

Identification of Montana's Owls



boreal owl

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The following guide is to help you identify Montana owls. Owls are divided into two groups or subfamilies: Tytoninae (barn and bay owls) and Striginae (all other owls). In North America, the two groups are represented by 19 breeding species; 15 species occur in Montana.

Owls are basically nocturnal or crepuscular (active in the late morning or early evening). However, during winter, some species may be observed almost any time and in a variety of habitats because they are in search of food.

Because most owls are active in times of low light or complete darkness, they have evolved a low-frequency vocal repertoire as a means of communication. Familiarity with these primary songs can greatly facilitate owl identification.

Owls have two primary hunting methods: (1) "perch and pounce," which usually takes place from a low perch and is most common among forest owls, and (2) "quartering," which means flying low over the ground; it is most common among open-country owls.

Owls have evolved several important adaptations to help them cope with their lifestyle. Some of the most recognizable characteristics include:

- Large heads to accommodate large eyes and ears. Owls cannot move their eyes up, down, or side to side as humans can, so owls have evolved the ability to rotate their heads approximately 270 degrees.
- The ears in some species are asymmetrical (the right ear is longer and situated higher on the skull), allowing them to calculate flight angles when sounds are heard but prey cannot be seen.
- Owl feathers in many species are structured so that sound

created by flight is absorbed; consequently, these owls can hear but not be heard by potential prey when flying.

- Owls usually vocalize at low frequency. These sound waves carry long distances and are not absorbed by barriers such as vegetation as quickly as high-frequency vocalizations.

IDENTIFICATION OF MONTANA OWLS

The illustrations and accompanying text are designed to help you identify Montana owls and provide some basic life history. In North America, female owls are larger than males, with the exception of the burrowing owl.

For identification purposes, owls are often separated into those with "eartufts" or "horns" and those which are "round-headed." In the owl descriptions which follow, we have used "tufts" instead of "eartufts" or "horns" to denote the specialized feathers arising from the heads of many owls. We have retained use of "round-headed."

If you're in the field and trying to identify Montana owls, make the following items part of your check list:

- (1) Determine if the owl has tufts or is round-headed.
- (2) Note eye and bill color.
- (3) Note plumage color and other distinctive markings.
- (4) Note relative size of the owl—for example, compare it with the size of your hand, the distance from your elbow to your fingertip, or the length of your arm.
- (5) Note details of the owl's habitat and check distribution maps.

By using a combination of these field tips, you should be well on your way to identifying any owl you might see in Montana. ■