Missouri Master Naturalist

2024 Certification Pin

Barred Owl

Strix varia

Description



The large eyes and rounded head of this large owl help identify it immediately upon sight. Barred owls have a dark barred pattern on the upper chest and dark streaking below. Both sexes have the same brown upperparts with irregularly white spots. In flight, the observer may notice the owl having six or seven bands of lighter brown or grayish tan coloration. Primary feathers will have squarish lighter spots and tail will appear to have clean defined bands with lighter brown in flight. Barred owls lack feather tufts (so nothing to resemble false ears) on the head. They have grayish white eyebrows highlighting their dark irises and black crescent at the anterior of the eye, which appeal to naturalists and wildlife photographers when the raptor focuses on the observer.

Range

They are a resident of the Pacific northwest region of Oregon, Washington to SE Alaska. They inhabit southern Canada and eastern United States with western Minnesota, the eastern regions of Nebraska, Kansas and Oklahoma south to Texas (absent or scarce in western Texas and southern tip). They occur statewide in Missouri.

Diet

Barred owls are highly opportunistic, and the proximity of creeks, swamps, or a wooded lakeshore will influence the number of small snakes, frogs, crayfish, salamanders, and fish in their diet. Much of their prey will be small mammals (immature rabbits and smaller in size e.g., voles, shrews, deer and white-footed mice). The birdlife remains found in owl pellets are usually songbirds and rarely larger than a medium sized woodpecker. However, there are records of screech owls and northern flickers being taken.

Habitat

They are non-migratory and loosely stay in the same habitat during non-breeding and past nesting season. But they strongly advertise and/or defend their home range during pair bonding, establishing territory, nesting and brooding the offspring. Ideal habitat consists of relatively heavy, mature forests ranging from thick upland woodlands to riparian forest and wooded swamps. Natural habitat needs the dense leaf cover (especially for roosting) and maturing trees having natural cavities for nesting. Quality of habitat and prey density influence the size of defended (patrolled) territory; it is usually about one square mile.

Reproduction

Barred owls are a single brooded species and like other Missouri owls (Great-horned and screech owls) they are among the earliest nesting. Both male and female stay on territory the whole year, unless food becomes insufficient, then it is the male who will temporarily disperse first. The female seemingly to

have a stronger bond to the established home range. Territorial owls will become more vocal in December and January. Courtship of the male approaching the female with bowing and wingspread behaviors occur throughout the winter leading up to nest selection in late winter.

The preferred nesting site is a tree cavity, often forming where a large tree branch fell. Occasionally barred owls utilize an unoccupied large bird's nest. The barred owls exhibit little if any nest building behavior and most cavity nests only contain a few owl feathers; nesting in a red-shouldered hawk nest or other abandoned nest may have a little moss, grass, or pine needles.

Two or three eggs are laid, often a day apart. Incubation is performed by the female (rarely by the male). The eggs hatch in about 30-33 days and then both parents contribute to brooding the young (owlets). By the third week the owlets are growing fast and replacing their natal down with new down feathers and the start of wing feathers can be observed. At some point owlets leave the nest before they can fly. How early they leave depends on cavity size and how crowded the nest is for the brood. If owlets fall to the ground, they can usually climb their nest tree if it has rough bark. The owlets will learn to fly at twelve to fifteen weeks old and stay with their parents. By September the young may still be in vicinity of the parents, but they are able to hunt on their own and will disperse once parents start vocalizing and defending the late autumn territory once again.

Population Status

The population of barred owls in Missouri seems to be stable and they are easy to manage for in species and age diverse forests. Improving wooded stream corridors benefits barred owls as well as a suite of other species. Having some blocks of habitat of at least 40 acres or more with connecting corridors allows barred owls to fulfill an important niche as one of the apex predators.