

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



DIVISION OF FISH AND WILDLIFE

BOWHUNTER SIGHTING LOG 2008-09 SUMMARY



In 2001, The Division of Fish and Wildlife implemented a voluntary sighting log survey for the state's archery deer hunters. The survey is modeled on similar surveys that have been used successfully for a number of years in other states such as New York and Virginia. The objective of the sighting log survey is to collect reliable information on a variety of wildlife species to help monitor the relative abundance of these species over time.

There are rarely enough personnel and resources available to wildlife managers to conduct population monitoring of more than a few wildlife species and particularly those that do not have to be tagged by the Division of Fish and Wildlife. Harvest data is often relied upon to estimate changes in wildlife populations, yet many variables often make harvest information alone a poor index of population trends. The number of unsolicited sighting reports, nuisance complaints, and road-kills can be related to wildlife population levels and provide useful information. The sighting log will provide an additional source of information, which when combined with other available data will improve our ability to detect changes in population levels for furbearers and other wildlife species. Another use of the survey is to gain a better understanding of distribution of species for which there may be little or no information.

Archery hunters have been the focus of sighting log surveys primarily because most archers still hunt from a stand, allowing them an opportunity to accurately identify any animals they observe. Additionally, the length of the archery season is longer than other methods, extending the observation period over several months. Many muzzleloader and shotgun hunters also hunt from a stand and the term "bowhunter sighting log" should not deter them from participating in the survey.

Participants were asked to record the number of hours hunted and the number of sightings of selected wildlife species each time they hunted throughout the archery deer season. In addition to those species listed on the survey card, participants were asked to record other species observed such as chipmunks, hawks, owls and domestic animals such as cats or dogs. Sightings of other hunters or other people observed while hunting should also be recorded. The number of sightings recorded is converted to a sighting rate (number of sightings/100hrs). The sighting rate can be compared from year to year, from area to area, and can be a useful index of population trends for certain species.

The total number of hunts reported remained about the same as last year but the total number of reported observation hours decreased slightly. During the 2008-2009 season twelve hunters logged 1033.5 hours of observation time during 351 individual outings. Those persons who participated continued to do an excellent job of recording their data. Unlike past years where some cards could not be used because of incorrect or incomplete recording of information, we were able to use all the cards that were returned in our analysis.

Observations were recorded in twenty different towns, one more than 2007-2008. Exeter again led all towns with the highest number of hunts, (86), followed by Coventry (39) and North Kingstown (28). November had the highest number of observation hours (483) as well as the most number of hunts (154). Ninety-seven percent of recorded hunts occurred on private land. The number of antlerless deer sighted statewide per 100 hours of observation time increased by 18.5% after four previous years of decline. The number of bucks observed statewide decreased 36.5% from 7.4/100 hrs in 2007/08 to 4.7/100 hrs in 2008/09.

When looking at the tables, it is important to remember that a change from one year of the survey to the next does not necessarily mean a change in the population. Many factors can affect the visibility of wildlife including weather, availability of food, etc. Also the low number of participants, the distribution of participants and low number of observation hours will affect the data. Over time however, with an adequate and consistent number of participants and better distribution throughout the state, we may be able to detect trends in populations of some species.

The Division of Fish and Wildlife wishes to thank those archers and other hunters that participated in the bowhunter sighting log. Survey forms will be available again this year prior to the opening of the mainland archery deer season. Survey forms can be downloaded from the DEM website: www.dem.ri.gov as well as various check stations and Fish and Wildlife offices. A continued effort will be made to increase the number of participants and the statewide distribution of effort and to refine the survey. The usefulness of the survey will depend on adequate participation and distribution of observers. Other potentially useful data that could be incorporated into the survey might include: weather conditions, number of bucks chasing does, doe to fawn ratios, or number of other hunters observed. Any comments or suggestions to make the survey more effective are welcomed. Survey results will be mailed to all participants who returned a survey card and provided a return address. Survey results are also available at Fish and Wildlife offices. If you know of anyone who might like to participate in the survey contact the Division of Fish and Wildlife at the Great Swamp Field Headquarters, West Kingstown, RI. Telephone **401-789-0281**.

Table 1. Number of hunts AM (morning) and PM (evening)

Time of day	# of hunts	% of hunts
AM	162	46
PM	189	54

Table 2. Number of recorded survey hours by month

Month	# of hours
October 2008	327
November 2008	483
December 2008	159
January 2009	64.5
Total:	1033.5

Table 3. Number of hunts per month for 2008-09 sighting log

Month	# of hunts	% of hunts
October 2008	115	32.8
November 2008	154	43.9
December 2008	58	16.5
January 2009	24	6.8
Total:	351	

Table 4. Number of hunts per town for 2008-09 sighting log

Town	# of hunts
Barrington	3
Burrillville	25
Charlestown	8
Coventry	39
Cranston	2
East Providence	1
Exeter	86
Foster	17
Hopkinton	8
Jamestown	24
Little Compton	1
Middletown	3
Narragansett	4
North Kingstown	28
Portsmouth	26
Richmond	1
Scituate	23
South Kingstown	23
Tiverton	4
West Greenwich	25
Total:	351

Table 5. Number of animals seen per 100 hours of observation statewide

Species	2008- 2009	2007- 2008	2006- 2007	2005- 2006	2004- 2005	2003- 2004	2002- 2003	2001- 2002
fisher	0.39	1.04	0.4	0.5	0.7	1.1	0.88	2.3
coyote	1.35	1.1	0.2	1.6	0.5	1.0	0.76	1.8
bobcat	0.09	0	0.1	0.7	0	0.1	0.22	0
squirrels	42.6	42.5	39.2	43.2	33.5	46.8	15.6	41.7
raccoon	0.58	0.68	1.1	0.3	0.7	0.7	0.11	0
red fox	0.39	0	0.4	0	1.1	0.2	0.44	1.3
gray fox	0.19	0.08	0.2	0	0.2	0.7	0.66	0.5
turkey	2.2	10.1	8.7	9.7	10.0	8.1	16.3	45.1
deer (bucks)	4.7	7.4	6.1	6.6	6.7	7.2	7.8	3.8
deer (antlerless)	30.1	25.4	31.0	35.2	37.2	38.5	25.2	22.8

Table 6. Number of animals seen per 100 hours of observation AM/PM statewide

Species	# seen/100 hours (AM)	# seen/100 hours (PM)
fisher	0.18	0.61
coyote	0.55	2.2
bobcat	0.18	0
squirrels	45.8	38.9
raccoon	0.7	0.41
red fox	0.37	0.41
gray fox	0.37	0
turkey	0.74	3.9
deer (bucks)	6.4	2.9
deer (antlerless)	20.3	40.9

Table 7. Number of deer seen per 100 hours of observation

	total hours	# seen/ 100 hours (bucks)	# seen/ 100 hours (antlerless)
Prudence Island	32	12.5	37.5
Jamestown	86.5	1.2	17.9
Aquidneck Island	48.5	10.3	2.1
mainland only	866.5	4.5	32.5
	1033.5		

Rhode Island Bowhunter Sighting Log Survey 2008-2009

