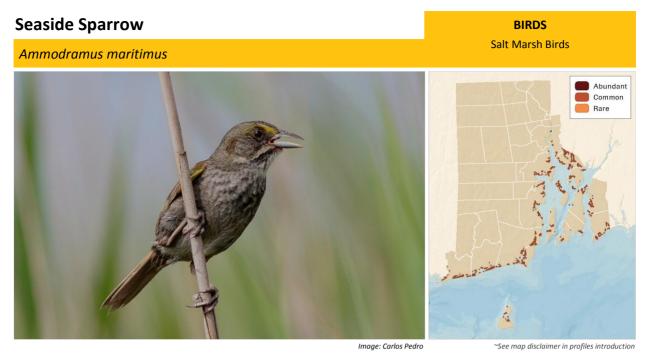
Threat 2 - Pollution; Impact of mercury and other discharges

Actions: • Law and policy; Take action to modify discharges of pollutants. Rank: 2

Threat 3 - Invasive and other problematic species and genes; Specifically phragmites

- Actions: Invasive/problematic species control. Rank: 2
  - Habitat and natural process restoration. Rank: 2

Refer to the Community: Brackish Marsh, Type: Brackish Marsh - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Seaside Sparrow includes nine recognized subspecies distributed in salt marshes along the Atlantic and Gulf Coasts from Maine to Texas. The subspecies A. m. maritima breeds from Maine to Virginia, and winters in coastal marshes in the southern United States. In Rhode Island, this species occupies most larger salt marshes along the south shore and parts of Narragansett Bay, but are absent from islands in Narragansett Bay and Block Island. Seaside Sparrow occupies fewer marshes in Rhode Island than Saltmarsh Sparrow. Seaside Sparrows nest in tall Spartina alterniflora, therefore are more common along the edges of tidal rivers than salt pannes and pools in salt marshes. Salt marshes along the Barrington and Warren Rivers probably support the largest population in Rhode Island. There are few systematic long-term survey data collected on this species in Rhode Island, thus evaluating their population trends is challenging. However, this species is a conservation concern in the state due to their specialization in salt marshes, which are being impacted by sea level rise. Conservation actions in Rhode Island include developing a widespread, systematic monitoring plan to assess changes in their spatial distribution, abundance, and reproductive success. In addition, research needs to focus on the effects of salt marsh restoration efforts on this species, including the control of Phragmites australis.

Habitat Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub

#### Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S2B,SZN. GRANK: G4. RSGCN: L-VH. PIF NALCP: Tier I. PIF BCPSN: Tier I A. AJV BCR: HH. CODES: B. Res/B: 1. GRP: 84. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

#### **Threats and Actions**

Threat 1 - Habitat shifting and alteration; Loss of	of habitat due to climate change
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- Actions: Land/water protection; Conserve lands to allow for migration of salt marsh. Rank: 3
  - Education and awareness; Educate landowners with appropriate habitat. Rank: 3

#### Threat 2 - Pollution; Impact of mercury and other discharges

- Actions: Law and policy; Take action to modify discharges of pollutants. Rank: 2
- Threat 3 Invasive and other problematic species and genes; Specifically phragmites
  - Actions: Invasive/problematic species control. Rank: 2
    - Habitat and natural process restoration. Rank: 2

Refer to the Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

This species nests throughout eastern Canada and the northeastern US. This species winters throughout the eastern US, particularly in coastal areas. This species has been a conservation concern as there has been an apparent population decline since the mid-1960s based on Breeding Bird Surveys (annual trend = -0.68; 95% CI = -2.8 to 1.0 from 1966 to 2012), although this rate of decline has diminished over the past decade. In Rhode Island, this species occurs year-round, but numbers peak when migrants arrive from early-October to early April. During the nesting season, this species is widespread throughout the state and was detected in 60 grid cells during the 1982-87 breeding bird atlas (Enser 1992). During the winter this species can be detected throughout the state, but most birds are seen in brackish coastal ponds and throughout shallow marine waters of Narragansett Bay, as well as interior freshwater ponds and lakes. Flocks typically range in size from 5-50 birds. Conservation concerns include habitat degradation, increases in the number of mesopredators, hybridization with Mallards, and the impact of harvest levels on local populations. Management actions include developing a standardized methodology to monitor nest success and estimate distribution and abundance of birds during the winter months, and assess local harvest levels.

Habitat Community: Freshwater Emergent Marsh, Type: Semi-permanently Flooded (Deep) Marsh

#### Status

IUCN Rank: LC. SRANK: S4B,S4N. GRANK: G5. RSGCN: L-VH. NALCC: X (NB). PIF BCPSN: Tier II C. NAWP: 1. AJV BCR: HH. CODES: B. Res/B: 1. GRP: 59. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Habitat shifting and alteration; Loss of habitat due to climate change

- Actions: Land/water protection; Conserve lands to allow for migration of salt marsh. Rank: 3
  - Education and awareness; Educate landowners with appropriate habitat. Rank: 3

#### Threat 2 - Pollution; Impact of mercury and other discharges

- Actions: Law and policy; Take action to modify discharges of pollutants. Rank: 2
- Threat 3 Invasive and other problematic species and genes; Specifically phragmites
  - Actions: Invasive/problematic species control. Rank: 2
    - Habitat and natural process restoration. Rank: 2

#### Threat 5 - Hunting and collecting terrestrial animals

Actions: • Policies and regulations. Rank: 3

Refer to the Community: Freshwater Emergent Marsh, Type: Semi-permanently Flooded (Deep) Marsh - Habitat Profile for additional

threats to this species.



# **Distribution & Abundance**

Peter WC Pato

"See map disclaimer in profiles introductior

The Clapper Rail resides in coastal salt marshes and mangroves along the Atlantic and Gulf Coasts of the United States from southern New England to Texas, with populations in the Caribbean and South America. There is also a disjunct population in southwestern North America from California to Mexico. Throughout most of their range, Clapper Rails are abundant, year-round residents, but near the northern limit of their distribution in New England, this species an uncommon breeder and migrant. In Rhode Island, Clapper Rails nest in salt marshes during the occupy nest in salt marshes. Individuals are rarely observed during spring or fall migration and there are few winter records at this latitude. This species is poorly sampled during the Breeding Bird Survey, with annual trend estimate uncertain for New England and Mid-Atlantic States (annual trend = 3.4 (95% CI = -0.1 to 7.5) and eastern North America (annual trend = -0.7 (95% CI = -3.5 to 2.2). Clapper Rails are found only in the larger salt marshes along the south coast (e.g., Jerusalem and Misquamicut), but they also occupy salt marshes near Hundred Acre Cove, Bristol County. Recently, project SHARP surveys have focused on this species and also salt marsh specialists from Delaware to Maine. Conservation actions include enhancing systematic surveys for this species and other rails throughout the state to gain a clearer understanding of habitat preferences, spatiallyexplicit maps of their distribution, and a quantitative assessment of population trends (which is not captured by ongoing survey efforts).

Habitat Community: Brackish Marsh, Type: Brackish Marsh

# Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,S2N. GRANK: G5. STATE: E-1(3-4). RSGCN: L-H. PIF NALCP: Tier II.a. AJV BCR: H. CODES: B. Res/B: 1. GRP: 9. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

# Threats and Actions

#### Threat 1 - Habitat shifting and alteration; Loss of habitat due to climate change

- Land/water protection; Conserve lands to allow for migration of salt marsh. Rank: 3 Actions: •
  - Education and awareness; Educate landowners with appropriate habitat. Rank: 3

#### Threat 2 - Pollution; Impact of mercury and other discharges

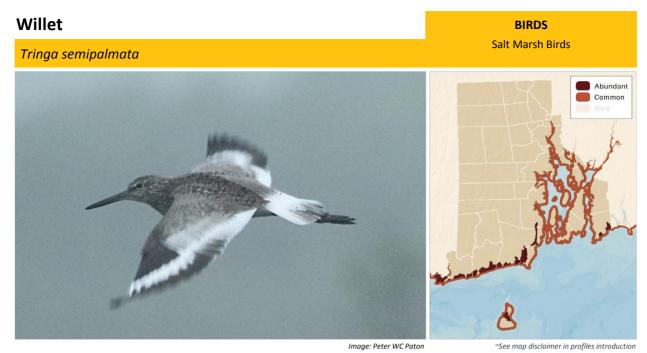
Actions: • Law and policy; Take action to modify discharges of pollutants. Rank: 2

Threat 3 - Invasive and other problematic species and genes; Specifically phragmites

- Actions: Invasive/problematic species control. Rank: 2
  - Habitat and natural process restoration. Rank: 2 •
- Threat 5 Hunting and collecting terrestrial animals

Actions: • Policies and regulations. Rank: 3

Refer to the Community: Brackish Marsh, Type: Brackish Marsh - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

There are two nesting populations of Willet in North America; the Eastern Willet (C. s. semipalmatus) is conspicuous breeding species in salt marshes, barrier beaches, and mangroves along the Atlantic and Gulf Coasts from Newfoundland to northeastern Mexico, whereas the Western Willet (C. s. inornatus) breeds in interior prairies from Alberta to Colorado. Eastern Willets winter in coastal eastern South America, whereas Western Willets winter on both coasts of North America from Washington and New Jersey south to Peru (O'Brien 2006). The Willet is a southern species that has extended its breeding range north in recent decades and is now a locally common breeding species. Willets were first documented nesting in Rhode Island during 1987, and have since expanded rapidly and are now widespread throughout the state. Willets nest in the high marsh (i.e., vegetation dominated by Spartina patens) of salt marches and along beaches where dune grass (Ammophila breviligulata) cover is thick. This species now nests along the south shore, Bristol County, on Block Island, and on several islands in Narragansett Bay. With an expanded breeding range, Willets are now also a common migrant in Rhode Island. During spring migration, some individuals are detected from the first through third week of May. This species is much more common during fall migration, with peak detection rates (i.e., over 30 birds) throughout July. The Western Willet is detected in Rhode Island during fall migration, usually in association with flocks of Eastern Willets. Conservation actions include developing systematic surveys of nesting habitat (both abundance and nesting productivity) in coastal salt marshes, and monitoring staging sites. In addition, protecting key nesting from human disturbance and the negative impacts of sea level rise is important for this species. Finally, minimizing disturbance to staging sites is vital also.

Habitat Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub

#### Status

IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S1B,S3N. GRANK: G5. RSGCN: L-VH. Shrbrd: 1. USSCP: M. AJV BCR: H. CODES: B. Res/B: 1. GRP: 2. PRIOR: 1. Climate Change Vulnerability: High = by 2030 (Habitat loss)

#### **Threats and Actions**

#### Threat 1 - Invasive non-native/alien species; Increasing phragmites in nesting habitat

- Actions: Invasive/problematic species control; Control phragmites. Rank: 2
  - Habitat and natural process restoration; Restore treated areas to natural function. Rank: 3

#### Threat 2 - Recreational activities; Disturbance of nesting and foraging habitat

- Actions: Land/water management; Minimize disturbance to nesting and foraging habitat. Rank: 3
  - Education and awareness; Educate public about species nesting and foraging requirements. Rank: 2

#### Threat 3 - Habitat shifting and alteration; Loss of salt marsh habitat due to Impact of sea level rise

- Actions: Site/area protection; Conserve lands to allow for salt marsh migration. Rank: 2
  - Site/area management; Manage lands for salt marsh migration. Rank: 2
  - Education and awareness; Educate landowners to allow for salt marsh migration on private lands. Rank: 2

Refer to the Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub - Habitat Profile for additional threats to this species.

#### **Other Birds**

**BIRDS** 

# Description

This category of birds includes species that do not cluster or fit well into groups according to existing guilds, vegetation or habitat schemes. Some of these have increasing regional populations but are iconic or depend to a large part on human infrastructure. They include species that either require more intensive attention because of special federal or other legislative mandates, those that nest on structures or require nest-boxes, or those for which education or outreach is the most appropriate conservation action.

#### **Species**

Chimney Swift *(Chaetura pelagica)* Rusty Blackbird *(Euphagus carolinus)* Bald Eagle *(Haliaeetus leucocephalus)* Bank Swallow *(Riparia riparia)* 

# Chaetura pelagica Other Birds

#### Distribution & Abundance

The Chimney Swift is a long-distance Neotropical migrant whose breeding range encompasses much of eastern North America from the Canadian Maritimes westward through Ontario and south to the Gulf states. Chimney Swifts winter in South America. In Rhode Island, Chimney Swifts nest throughout the state, but are less common along near the coast and do not nest on Block Island. Because Chimney Swifts require tall chimneys for nesting and roosting, and forage for insects over open country and waterways, they are more common in villages and cities, and less common in thickly forested areas. Chimney Swifts are difficult to study and census, however trend estimates from New England and Mid-Atlantic States based on BBS from 1966-2012 suggest a declining population (annual trend = -1.8 (95% CI = -2.4 to -1.2) and throughout eastern North America (annual trend = -2.3 (95% CI = -2.5 to -2.1). Chimney Swifts are diurnal migrants that sometimes gather at large roosting sites (e.g., favorable chimneys), where they descend at sunset in swirling tornado-like flocks, when detection probabilities are greatest. Conservation actions include a detailed survey of existing nesting and roosting structures throughout the state. Based on these survey results, the development of an educational program targeting homeowners and businesses that have nesting and roosting swifts would be the best strategy to assist with the long-term conservation of this species in Rhode Island.

mage: Greg Schechte

"See map disclaimer in profiles introductior

#### Status

IUCN Rank: NT. FED: FWS. SRANK: S5B,SZN. GRANK: G5. RSGCN: L-H. PIF NALCP: Tier II.a. PIF BCPSN: Tier II A. AJV BCR: H. CODES: B. Res/B: 1. GRP: 63. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Residential and commercial development; Loss of suitable nesting habitat in buildings

- Actions: Education and awareness; Educating property owners regarding nesting habitats. Rank: 3
  - Species recovery; Artificial nesting chimney structures. Rank: 2



# **Distribution & Abundance**

The Rusty Blackbird is a short-distance Nearctic migrant that nests in boreal regions of North America from Newfoundland westward to Alaska and southward to the latitude of the Great Lakes. The wintering range is primarily in the southeastern United States from southern New England to the Gulf of Mexico. In Rhode Island, the Rusty Blackbird occurs only as a stopover migrant in both spring and fall, with occasional records during the winter months. Rusty Blackbirds sometimes occur in mixed-species flocks with Red-winged Blackbirds, Common Grackles, or European Starlings in agricultural fields. However, they are usually detected in forested wetlands. The presence of Rusty Blackbirds in Rhode Island is scattered and erratic, with little geographic consistency or obvious pattern of habitat use. Rusty Blackbirds have exhibited dramatic declines on breeding and winter grounds in recent decades, with Breeding Bird Surveys and Christmas Bird Counts suggesting an 85-95% decline since the 1990s (BBS annual trend from 1966 to 2012 = -5.5 (95% CI = -9.5 to -2.6). This species now has their own advocacy group: the International Rusty Blackbird Working Group (rustyblackbird.org), which suggests that loss of wooded wetlands on their wintering grounds in the southeast have contributed to their decline. One contribution that can be made in Rhode Island is active participation in the Rusty Blackbird Spring Migration Blitz to help assess use of stopover habitat during migration. In addition, protect of forested wetlands used as stopover habitat is a critical contribution and the identification of species sites used by this species would be an important contribution.

Habitat Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland

#### Status

IUCN Rank: VU. SRANK: SNA. GRANK: G4. RSGCN: L-VH. AJV BCR: H. Climate Change Vulnerability: Unknown

#### **Threats and Actions**

# Threat 1 - Lack of information; RI is stopover habitat, need to determine habitat requirements during migration and additional information

Actions: • Data collection and analysis. Rank: 3

Threat 2 - Residential and commercial development; Loss of stopover habitat due to multiple reasons

- Actions: Land/water protection. Rank: 3
  - Site/area management. Rank: 3
- Threat 3 Agriculture and aquaculture; Loss of stopover habitat du to multiple reasons

Actions: • Land/water protection. Rank: 3

• Site/area management. Rank: 3

Refer to the Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Bald Eagle is a short-distance Nearctic migrant that nests throughout much of Canada, Alaska, and along the East Coast of North America. This species winters across much of the United States and northern Mexico. Bald Eagle populations declined due to the negative impacts of DDT on their egg shells, with their population nearly extirpated in the continental United States by the 1960s. Recovery efforts led by the US Fish and Wildlife Service downlisting this species from Endangered to a Threatened in 1995 and removal from the List of Endangered and Threatened Wildlife in 2007. However, Bald Eagles and their nests are still protected by the Bald and Golden Eagle Protection Act. As such, they are managed differently than other migratory birds in Rhode Island, even though their population is increasing across eastern North America, with an annual increase based on Breeding Bird Surveys from 1966-2012 = 8.7 (95% CI = 6.5 to 10.6). In Rhode Island there are few risks to migrant or wintering eagles and such birds would not be a high priority for conservation action within the state. At present there is one known nesting pair in Scituate. However, with the expansion of the regional population, additional nesting activity is imminent, thus continued monitoring of larger freshwater wetlands around the state (where eagles are most likely to nest) will be necessary. Therefore, continued coordination between property owners, where eagles decide to nest, and with local and federal law enforcement agencies will be required. Such consultation is expected to increase in the future.

#### Status

STSTAT: SE. SRANK: S1B,S1N. GRANK: G5. AJV BCR: M. Res/B: . Climate Change Vulnerability: Unknown

#### **Threats and Actions**

#### Threat 1 - Human intrusions and disturbance

- Actions: Land/water protection. Rank: 3
  - Site/area management. Rank: 3
  - Education and awareness. Rank: 2



# **Distribution & Abundance**

The Bank Swallow is a long-distance Neotropical migrant that nests across North America from the Canadian Maritimes westward through Alaska and southward to the central Midwestern states. Bank Swallows winter throughout Central and South America and the Caribbean. Bank Swallows nest in colonies and dig burrows in the soft soil of vertical faces of bluffs, gravel pits and riverbanks. Because these habitats are ephemeral, colonies are dynamic as habitats become available or lost. Therefore, this species is a very difficult species to monitor because colony locations keep changing. Available evidence suggests this species is declining at a more rapid rate that most species in New England and Mid-Atlantic states (BBS annual trend estimates from 1966-2012, annual trend = -4.1 (95% CI = -6.7 to -1.0) and across Eastern North America (Annual trend = -7.7 (95% CI = -9.2 to -5.8). In Rhode Island, colonies are usually found in marine bluffs, especially on Block Island, and in gravel pits. Management actions should include a detailed inventory of existing colony locations and a set of recommendations to create or enhance existing colony locations. The nesting colonies are vulnerable to inclement weather, which can cause bluffs to slump and disturbance or destroy the colony.

Habitat Community: Sparsely Vegetated Rock, Type: Maritime Bluff

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S3B,SZN. GRANK: G5. RSGCN: L-H. CODES: B. Res/B: 1. GRP: 48. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Lack of suitable nesting habitat

Actions: • Site/area management; Minimize disturbance to habitat. Rank: 3

• Habitat and natural process restoration; Create and maintain nesting habitat. Rank: 2

Refer to the Community: Sparsely Vegetated Rock, Type: Maritime Bluff - Habitat Profile for additional threats to this species.

#### **Nest Box Birds**

**BIRDS** 

#### Description

These species rely primarily on intentionally created man-made enclosures or structures for their nesting. Nest boxes, birdhouses, or bird platforms are placed in order to maintain or improve populations, or in an effort to attract particular species in an area.

#### Species

Peregrine Falcon *(Falco peregrinus)* American Kestrel *(Falco sparverius)* Osprey *(Pandion haliaetus)* Eastern Bluebird *(Sialia sialis)* 



# **Distribution & Abundance**

The Peregrine Falcons documented in Rhode Island consist of two subspecies. F. p. anatum formerly nested throughout the Northeast, and was extirpated due to eggshell thinning from DDT poisoning. Hybrid birds were reintroduced to its former range through nest-box and hatching programs, and the progeny of these birds have repopulated parts of the Northeast, including Rhode Island. The anatum subspecies winters along the coast in the SE United States. F. p. tundrius nest in the high Arctic and migrates through Rhode Island to their wintering grounds in South America. Due to population declines, this species was federally-listed as Endangered, but with recovery efforts led by the USFWS, this species was taken off the List of Threatened and Endangered Species in 1999. Currently, there are about five known nesting sites in Rhode Island, primarily nest boxes on larger bridges (e.g., Pell Bridge) and skyscrapers (Bank of America building) in downtown Providence. Migrant F. p. tundrius are consistently seen in coastal Rhode Island in the fall, particularly on Block Island (where researchers have been actively banding birds and monitoring movements with satellite-transmitters). With the continued expansion of the regional population, additional nesting activity is imminent, which will require monitoring efforts to track the dynamics of nesting sites. In addition, there will be a need for continued coordination between property owners with peregrine nests and local and federal law enforcement agencies to ensure that management actions are taken to ensure that peregrines are not disturbed during the nesting cycle.

#### Status

CITES: I. IUCN Rank: LC. FED: FWS. STSTAT: SE. SRANK: SZN. GRANK: G4. STATE: E-1. RSGCN: H-VH. PIF BCPSN: Tier II C. CODES: B. Res/B: 1. GRP: 90. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Precipitation change)

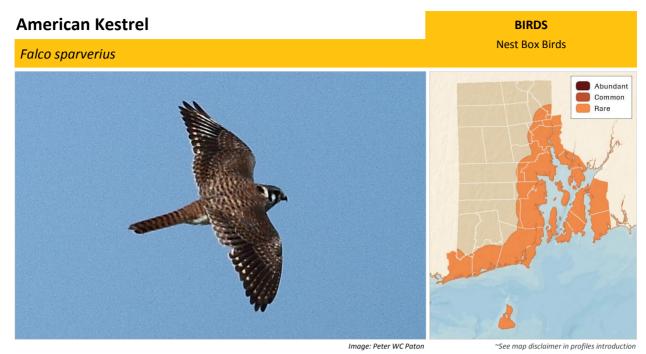
# Threats and Actions

Threat 1 - Residential and commercial devel	lopment; Lack of suitable nesting habitat
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Actions: • Species recovery; Creating nest boxes. Rank: 3

#### Threat 2 - Natural system modifications; Loss of suitable foraging habitat during migration

- Actions: Site/area management; Create and maintain early successional habitat. Rank: 2
  - Site/area protection; Conserve suitable early successional habitat near bluffs. Rank: 1



# **Distribution & Abundance**

The American Kestrel nests throughout much of North and South America. This is a short-distance migrant that winters in the southern and temperate portions of its breeding range. Although common in parts of their range, the kestrel has been declining in the Northeast for many years as the region becomes more forested. Based on BBS trend estimate from surveys conducted from 1966-2012, this species is rapidly declining in New England and Mid-Atlantic states (annual trend = -5.2 (95% CI = -6.9 to -4.0)) and in Eastern North America (annual trend = -2.1 (95% CI = -3.9 to -1.1)). In Rhode Island, American Kestrels are now rare as a nesting species and much reduced as a migrant. This species is a grassland or shrub-obligate bird because kestrels do require open habitats, where they foraging on small mammals and insects. Unlike many grassland specialists, however, kestrels do not require habitats specifically managed for grasslands and can occur in smaller patches of shrub habitat. Conservation actions include a detailed assessment of the current distribution of nesting kestrels in the state. Active habitat management to create more grasslands, or shrub habitats would be beneficial for kestrels. Finally, a continuation of the nest box program initiated by Audubon Society of Rhode Island would help to enhance kestrel populations throughout the state, as long as nest boxes were located in suitable habitat.

Habitat Community: Ruderal Grassland/Shrubland, Type: Old Field

#### Status

CITES: II. IUCN Rank: LC. FED: FWS. SRANK: S4B,SZN. GRANK: G5. RSGCN: L-H. CODES: B. Res/B: 1. GRP: 21. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Loss of early successional habitat

- Actions: Habitat and natural process restoration; Create and maintain early successional habitat. Rank: 3
  - Land/water protection; Work with state and local non profits to conserve suitable habitat. Rank: 3
  - Resource and habitat protection. Rank: 3
  - Education and awareness. Rank: 2
  - Species recovery; Erecting Kestrel nesting boxes near early successional habitat. Rank: 2

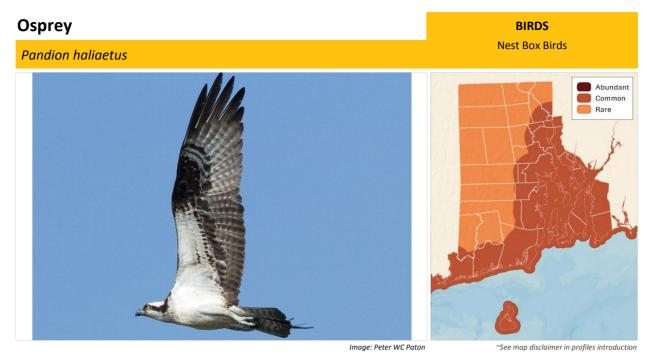
#### Threat 2 - Residential and commercial development; Loss of early successional habitat due to development

Actions: • Land/water protection; Conserve early successional habitat. Rank: 3

#### Threat 3 - Lack of planning

Actions: • Data collection and analysis. Rank: 2

Refer to the Community: Ruderal Grassland/Shrubland, Type: Old Field - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Osprey is a long-distance Neotropical migrant that nests throughout much of Canada and the northern United States, and winters in South America. In Rhode Island, this species now is a common breeding bird, with over 100 active sites in the state, which is an increase from 12 nests in early 1980. Studies by R. Bierregaard of satellite-tagged birds have documented local and global movements of Ospreys nesting on Conanicut Island (www.ospreytrax.com) and shown that birds from Rhode Island consistently winter in northern Brazil. Although Osprey have no other legislative protection besides that afforded to migratory birds, this iconic, popular bird requires continued attention by RI DFW biologists. The nesting activity of Ospreys was monitored for many years by the RI DFW, but recently this project has been run by the Audubon Society of Rhode Island. Nevertheless, because the State retains authority over its wildlife, there is still a chronic need to advise utility companies, cell tower operators, and other private entities how to approach interacting with nesting Ospreys. In Rhode Island there are few risks to migrant Ospreys and such birds would not be a high priority for conservation action within the state WAP. However, with the expansion of the regional population, there are now more than 100 active Osprey nests in the state and additional nesting activity is imminent. Therefore, there will be a need for continued coordination between property owners who have Osprey nests on their land, and local and federal law enforcement agencies. One aspect of Osprey management in the State is nesting platforms. Ospreys now rarely use natural snags (6 of 106 nests in 2010), whereas most nests were on platforms constructed specifically for Ospreys (46 of 106), telephone poles (15 of 106), cell phone towers (17 of 106) or lights (15 of 106). Thus ensuring there are a sufficient number of nest platforms is one management action that would allow the local population to continue to expand.

Habitat Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub

#### Status

CITES: II. IUCN Rank: LC. FED: FWS. STSTAT: C. SRANK: S2B,S2N. GRANK: G5. PIF BCPSN: Tier V. CODES: B. Res/B: 1. GRP: 117. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Precipitation change)

# Threats and Actions

Threat 1 - Residential and commercial development; Lack of suitable nesting habitat

Actions: • Species recovery; Creating nesting platforms. Rank: 2

Refer to the Community: Tidal Salt Marsh, Type: Low Salt Marsh; High Salt Marsh; Salt Panne; Salt Scrub - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Eastern Bluebird is a short-distance Nearctic migrant that nests throughout much of the eastern United States into southern Canada, and in the mountains of Mexico. Eastern Bluebirds winter in the southern portions of its range. Eastern Bluebirds had severely declined after World War II because of extensive DDT spraying and competition for nesting sites by House Sparrows and European Starlings. In recent years there has been a steady, albeit slow, increase in the population. Population trend estimates from BBS surveys from 1966-2012 in New England and Mid-Atlantic states suggest an increase (annual trend = 5.0 (95% CI = 4.0 to 5.9) and in eastern North America (annual trend = 1.9, (95% CI = 1.6 to 2.1). In Rhode Island, eastern Bluebirds are most common in the western mainland, and rarely nest on the large island in Narragansett Bay or Block Island. However they are detected during fall migration and winter in those areas. Eastern Bluebirds or orchards, as well as low-density suburban areas can also support them. Therefore, management actions designed to create open woodlands to provide suitable nesting and foraging habitat will be beneficial to this species. Because Eastern Bluebirds are cavity-nesters, their populations can be enhanced with nest-box programs. Therefore this can be a useful species around which to organize civic participation and educational programs for bird conservation.

Habitat Community: Ruderal Grassland/Shrubland, Type: Old Field

#### Status

IUCN Rank: LC. SRANK: S3B. GRANK: G5. Climate Change Vulnerability: Unknown

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Habitat succession

Actions: • Site/area management; Manage for early successional habitat. Rank: 3

• Species recovery; Create nesting cavities, nest boxes. Rank: 2

Refer to the Community: Ruderal Grassland/Shrubland, Type: Old Field - Habitat Profile for additional threats to this species.

#### **Shrubland Birds**

BIRDS

#### Description

Shrublands and young forest habitats support nine birds identified as priority PIF species in Southern New England: northern bobwhite, American woodcock, willow flycatcher, eastern kingbird, brown thrasher, bluewinged warbler, prairie warbler, eastern towhee, and field sparrow (Rosenberg 2004). PIF has recommended increasing the populations for each of these species in Rhode Island, with specific target populations provided in Rosenberg (2004). The northern bobwhite is the one species in this group that appears to have disappeared as a breeding species in Rhode Island (C. Raithel pers. comm. 2014).

The population status of the American woodcock is assessed annually by the USFWS, and the following is a summation from the 2013 report. Both the Eastern and Central Management Regions for American woodcock have a long-term (1966-13) declining trend (-0.1 in the Eastern Region and -0.8 in the Central Region). The 2012 recruitment index for the US portion of the Eastern Region was 1.9% less than the 2011 index and 0.8% greater than the long-term regional index. Recruitment in the Central Region was 0.8% greater than the 2011 index and 5.7% greater than the long-term regional index. The report noted that 2013 marked the tenth consecutive year that the 10-year trend estimate is not significant in the Eastern Region, and the third year that the 10-year trend estimate is not significant. The University of Rhode Island (URI) and RIDEM DFW are cooperating on studies of the distribution and habitat requirements of American woodcock in order to better understand where breeding populations occur, which habitats are preferred, and the quality of preferred habitat. As part of this research Buffum (2011) assessed the amount of shrubland habitat in Rhode Island.

According to the RSGCN list the only early successional species for which the Northeast has high responsibility is the blue-winged warbler, with 48% of the continental population in this region. Species-specific conservation initiatives for early successional birds include the Woodcock Management Plan (http://timberdoodle.org/), and National Bobwhite Quail Initiative. There are also ongoing state and regional efforts to manage early successional habitats for the regionally endemic New England cottontail, as described above. Such efforts also benefit early successional birds even if they are not the direct targets of the management activities.

A small set of obligate shrub–nesting species is differentiated from those mentioned above because they utilize shrubby habitats associated with wetlands. Shrub habitats sometimes develop along the margins on ponds and slow rivers, and Beaver impoundments can convert forests to more transitional vegetation.

#### Species

Eastern Whip-poor-will	(Antrostomus vociferous)
Ruffed Grouse	(Bonasa umbellus)
Yellow-billed Cuckoo	(Coccyzus americanus)
Black-billed Cuckoo	(Coccyzus erythropthalmus)
Gray Catbird	(Dumetella carolinensis)
Willow Flycatcher	(Empidonax traillii)
Yellow-breasted Chat	(Icteria virens)
Nashville Warbler	(Oreothlypis ruficapilla)
Indigo Bunting	(Passerina cyanea)
Eastern Towhee	(Pipilo erythrophthalmus)
American Woodcock	(Scolopax minor)
Prairie Warbler	(Setophaga discolor)
Chestnut-sided Warbler	(Setophaga pensylvanica)
Field Sparrow	(Spizella pusilla)
Brown Thrasher	(Toxostoma rufum)
Eastern Kingbird	(Tyrannus tyrannus)
Blue-winged Warbler	(Vermivora cyanoptera)



# **Distribution & Abundance**

The Whip-poor-will is a Nearctic-neotropical migrant that nest across the eastern half of the continental United States and into southern Canada. The winter range is from the south-coastal United States through Central America. The Rhode Island Breeding Bird Atlas demonstrated that this species is most common in the western portions of the state and rare or absent on the Narragansett Bay islands, the mainland section east of the bay, the greater Metropolitan area, and Block Island. In Rhode Island, Whip-poor-wills nest in dry open forests, especially Pitch Pine barrens or structurally similar habitats, but are also associated with open deciduous woodlands. Since the atlas, there is little local sampling data on this species, but declines have undoubtedly occurred with the continued maturation of Rhode Island forests. There is little known about the distribution, abundance, habitat associations, or population trends of nightjars, including this species. Recently the Nightjar Survey Network was established and biologists could become involved in this standardized monitoring network. Data gathered from this research could be used to develop a management plan for this species.

Habitat Community: Pitch Pine Woodland/Barren, Type: Pitch Pine Woodland

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S4B,SZN. GRANK: G5. RSGCN: L-VH. PIF NALCP: Tier II.a. PIF BCPSN: Tier V. AJV BCR: H. CODES: B. Res/B: 1. GRP: 36. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Loss of early successional habitat

- Actions: Habitat and natural process restoration; Create and maintain early successional habitat. Rank: 3
  - Land/water protection; Work with state and local non profits to conserve suitable habitat. Rank: 2

Refer to the Community: Pitch Pine Woodland/Barren, Type: Pitch Pine Woodland - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Ruffed Grouse is a non-migratory species that nests throughout the northern United States and much of Canada from coast to coast. In Rhode Island, their populations have declined substantially over the past several decades. At one time hunters were allowed to harvest this species, but due to dramatic population declines hunting is no longer allowed. Based on Breeding Bird Survey trend estimates using data collected from 1966-2012, this species has declined at a more rapid rate that virtually all other species in the region (annual trend = -7.3 (95% CI = -11.4 to -3.7). Ruffed Grouse are abundant only where forests that range in age from 5 to 20 years of age are common. These young-forest habitats typically support 5,000 to 8,000 trees and shrubs per acre, which provides cover to protect ruffed grouse from hawks, owls and other predators (Ruffed Grouse Conservation Plan 2007). Therefore, even-aged management of forest tracts at least 3 acres in size are needed provide suitable forest habitat. Management actions following the Ruffed Grouse Conservation Plan (2007) are needed restore populations of this species in Rhode Island. The Ruffed Grouse Society, founded in 1962, has developed various conservation and awareness initiatives.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S5B,S5N. GRANK: G5. STATE: 23-R. RSGCN: L-H. CODES: B. Res/B: 1. GRP: 106. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Habitat succession

Actions: • Habitat and natural process restoration; Create early successional habitat. Rank: 3

- Site/area management; Create feathered edge habitat. Rank: 2
- Site/area protection; Land protection of appropriate habitat. Rank: 3
- Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3

#### Threat 3 - Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2

Refer to the Community: Oak Forest, Type: Oak Forest - Habitat Profile for additional threats to this species.

# Yellow-billed Cuckoo

BIRDS **Shrubland Birds** 

Coccyzus americanus



Image: Carlos Pedro

"See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Yellow-billed Cuckoo is a long-distance Neotropical migrant that nest throughout the eastern half of the United States to the Canadian border, with disjunct populations in the western United States. Breeding densities are greatest in the southern United States. Yellow-billed Cuckoos winters in South America. In Rhode Island, Yellow-billed Cuckoos nest widely across the state, with the greatest densities in the western mainland and sporadic nesting may occur on islands in Narragansett Bay and Block Island. The Yellow-billed Cuckoo is thought to prefer open woodlands that have a dense shrub understory. They also occur at the ecotone between woodlands and shrub-dominated old field habitat. However, cuckoos are strongly associated with caterpillar outbreaks, and vegetation may not influence their habitat preferences as much as prey availability. This species was more common during the Gypsy Moth outbreak in the mid-1980s and have declined since that time. In New England and Mid-Atlantic states, this species is declining rapidly (annual trend = -1.8 [95% Cl = -0.9 to -2.7]), with a similar negative trend throughout eastern North America (annual trend = -1.6 [95% Cl = -1.4 to -1.8]). Conservations actions include management that creates and maintains early successional habitats throughout the region. Yellow-billed Cuckoos are an uncommon migrant throughout Rhode Island, often detected along the coast in thickets used by many other Neotropical migrants.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S5B,S5N. GRANK: G5. CODES: B. Res/B: 1. GRP: 28. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Housing and urban areas; Loss and disturbance of habitat

Actions: • Land/water protection; Protection of nesting and forested habitat. Rank: 2

Refer to the Community: Oak Forest, Type: Oak Forest - Habitat Profile for additional threats to this species.

# 

# **Distribution & Abundance**

The Black-billed Cuckoo is a long-distance Neotropical migrant that nests throughout the eastern North America from the Canadian Maritimes westward to Montana and southward to the Appalachians. Black-billed Cuckoos winters in South America. In Rhode Island, Black-billed Cuckoos nest throughout the state with greatest densities in the western mainland, with sporadic nesting may occur on islands in Narragansett Bay and Block Island. Black-billed Cuckoos were more common during the Gypsy Moth outbreak in the mid-1980s and have since declined. This may explain their decline in New England and Mid-Atlantic states (annual trend = -4.9 [95% CI = -2.8 to -7.5]), with a more gradual decline throughout eastern North America (annual trend = -1.4 [95% CI = -4.7 to -0.0]). Black-billed Cuckoos are consistent, uncommon migrants throughout Rhode Island. They tend to occur along the coast in thickets used by many other Neotropical migrants.

Habitat Community: Pitch Pine Woodland/Barren, Type: Pitch Pine Woodland

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S5B,S5N. GRANK: G5. RSGCN: L-VH. PIF NALCP: Tier II.a. PIF BCPSN: Tier I A. CODES: B. Res/B: 1. GRP: 116. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

#### **Threats and Actions**

#### Threat 1 - Natural system modifications; Habitat succession

- Actions: Habitat and natural process restoration; Create early successional habitat. Rank: 3
  - Site/area management; Create feathered edge habitat. Rank: 2
  - Site/area protection; Land protection of appropriate habitat. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3

Threat 3 - Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2

Refer to the Community: Pitch Pine Woodland/Barren, Type: Pitch Pine Woodland - Habitat Profile for additional threats to this species.

# Gray catbird BIRDS **Shrubland Birds** Dumetella carolinensis Abundant Common Rare Image: Richard L Ferrer

#### **Distribution & Abundance**

The Gray Catbird is a moderate-distance Nearctic and Neotropical migrant. This species nests from Maritime Canada to British Columbia and throughout much of the eastern and mid-western United States. Gray Catbirds winter along in a narrow band along the Atlantic Coast, the Caribbean, and Central America. This species is one of Rhode Island's most familiar and common species nesting species that occur throughout the State except in the most urbanized areas. Preferred nesting habitat is thickets, and Gray Catbirds are much more common along the coast and on the larger islands in Narragansett Bay. In coastal areas, more than three catbird territories can be detected from a single point count station. Densities can also be high in the interior, especially along shrubby floodplains of rivers. Because the Gray Catbird utilizes shrub thickets that are important to many other nesting species and birds during migration, this is a useful umbrella species with which to track the condition of this habitat type. Although regional population trends suggest a stable population, with an annual trend of 0.3 (95% CI = 0 to 0.7) in New England and Mid-Atlantic states based on BBS estimates from 1966 to 2012, throughout eastern North America their populations are declining (annual trend = -0.3 (95% Cl = -0.1 to -0.3). Gray Catbirds are common and occasionally abundant as migrants in both spring and fall, when they tend to utilize coastal shrub lands that are important to many other migratory species.

See map disclaimer in profiles introduction

Habitat Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S5B. GRANK: G5. AJV BCR: M. CODES: B. Res/B: 1. GRP: 79. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Residential and commercial development; Loss and disturbance of habitat

- Actions: Site/area management; Minimize disturbance to habitat. Rank: 3
  - Land/water protection; Conserve nesting and foraging habitat. Rank: 2

Refer to the Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Willow Flycatcher is a long-distance migrant that nests throughout the northern continental United States and southern Canada, and winters in lowland areas of Central America. In Rhode Island, Willow Flycatchers are a locally common, habitat specialist that nests in wet shrub thickets. Nesting densities of Willow Flycatcher are most abundant along the southern coast, on islands and salt marshes throughout Narragansett Bay, and Block Island. In Rhode Island, Least Flycatchers typically nest in the upper edges of salt marshes, freshwater marshes and freshwater lakes near tidewater. Away from the coast, nesting densities are sparse along open shrubby floodplains of rivers, lake shorelines, and beaver impoundments. Based on BBS surveys from 1966-2001, annual trend estimates suggest that Willow Flycatchers are stable in New England and Mid-Atlantic states (annual trend = 4.09 [95% CI = 2.3 to 5.8]), as well as throughout eastern North America (annual trend = 0.39 [95% CI = -0.06 to 0.78]). Increased beaver activity throughout the region may be creating additional nesting habitat that is maintaining population stability of Willow Flycatchers. Wet scrub habitats used by Willow Flycatchers are also important for neo-tropical migrants during spring and fall.

Habitat Community: Shrub Swamp/Wet Meadow, Type: Shrub Swamp/Wet Meadow

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S3B,S3N. GRANK: G5. RSGCN: L-H. NALCC: X (B). PIF NALCP: Tier I. AJV BCR: H. CODES: B. Res/B: 1. GRP: 20. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Habitat succession

Actions: • Habitat and natural process restoration; Create early successional habitat. Rank: 3

- Site/area management; Create feathered edge habitat. Rank: 2
- Site/area protection; Land protection of appropriate habitat. Rank: 3
- Education and awareness. Rank: 2

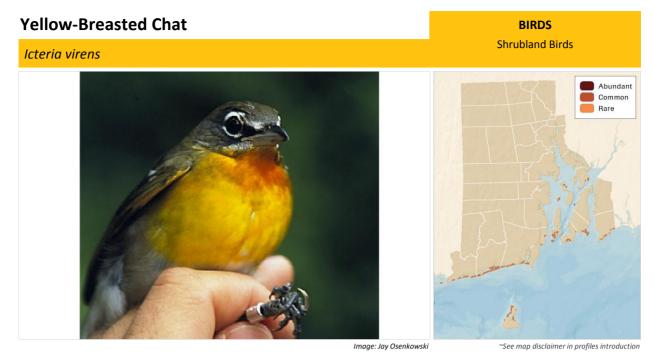
Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3

#### Threat 3 - Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2

Refer to the Community: Shrub Swamp/Wet Meadow, Type: Shrub Swamp/Wet Meadow - Habitat Profile for additional threats to this species.



# **Distribution & Abundance**

The Yellow-breasted Chat is more common as a nesting species in the southern and Midwestern United States and only reaches the northeastern edge of its distribution in southern New England. This species winters in throughout Central America. This species was formerly more widespread in Rhode Island during the postagricultural era, when shrub habitats dominated the landscape. Based on Breeding Bird Surveys from 1966-2011, this species has declined throughout New England and the Mid-Atlantic states (annual trend = -2.5 [95% CI = -1.9 to -3.5]) and throughout eastern North America (annual trend = -0.96 [95% CI =-0.72 to -1.2]). Yellowbreasted Chats use thick shrub patches for nesting, which is now a rare habitat in Rhode Island as forests in the region have matured. This species was thought to be extirpated prior to the Breeding Bird Atlas project, but a single site was discovered on Ninigret National Wildlife Refuge, where they still may occur. Preferred early successional habitat also supports dense concentrations of other high-priority GCN nesting birds, including the Blue-winged and Prairie Warblers. Therefore, the Yellow-breasted Chat is a useful indicator species in identification of high quality shrub habitat. Yellow-breasted Chats are consistently, albeit rarely reported as stopover migrants, at which time they are found in coastal thickets. Additional survey work and maintenance of coastal shrub habitats are the most pressing conservation action for Yellow-breasted Chats in Rhode Island.

Habitat Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland

#### Status

IUCN Rank: LC. FED: FWS. STSTAT: SE. SRANK: SHB,S1N. GRANK: G5. RSGCN: L-H. PIF BCPSN: Tier V. CODES: B. Res/B: 1. GRP: 40. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

#### **Threats and Actions**

#### Threat 1 - Natural system modifications; Habitat succession

- Actions: Habitat and natural process restoration; Create early successional habitat. Rank: 3
  - Site/area management; Create feathered edge habitat. Rank: 2
  - Site/area protection; Land protection of appropriate habitat. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3

#### Threat 3 - Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2

Refer to the Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland - Habitat Profile for additional threats to this species.

# Nashville Warbler Oreothlypis ruficapilla Image: Control of the state of

# Distribution & Abundance

The Nashville Warbler is a long-distance migrant with two disjunct breeding and wintering populations. The eastern population breeds from the Canadian Maritimes westward to central Alberta and southward to the Great Lakes and Pennsylvania (Fig x), and winters throughout Mexico and northern Central America. In Rhode Island, the Nashville Warbler is a rare and declining habitat specialist that occupies habitats dominated by low shrubs and a sparse overstory in the interior mainland of western forests of the State. Nashville Warblers nest in at least two different habitat types, which are structurally similar. This species is most often encountered in Pitch Pine barrens in open scarified areas where patches of reindeer lichens and low bushes are dominant. They formerly occupied forest stands in the Arcadia Management Area created after the "Hope Valley" fire of the 1950s, however they have declined since the 1980s, probably because of forest maturation. They also occur in open fens in Atlantic White Cedar swamps and bogs, where the low ericaceous vegetation mimics habitat within a pitch pine barren after a fire. Nashville Warblers are experiencing a dramatic population decline in New England and Mid-Atlantic (annual trend = -6.2 (95% Cl = -2.3 to -11.1)), whereas their populations appear to be more stable throughout eastern North America (annual trend = 0.4 (95% CI = -0.4 to 1.2). This species is management sensitive, with fire manipulation of Pitch Pine barrens the best approach to maintaining this species in Rhode Island. This habitat also supports many other rare species. Nashville Warblers are sometimes moderately common as stopover migrants, especially during fall, where they tend to occupy coastal thickets.

Image: Steve Maslowski USFWS

See map disclaimer in profiles introduction

Habitat Community: Pitch Pine Woodland/Barren, Type: Pitch Pine Woodland

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S3B,SZN. GRANK: G5. CODES: B. Res/B: 1. GRP: 115. PRIOR: 1. Climate Change Vulnerability: Unknown

# Threats and Actions

#### Threat 1 - Natural system modifications; Habitat succession

- Actions: Habitat and natural process restoration; Create early successional habitat. Rank: 3
  - Site/area management; Create feathered edge habitat. Rank: 2
  - Site/area protection; Land protection of appropriate habitat. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

Actions: • Land/water management. Rank: 3

• Land/water protection. Rank: 3

#### Threat 3 - Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2

Refer to the Community: Pitch Pine Woodland/Barren, Type: Pitch Pine Woodland - Habitat Profile for additional threats to this species.

# Indigo Bunting

Passerina cyanea

BIRDS **Shrubland Birds** 



aae: Peter WC Pato

See map disclaimer in profiles introductior

# **Distribution & Abundance**

The Indigo Bunting is a long-distance Neotropical migrant whose breeding range extends across the eastern half of the United States and southern Canada, as well as and the southwestern United States. This species is more common in the southern and central United States than in New England. Indigo Buntings winter in the Caribbean, Central America and northern South America. In Rhode Island, Indigo Buntings nest primarily in the western mainland and are uncommon or absent east of Narragansett Bay or on large islands in the Bay. Indigo Buntings prefer the ecotone between dry coniferous or mixed forests and shrub-dominated old fields or agricultural lands. Several other shrub-obligate specialists prefer this habitat including Prairie and Blue-winged Warblers. This species has a detection probability as males broadcast their melodious songs from perches at the tops of trees. Based on BBS annual trend estimates, this species is gradually declining in New England and Mid-Atlantic state (annual trend = -0.2 [95% CI = -0.05 to 0.1]), whereas they appear to be declining at more rapid rate throughout their range in eastern North America (annual trend = -0.9 [95% CI = -0.8 to -1.0]). As forests mature in Rhode Island, the amount of suitable habitat declines. Therefore, conservations actions include management actions designed to create and maintain early successional habitats throughout the region. Indigo Buntings are consistent but rather uncommon migrants through Rhode Island. They tend to occur along the coast in thickets used by many other migrating species.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S4B,SZN. GRANK: G5. CODES: B. Res/B: 1. GRP: 66. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Habitat succession

- Actions: Habitat and natural process restoration; Create early successional habitat. Rank: 3
  - Site/area management; Create feathered edge habitat. Rank: 2
  - Site/area protection; Land protection of appropriate habitat. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3
- Threat 3 Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2

Refer to the Community: Oak Forest, Type: Oak Forest - Habitat Profile for additional threats to this species.

# **Eastern Towhee**

BIRDS **Shrubland Birds** Pipilo erythrophthalmus Abundant Common Rare

Imaae: Peter WC Pato

"See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Eastern Towhee is a short-distance Nearctic migrant that breeds throughout the eastern United States into southern Canada and. winters in the southeastern United States. In Rhode Island, Eastern Towhees occur throughout the state, with peak nesting densities in the southwestern and northwestern part of the state. This species is also common along the coast and certain islands, especially Prudence and Block Islands. Towhees densities are greatest in dry forests with a thick understory of blueberry, mountain laurel and other shrubs. Arcadia Management Area and Block Island are two areas where over five males can be detected per point count station. In many other parts of the state and in suburban areas, this species is rare or absent, suggesting this species does not persist in suburban landscapes. Along the coast, they are most common in shrub habitats. Loss of dry forest stands with a dense understory is a management concern for this species. Regional trends based on BBS routes from 1966-2012 suggest they are declining more rapidly than many species in New England and Mid-Atlantic States (annual trend = -5.4 annual decline (95% = -4.8 to -5.9), whereas they are declining at a slower rate throughout eastern North America (annual trend = -1.3 (95% CI= -1.3 to 1.6). Eastern Towhees are relatively common in Rhode Island as migrants especially in coastal thickets used by many Neotropical migrants, with densities apparently greater during spring rather than fall.

Habitat Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S5B,SZN. GRANK: G5. RSGCN: L-VH. PIF NALCP: Tier II.a. PIF BCPSN: Tier II A. AJV BCR: H. CODES: B. Res/B: 1. GRP: 47. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Habitat succession

- Actions: Habitat and natural process restoration; Create early successional habitat. Rank: 3
  - Site/area management; Create feathered edge habitat. Rank: 2
  - Site/area protection; Land protection of appropriate habitat. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3

#### Threat 3 - Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2

Refer to the Community: Coastal Shrubland and Grassland, Type: Maritime Shrubland - Habitat Profile for additional threats to this species.

# American Woodcock BIRDS Scolopax minor Shrubland Birds

Image: Peter WC Pator

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The American Woodcock in a Nearctic migrant that nest throughout much of the eastern United States and winters in the southeastern United States. In Rhode Island, this species occurs nests throughout much of the state where large tracts of early age deciduous or mixed deciduous-coniferous woodlands occur that have adjacent open habitat for singing and nocturnal roosting. There have been long-term (1968 to 2006) decline in woodcocks (-1.9 percent per year) in the eastern United States (Kelley and Rau 2006), therefore conservation actions are needed to enhance populations of this species in the region. Research by Roger Masse (a PhD student at URI) has shown that woodcocks use the open habitats at night for roosting, probably to avoid predators. During the day, they disperse to nearby forest wetlands, where they forage for earthworms. The maturation of forests in the region has increased habitat suitability for Cooper's Hawks, which are now common throughout the state and a major predator of this species. Conservation actions include implements a series of habitat manipulations to increase availability of areas for singing grounds, nesting and brood rearing habitat, and foraging habitat (American Woodcock Conservation Plan 2008). In addition, systematic surveys for this species should be continued throughout the state to assess changes in the spatial distribution and abundance of this species.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S4B,S4N. GRANK: G5. STATE: 23-R. RSGCN: L-VH. Shrbrd: 1. USSCP: HC. PIF BCPSN: Tier I A. AJV BCR: HH. CODES: B. Res/B: 1. GRP: 35. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Habitat succession

- Actions: Habitat and natural process restoration; Create early successional habitat. Rank: 3
  - Site/area management; Create feathered edge habitat. Rank: 2
  - Site/area protection; Land protection of appropriate habitat. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3
- Threat 3 Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2

#### **Prairie Warbler**

BIRDS Shrubland Birds





Image: Robert Wadma

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Prairie Warbler is a long-distance migrant that nest throughout most of the southeastern United States, and as far north as southern Maine. The wintering range extends from the east coast of Central America through Florida and the Caribbean. In Rhode Island, the Prairie Warbler is a declining breeding species that nests in early successional habitats dominated by a sparse shrub understory with no forest canopy or rough old fields. This species is uncommon throughout the state, but still occupies areas where powerline corridors and cutting programs have maintained scrub-shrub habitat. Prairie Warblers used to occur in a Pitch Pine barren in Arcadia Management Area created by a large fire in the 1950s, but they are now extirpated due forest maturation. Unlike Blue-winged Warblers that prefer similar nesting habitat, Prairie Warblers tolerate the coastal environment and some individuals nest on islands in Narragansett Bay. Based on Breeding Bird Surveys from 1966-2011, this species has declined significantly in New England and the Mid-Atlantic states (annual trend = - 4.1 [95% CI = -2.9 to -5.2]), and throughout eastern North America (annual trend = -2.0 [95% CI = -1.7 to - 2.4]),thus conservation action is needed. This is a management-sensitive species that will require habitat manipulations to create early successional habitat to retain local populations. This species is rarely encountered during migration, but occurs in fall in coastal thickest used by many other neotropical migrant birds.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

FED: FWS. SRANK: S5B,SZN. GRANK: G5. RSGCN: L-VH. NALCC: X (B). PIF NALCP: Tier I. PIF BCPSN: Tier I A. AJV BCR: HH. CODES: B. Res/B: 1. GRP: 114. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Habitat succession

Actions: • Habitat and natural process restoration; Create early successional habitat. Rank: 3

- Site/area management; Create feathered edge habitat. Rank: 2
- Site/area protection; Land protection of appropriate habitat. Rank: 3
- Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3

#### Threat 3 - Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2



# **Distribution & Abundance**

The Chestnut-sided Warbler is a long-range migrant whose breeding range extends in narrow band from the Canadian Maritime Provinces westward to Minnesota and southward though the Appalachian Mountains to North Carolina (Fig x). This species winters in a relatively small area of eastern Central America. Chestnut-sided Warblers prefer to nest in habitats dominated by a dense shrub understory a sparse forest canopy, which occurs following regeneration after a fire or logging operations. They are generally not found in dense forests, suburbia, or agricultural landscapes. In Rhode Island, they usually occupy copses of shrubs, such as mountain laurel or spicebush, which are found in moist deciduous or mixed forests with sparse canopy closure. Population declines throughout their breeding range have been noted in recent decades. Breeding Bird Survey trend estimates from 1966-2011in New England and the Mid-Atlantic states suggest a significant population decline (annual trend = -2.8 [95% CI = -1.8 to -3.7]), as well as throughout eastern North America (annual trend = -1.4 (95% CI = -0.8 to -2.0). Similar declines are evident in Rhode Island; Chestnut-sided Warblers formerly nested in the Great Swamp and other management areas in Washington County, but have virtually disappeared in those areas. The present stronghold of this species is near Sprague Hill in Glocester, an area that also supports other shrub-obligate species (e.g., Black-throated Blue Warbler and Canada Warbler). Long-cycle selective logging of forests is necessary to create and maintain their preferred habitat. Chestnut-sided Warblers are more likely to be detected as stopover migrants in spring than fall, and are not common in the coastal thickets utilized by many other neotropical migrants.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

FED: FWS. SRANK: S5B,SZN. GRANK: G5. NALCC: X (B). CODES: B. Res/B: 1. GRP: 42. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Habitat succession

- Actions: Habitat and natural process restoration; Create early successional habitat. Rank: 3
  - Site/area management; Create feathered edge habitat. Rank: 2
  - Site/area protection; Land protection of appropriate habitat. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3

#### Threat 3 - Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2



# **Distribution & Abundance**

The Field Sparrow is a short-distance Nearctic migrant that nests throughout the eastern two-thirds of the United States and southern Canada, and winters in the southeastern and Midwestern United States, This species is declining throughout their breeding range, with annual decline of -5.2 (95% CI = -4.6 to =5.8) in New England and Mid-Atlantic states based on BBS trend estimates from 1966-2012, and an annual decline of -2.8 (95% CI = - 2.7 to -3.0) in eastern North America. Field Sparrows are more common in the Midwest than in New England. In Rhode Island, Field Sparrows are uncommon and localized. They are relatively common on Prudence Island but rare on other islands within Narragansett Bay and do not nest on Block Island. They tend to occur in suitable patches of shrubs or dry old-field habitat such as along power-line corridors, Pitch Pine Barrens, and post agricultural settings. They share this habitat with several other shrub-obligate species such as Prairie and Bluewinged Warblers. Field Sparrows are uncommon in Rhode Island as migrants; they tend to appear along the coast in thickets used by Neotropical migrants.

Habitat Community: Ruderal Grassland/Shrubland

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S4B,SZN. GRANK: G5. RSGCN: L-VH. NALCC: X (B). PIF NALCP: Tier II.a. AJV BCR: H. CODES: B. Res/B: 1. GRP: 38. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Habitat succession

- Actions: Habitat and natural process restoration; Create early successional habitat. Rank: 3
  - Site/area management; Create feathered edge habitat. Rank: 2
  - Site/area protection; Land protection of appropriate habitat. Rank: 3
  - Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3

Threat 3 - Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2

Refer to the Community: Ruderal Grassland/Shrubland - Habitat Profile for additional threats to this species.

# **Brown Thrasher**



age: Richard L Ferrer

See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Brown Thrasher is a short-distance Nearctic migrant that breeds throughout eastern North America, with the densest populations in the Midwest and Southeast. Wintering occurs in the southeastern United States. This species prefers open landscapes surrounded by hedgerows and scattered shrubs, which were most abundant after agricultural fields began to revert to young forests. In the mid-1980s, this species was still fairly widespread, especially in coastal areas such as the large islands within Narragansett Bay. This species continues to declines as forest mature in Rhode Island. Thrashers are now uncommon or absent from many areas where they used to occur, such as Pitch Pine barrens of the Arcadia Management Area. In New England and Mid-Atlantic states, this species is declining rapidly based on BBS trends (annual trend = -4.5 [95% Cl = -4.0 to -5.1]), while they are declining at slower rate throughout eastern North America (annual trend = -0.9 [-0.8 to -1.1]). The Brown Thrasher associates with several scrub-shrub specialists that will all benefit from habitat management designed to restore early successional habitats in the State.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S4B,SZN. GRANK: G5. RSGCN: L-VH. PIF NALCP: Tier II.a. AJV BCR: H. CODES: B. Res/B: 1. GRP: 49. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Habitat succession

- Actions: Habitat and natural process restoration; Create early successional habitat. Rank: 3
  - Site/area management; Create feathered edge habitat. Rank: 2
  - Site/area protection; Land protection of appropriate habitat. Rank: 3 ٠
  - Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3

Threat 3 - Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2

# **Eastern Kingbird**



Image: Peter WC Pator

~See map disclaimer in profiles introduction

# **Distribution & Abundance**

The Eastern Kingbird is a long-distance migrant whose breeding range extends throughout eastern and central North America, where they are most abundant (Fig. 3). They winter throughout northwestern South America. In Rhode Island, the Eastern Kingbird is a locally common, widespread nesting species in the interior and along the coast including Block Island. Their highest nesting densities occur along riparian zones of sluggish rivers and large lakes. Based on BBS trend estimates from 1966-2001, this species is declining rapidly throughout the region, with a -3.15 annual decline (95% CI - -2.68 to -3.64) in New England and Mid-Atlantic states and a -1.98 annual decline (95% CI =-1.8 to -2.2) in eastern North America. Protection of riparian habitats in Rhode Island is important to long-term conservation efforts for Eastern Kingbirds in the region.

Habitat Community: Ruderal Forest, Type: Ruderal Forest

#### Status

IUCN Rank: LC. FED: FWS. SRANK: S5B,S5N. GRANK: G5. PIF NALCP: Tier II.a. AJV BCR: H. CODES: B. Res/B: 1. GRP: 18. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Residential and commercial development; Loss and disturbance of habitat

Actions: • Site/area management; Minimize disturbance to habitat. Rank: 2

Land/water protection; Conserve nesting and foraging habitat. Rank: 2

#### **Blue-winged Warbler**

Vermivora cyanoptera



Image: Peter WC Pator

"See map disclaimer in profiles introductior

BIRDS **Shrubland Birds** 

# **Distribution & Abundance**

The Blue-winged Warbler is a long-distance migrant whose limited breeding range is the central eastern US. The wintering range is eastern Central America and the Caribbean. The Blue-winged Warbler is a scarce and declining resident in Rhode Island that specializes in early successional habitats including scrub-shrubs and old fields. Currently, this species is most likely detected in areas where powerlines and management programs have created shrub-dominated habitats. However, somewhat paradoxically, Blue-winged Warblers do not nest along the outer coast or on islands in Narragansett Bay islands where shrubs are abundant (except Prudence Island). This species formerly occurred in a Pitch Pine barren created by a large fire in the 1950s within the Arcadia Management Area. Blue-winged Warblers are significantly declining throughout New England and Mid-Atlantic (annual trend = -2.4 [95% CI = -0.5 to -3.7]), probably due to forest maturation, although throughout eastern North America the evidence of a population decline is less certain (annual trend = -0.58 [95% CI = -1.25 to 0.22]). This species was selected as a GCN because of local and regional declines. Blue-winged Warblers are management sensitive and would benefit from vegetative management to promote shrub habitats. Blue-winged Warblers are uncommon as stopover migrants in Rhode Island because the state is at the northern edge of their breeding range.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

FED: FWS. SRANK: S5B,SZN. GRANK: G5. RSGCN: H-VH. NALCC: X (B). PIF NALCP: Tier I. PIF BCPSN: Tier I A. AJV BCR: HH. CODES: B. Res/B: 1. GRP: 56. PRIOR: 1. Climate Change Vulnerability: Low = by 2100 (Habitat loss)

# Threats and Actions

#### Threat 1 - Natural system modifications; Habitat succession

Actions: • Habitat and natural process restoration; Create early successional habitat. Rank: 3

- Site/area management; Create feathered edge habitat. Rank: 2
- Site/area protection; Land protection of appropriate habitat. Rank: 3
- Education and awareness. Rank: 2

#### Threat 2 - Other; Loss of stop-over habitat due to multiple factors (development, human disturbance)

- Actions: Land/water management. Rank: 3
  - Land/water protection. Rank: 3

#### Threat 3 - Invasive and other problematic species and genes

Actions: • Invasive/problematic species control. Rank: 2

#### **Coastal Shrub Birds**

**BIRDS** 

# Description

Coastal shrub areas are rare habitats that provide food and cover for wildlife. These shrublands also serve as refuges for native warm-season grasses and rare plants. Due to the coastal position of this habitat and the plant richness and density, it serves as a vital stopover habitat and refueling ground for migratory bird species (USFWS).

#### **Species**

Blackpoll Warbler *(Setophaga striata)* Tree Swallow *(Tachycineta bicolor)* 

# Blackpoll Warbler Setophaga striata



Image: Donna Dewhurst USFWS

~See map disclaimer in profiles introduction

**BIRDS** Coastal Shrub Birds

# **Distribution & Abundance**

The Blackpoll Warbler nests in the spruce-fir forests of northern North America and primarily occur in Rhode Island only as a stopover migrant in the fall. During fall migration Blackpoll Warblers stage in New England, where they accumulate fat reserves prior to making an extended over-water migration to South America. Prior to these flights, coastal stopover habitats provide critical foraging resources. Therefore coastal shrub thickets (e.g., Block Island and along the south shore) offer critical respite and refueling opportunities for this long-distance migrant. This species is included in the SWAP as a GCN because it is a relatively common fall migrant and its behavior and habitat requirements are appropriate surrogates for many of the Neotropical birds that migrate through Rhode Island. Population trends for Blackpoll Warbler are unclear, because most individuals breed in areas not covered by the Breeding Bird Surveys that suggest a non-significant population decline in areas where this species was detected (annual trend = -6.4 [95% CI = -22.3 to 0.6]). Landscape planning and habitat acquisition and management, especially along the coast, will enhance the probability that Neotropical migrants survive their migrations. Informed placement of structures in the coastal zone, especially but not limited to wind generation turbines, could also mitigate the hazards faced by migrating birds.

Habitat Community: Oak Forest, Type: Oak Forest

#### Status

IUCN Rank: LC. SRANK: SNA. GRANK: G5. Climate Change Vulnerability: Unknown

# **Threats and Actions**

#### Threat 1 - Natural system modifications; Loss of stop over habitat

- Actions: Land/water management; Manage for shrub habitat . Rank: 3
  - Land/water protection; Conserve shrub habitat. Rank: 3

#### Threat 2 - Residential and commercial development; Loss of stopover habitat

- Actions: Land/water management; Manage land for stopover habitat. Rank: 3
  - Land/water protection; Identify key stopover habitat. Rank: 3

#### Threat 3 - Renewable energy

Actions: • Planning. Rank: 2



# **Distribution & Abundance**

The Tree Swallow is a widespread, abundant species across its breeding range, which spans much of North America. Wintering occurs in the southern parts of North America and into Central America and the Caribbean. In Rhode Island, Tree Swallows are widespread and common cavity nesters whose population has benefited from the placement and maintenance of artificial nest boxes. Such attention by bird lovers has fostered Tree Swallows populations in virtually all areas of the state, even on Block Island. In addition to the local breeding population, Rhode Island is an important staging area during fall migration, when tens of thousands of birds can be seen staging along barrier beaches. Tree Swallows spend several weeks in southern New England (typically early August to mid-October, with peak abundance during August) feeding on berries of coastal shrubs (e.g., Bayberry) and roost overnight in persistent emergent vegetation in local marshes. Large stands of Phragmites australis near the southern terminus of the Connecticut River provide roosting habitat for well over 100,000 swallows on some nights, and many of these birds might forage Rhode Island during the day. Population trend estimates from Breeding Bird Surveys from 1966-2012 suggest this species in New England and Mid-Atlantic States is potentially stable (annual trend = -0.1 (95% CI = -1.0 to 0.7), whereas population trends throughout eastern North America suggest their populations are declining significantly (annual trend = -1.7 (95% Cl = -2.3 to -1.3). Conservation actions include the continuation of support for nest box programs that provide suitable nest sites. Due to the probably importance of Rhode Island as a staging site for swallows along the coast, a standardized survey technique should be developed to monitor the spatial distribution and abundance of foraging birds, as well as roosting birds. Protection and enhancement of coastal shrub to provide a key food resource for this migrant is important, as well as insuring that large stands of persistent emergent vegetation in coastal marshes is protected to provide roosting habitat.

Habitat Community: Ruderal Grassland/Shrubland, Type: Old Field

#### Status

IUCN Rank: LC. SRANK: S5B. GRANK: G5. Climate Change Vulnerability: Unknown

# **Threats and Actions**

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#### Threat 1 - Natural system modifications; Loss of habitat, specifically bayberry

- Actions: Land/water management; Manage for shrub habitat, specifically bayberry. Rank: 3
  - Land/water protection; Conserve shrub habitat, specifically bayberry. Rank: 3

#### Threat 2 - Residential and commercial development; Loss of stopover habitat

- Actions: Land/water management; Manage land for stopover habitat. Rank: 3
  - Land/water protection; Identify key stopover habitat. Rank: 3

#### Threat 3 - Renewable energy

Actions: • Planning. Rank: 2

Refer to the Community: Ruderal Grassland/Shrubland, Type: Old Field - Habitat Profile for additional threats to this species.