Wild Pollinators of Rhode Island:
Inventory, Status, Habitats

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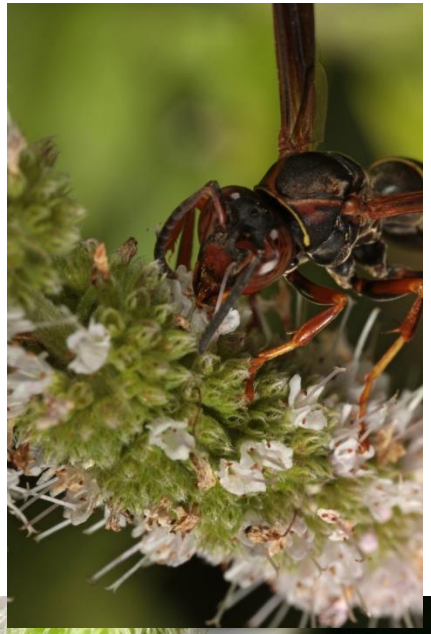
Bats

Birds

Mice

Flies

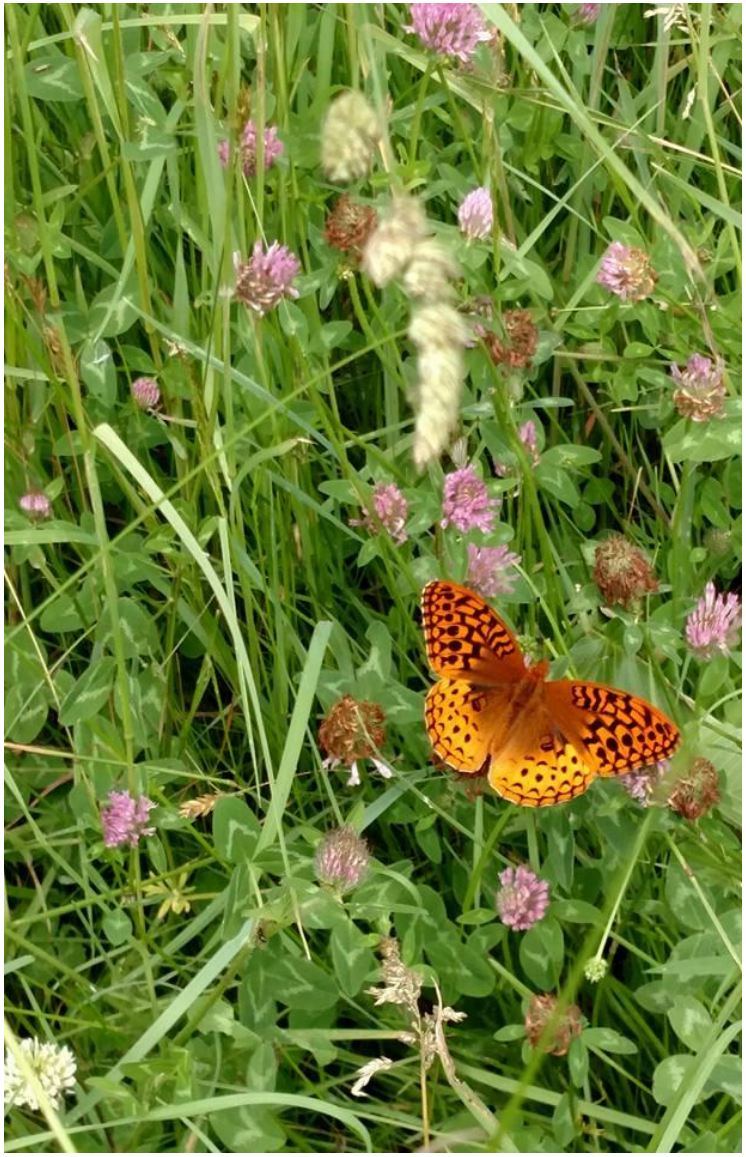
Beetles



Other stuff:

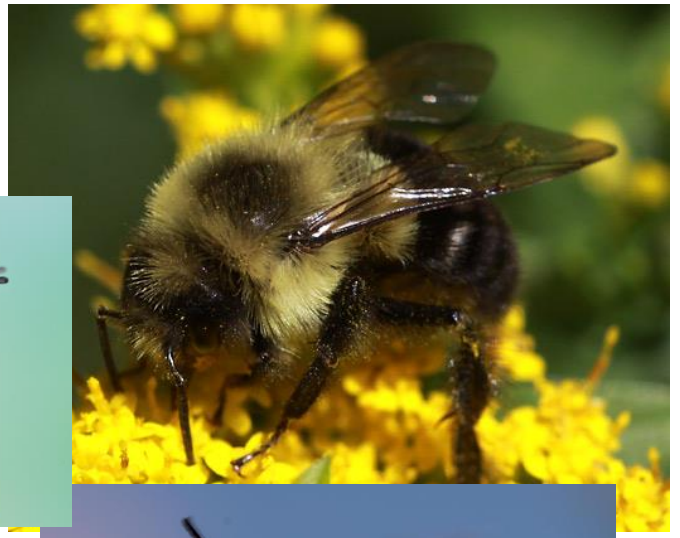
- ants
- wasps
- spiders
- true bugs

Butterflies



Moths

Bees



3,500 species north of Mexico
770 species in eastern North America
183 species documented in RI as of spring 2016
a complete inventory would
nearly double that number

Bee decline

Apis mellifera and CCD

Bumblebee species

Population

Species diversity

Bombus terricola
yellow-banded bumblebee

Bombus affinis
rusty patched bumblebee

Decline of pollinators:

Things to think about

Pollination is not necessarily an yes-no thing:
Crop productivity is sometimes related to pollination intensity

kinds of pollination are better for different kinds of plants

Colletes bees, important native pollinators, also host many support parasites and inqualines, such as blister beetles or Epeolus genus of bees.

Other invertebrates as well as vertebrates such as birds and amphibians eat bees.

Pollinators and plant species diversity

Bee habitat characters:

sandy soil substrates and disturbance

- Bumblebee nest density coincided most closely with the area of gardens
- secondarily with the area of grasslands
- elevated bumblebee nest density in gardens was measurable up to 1 km into adjacent farm lands with poor bee habitat

Urban habitats

studies of native bee richness and abundance indicate diverse communities of wild bees persisting in cities in many parts of the world

Several analyses and meta-analysis of urban insect pollinators found the consistent variable correlated with pollinator health is forage—the presence of flowers

As urban ecology advances the science of ecology, the role of NRM agencies should similarly update their understanding of the role of cities in landscape-scale conservation priorities (see IPBES 2016). Engaging city planners and residents in enhancing insect pollinator habitat is a legitimate conservation practice in addition to its well-understood educational value.

–Hall et al 2016 The city as a refuge for insect pollinators. Conservation Biology.

GOALS from UK National Pollinators Strategy (2015)

- More, bigger, better, joined-up, diverse and high-quality flower-rich habitats (including nesting places and shelter) supporting our pollinators across the country.
- Healthy bees and other pollinators which are more resilient to climate change and severe weather events.
- No further extinctions of known threatened pollinator species.
- Enhanced awareness across a wide range of businesses, other organisations and the public of the essential needs of pollinators.
- Evidence of actions taken to support pollinators.