

OWLS IN MASSACHUSETTS

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Owls are one group of birds that have long fascinated and interested man. In North America there are 18 species of owls, of which 12 have occurred in Massachusetts. The owls most commonly found in the state are the Great Horned, Screech, Barred, Short-eared, Long-eared, Saw-whet, Snowy and Barn. There are only a handful of records for the Great Gray Owl, the most recent at Gill, from January to March 1973. The Hawk Owl has been seen on only 5 or 6 occasions, and the Boreal Owl only a few times since a pronounced flight in the winter of 1922-23. There is one record of a Burrowing Owl, collected at Newburyport on 15 May, 1875 by H. Joyce and J. K. Clifford. The specimen is preserved at the Museum of Science, Boston.

Detailed information on owl abundance is largely lacking. Most owls seem to be more common in winter, or at least they are reported more frequently from November through March than at any other time. Below is a chart listing all owls reported on a Christmas Count Census for the years 1967-1974. The number in parentheses following the year denotes the total number of counts held that year in Massachusetts.

<u>SPECIES</u>	<u>1967(20)</u>	<u>1968(18)</u>	<u>1969(18)</u>	<u>1970(20)</u>	<u>1971(20)</u>	<u>1972(20)</u>	<u>1973(20)</u>	<u>1974(21)</u>	<u>Total</u>
Barn	0	1	2	1	0	0	2	6	12
Screech	19	11	21	46	42	17	27	56	239
Great									
Horned	16	21	19	39	56	17	41	68	277
Snowy	10	3	1	5	21	0	0	18	58
Barred	4	5	3	2	10	7	11	4	46
Long-eared	1	0	6	15	9	1	5	6	43
Short-eared	7	12	8	11	17	2	15	17	89
Saw-whet	0	2	1	1	3	1	0	0	8
	57	55	61	120	158	45	101	175	

As a family, owls display certain common but distinctive features and characteristics. Unlike most birds, the female is larger in size and weight than the male. For most birds, egg incubation begins after the last egg in the clutch is laid, but owls begin incubation after the female deposits the first egg. The hatching of young owls is thus staggered and not synchronized, and this of course, results in offspring of various sizes all in the same nest.

Owls seldom build their own nests. They often seek out the nests of hawks, crows or even squirrels in which to lay their eggs. To these structures they sometimes add a few new branches. Very rarely they build their own afresh. The usual clutch is 2 to 6 eggs--these invariably pure white. The male assists in feeding the young birds, and both parents are often aggressive and belligerent in the defense of the nest against intruders. The owlets are slow to develop and have a long period of dependence on parental care.

The eyes of owls are directed forward so that both look in the same direction. Thus, in order to look to the side, the birds are obliged to turn the head. Owls have superb eyesight: Barn Owls can capture prey where the illumination is only equivalent to that thrown by an ordinary candle burning 2500 feet away.

Not only do owls have such great eyesight, their hearing is equally superb. The ear openings are so large that they almost cover the wide sides of the head. The feathers of owls are constructed in such a way as to make their flight almost noiseless. A mouse has no chance to escape!

Owl longevity in the wild is largely a mystery, but a record exists of a Great Horned Owl that lived in captivity for 68 years.

Owls are difficult to observe because of their nocturnal nature. During the day they retire to dense forest vegetation. In the breeding season, owls become more vocal and are easily found by "owling." A good human imitation of the bird's call will often result in an answer, and hopefully the owl will come close enough to be seen with the aid of a powerful flashlight. Like most nocturnal animals, owls will not be disturbed by the light, provided that the observer is very quiet.

Finding an owl during the day is often a matter of luck. A good way to start is to pick a substantial stand of evergreen trees and then to look for pellets on the ground and

whitewash (bird droppings) on branches. Pellets are odd, compact, elliptical balls of undigested fur and bones. Most owls do not tear small prey apart, but instead swallow it whole with no injury to the bone structure of the animal eaten. Since the digestive juices in an owl's stomach are not acidic enough to dissolve the bones and fur after they have been swallowed, the owl must regurgitate them. This is done about six to eight hours after feeding. Another sure sign of the presence of an owl is a mob of scolding chickadees, nuthatches, crows and Blue Jays.

The Screech Owl is the most common owl in Massachusetts. It prefers woodlots and orchards and is often found within city limits. The only areas in which it is less populous are those of the higher elevations in western Massachusetts. Screech Owls breed from April to the second week of May. They are easily called in by a tape recording or a good imitation, and they will often respond during the day.

The Great Horned Owl is our largest common owl. It prefers heavily wooded areas and is particularly fond of the pine barrens of the Outer Cape and Plymouth County (especially Myles Standish State Forest). It nests very early in March, most often preferring a stand of White Pines (*Pinus Strobus*). Great Horned Owls are often seen at dusk, silhouetted against the sky. Less frequently, they can be seen in the daytime being chased by crows.

The Barred Owl is an uncommon breeding owl preferring densely wooded swamp regions. During the winter months, they often move from their breeding area to a region where food is more easily obtained. At this season they may even occasionally be found in thoroughly urban environments, such as downtown Boston. The Barred Owl is extremely rare along the southeastern coast and on Cape Cod. Crooked Pond, Boxford, is one of the easiest places in eastern Massachusetts at which to find this species. Mount Greylock in western Massachusetts is also most reliable, especially if you camp overnight. The Barred Owl's call is easily imitated, and results are often favorable--even during mid-day. Barred Owls call just at sunrise and up to one hour beyond that time.

The Long-eared Owl is the least known owl of those that regularly breed in the state. The species is almost totally nocturnal. It seems to call infrequently at the nest, but this is not a very vocal owl. The calls are quite weird: some resemble the yapping of an injured dog, others sound more like a human moan. Moreover, it is difficult to distinguish these calls from some of the less common vocalizations of other owl species. Certain calls of the Barred Owl are notably similar. The Long-eared Owl is easy to overlook during the day as well, for it is quite reluctant to flush. In spite of the rarity of this bird (which may be more apparent than real), winter roosts are occasionally found containing six or more individuals.

The Short-eared Owl is partially a diurnal owl. It is essentially a salt marsh and sand dune inhabitant, and is a permanent resident of Martha's Vineyard, Nantucket, Muskeget and Tuckernuck Islands. During the winter months, it can sometimes be found in such coastal marshes as those at Squantum, Salisbury, Parker River Refuge and even at Logan Airport. Fort Hill at Eastham is one of the more reliable Cape spots.

The Saw-whet Owl is a local breeding bird, preferring wet woodlands. It migrates in October and often shows up in the strangest places. Saw-whet Owls are very tame. They can be approached closely and sometimes even lifted off the perch. The species breeds on Cape Cod, probably in Nickerson State Park, and has been found nesting on Mount Greylock.

The Barn Owl is the least common owl in Massachusetts. It is a permanent resident of Martha's Vineyard and of Nantucket Island. During the winter months, it is found roosting in pine groves along the coast. Barn Owls probably also breed in Boston Harbor or in some of the abandoned buildings along the south shore waterfront, for they have been seen regularly on various islands in the Harbor.

