Long-eared Owl, Asio otus

Status: State: Threatened Federal: Not listed

Identification

The long-eared owl is a slender, crow-sized owl with long "ear" tufts atop the head that are often visible when the owl perches. The ear tufts are not actual ears, but rather clusters of feathers that aid in camouflaging the bird. The true ears are located on either side of the head next to the round rusty-orange facial disk.

The breast of the long-eared owl is brown with irregular white spotting. The belly is buffy and crosshatched with dark brown markings. The upperparts are heavily marked with black and brown and have gray, buff, and white tones. The wings are long and rounded with a buff-orange patch at the base of the outer primaries on the upperwing. The flight feathers are grayish with dusky spots. The underwing shows a dark brown patch at the wrist. There is a small white patch on the throat below the black bill. The tail is buff colored with brown bands. The legs and feet are feathered to the talons, which are black.



The iris is yellow to golden-yellow. Sexes are alike in plumage, although males are often slightly paler than females.

The long-eared owl relies on its cryptic coloration to camouflage itself within its surroundings. When disturbed, the owl may elongate its body and raise its ear tufts to resemble a broken branch or part of a tree trunk. Long-eared owls also snap their bills if threatened. Vocal activity of the long-eared owl is primarily restricted to the breeding season when males emit a series of deep "hoo" notes during the nighttime hours. The call of the female is slightly higher pitched than that of the male. Both adults give a repeated barking "oo-ack" alarm call. Long-eared owls are skilled fliers that can maneuver among trees and migrate long distances.

The long-eared owl can be confused with other owl species. The great-horned owl (<u>Bubo virginianus</u>), which is similarly patterned and also has prominent ear tufts, can be distinguished from the long-eared owl by its larger size and stockier body. The eastern screech owl (<u>Otus asio</u>) is much smaller than the long-eared owl and differs in coloration, occurring in a rusty red or gray phase.

Habitat

Long-eared owls require a mosaic of wooded and open habitats. Both roosting and nesting sites may be located within dense stands of either natural or ornamental evergreens, such as Scotch pine (Pinus sylvestris), Austrian pine (P. nigra), Virginia pine (P. virginiana), eastern red cedar (Juniperus virginiana), Norway spruce (Picea abies), arborvitae (Thuja orientalis), eastern hemlock (Tsuga canadensis), red pine (Pinus resinosa), and white pine (P. strobus) (Bosakowski et al. 1989). Deciduous trees and impenetrable tangles of vines also provide cover for these owls. High foliage density is required at nesting and roosting sites to provide camouflage and protection from wind, cold temperatures, and precipitation. Roosting and nesting woodlots are located adjacent to upland or wetland open terrain. Open areas, such as fallow fields, farm fields, and marshes, are used for hunting and are integral components of long-eared owl habitat. Marshes may contain reed grass (Phragmites australis), cattail (Typha spp.), or sedges. Status and Conservation

Prior to the 20th century, the clearing of eastern forests for agriculture resulted in a mosaic of farm fields and woodlands and may have enabled long-eared owl numbers to exceed pre-settlement populations. In the late 1800s and early 1900s, long-eared owls bred at scattered locations in New Jersey from Sussex County to Salem County. However, by the mid-1900s, vegetative succession, development of open and forested areas, and modern agricultural practices greatly reduced habitat for these owls in the state. The number of active long-eared owl winter roosts, as well as the number of birds per roost, has declined since the 1950s. Despite extensive surveys in the late 1980s, the number of known breeding pairs remained extremely low. Long-eared owls are currently absent from many nesting sites that were occupied prior to the 1960s. Expanding development has been responsible for the loss of traditional roosting and nesting sites. Due to population declines of breeding pairs and winter residents, habitat loss, and limited breeding distribution in the state, the long-eared owl was listed as a threatened species in New Jersey in 1991. The New Jersey Natural Heritage Program considers the long-eared owl to be "demonstrably secure globally," yet "rare in New Jersey" (Office of Natural Lands Management 1992).

■ Sherry Liguori