

ABOUT THE COVER

Barn Owl

The Barn Owl (*Tyto alba*) has the most widespread distribution of any owl species — Antarctica being the only continent where it does not occur. A medium-sized owl, it is easily distinguished from all other North American Owls. It is dark above and light below, varyingly tinted with buff-orange and brownish spots. It has a heart-shaped facial disc, no ear tufts, long, rounded wings, and a short tail. It has a buoyant flight, with deep, slow wingbeats. Females are larger and heavier than males, and are generally darker and more spotted below. It is almost exclusively nocturnal.

Up to thirty-five subspecies are generally recognized worldwide, but the taxonomy remains unsettled, with several subspecies considered full species by some taxonomists. In North America Barn Owls are found throughout most of the United States, although they become uncommon and local in the upper tier of states. They are found throughout Central and South America, as far south as Tierra del Fuego. They have been successfully introduced to Hawaii. The Barn Owl is largely a resident species, although some may be migratory in the northern edge of their range. Immature birds disperse widely in all directions, often over great distances, giving the impression of migratory behavior. In Massachusetts, the Barn Owl is considered an uncommon to rare local breeder in scattered localities, including Springfield, Boston Harbor Islands, and Martha's Vineyard. A winter maximum of eight birds has been recorded for the state. Like many owls, they may congregate in winter roosts.

Barn Owls are mostly monogamous, and mate for life. They usually produce a single brood, although sometimes they produce two. Their preferred habitat is low elevation grasslands and farmlands, or other open habitat such as marshes, wherever there are suitable roost and nest sites available, including open farm buildings. They avoid mountains and heavy forest. They are territorial and protective of their nesting area, giving threat displays with head held low and swaying with their wings spread with dorsal surfaces displayed toward the intruder, or shifting from one foot to another while swaying side to side. There is usually hissing and bill snapping, and in extreme cases the owl falls onto its back and strikes with its raised talons. Most calls are some form of scream; the territorial call is described as a gargled scream, usually given by the male while flying near the nest site. Females and chicks give self-advertising or food-begging calls. Courtship displays include the "moth flight," where the male hovers with dangling legs in front of the female. The male often brings food for the female.

Barn Owls nest in tree cavities, caves, cliffs, and in a variety of man-made structures, including abandoned mines, nest boxes, churches, farm buildings, and even drive-in movie screens! The female makes a cup of shredded owl pellets and may reuse a nest site for years. The entrance to the nest must be at least six inches in diameter. The usual clutch is 5-7 white eggs incubated for about a month by the female (only the female develops a brood patch). Incubation begins with the first egg,

so the young hatch asynchronously, often producing chicks of very different sizes, with two weeks sometimes separating the youngest from the oldest. This is likely a reproductive strategy for maximizing the production of young in years of superabundant food. Brooding is also by the female alone, with the male bringing in food for the female. After two weeks the female joins the male in hunting expeditions. Adults may store prey at the nest, sometimes dozens of items, during incubation and brooding. The young grow quickly to more than their adult weight, and then lose weight before fledging. They can fly after about two months, and are independent by about three months.

Barn Owls are awesome predators. They are almost strictly nocturnal, leaving their nest or roost about an hour after sunset and returning an hour before dawn. They have remarkably well-developed low-light sight, combined with hearing so sensitive that they can capture prey hidden by vegetation or snow. They are even capable of memorizing prey noises. They usually hunt flying low over the ground but do hunt from perches. Prey is captured with the talons, and dispatched by a bite through the neck or skull. Prey are usually swallowed whole, with the indigestible portions regurgitated hours later as pellets. They eat mostly small mammals, particularly voles, shrews, mice, and young rats. They will occasionally take a bird and rarely an invertebrate, amphibian, or reptile.

Barn Owls tend to be short-lived, with first-year mortality up to 75 percent. Collisions with cars are a frequent cause of death, but cold winters are devastating in the northern parts of their range. In Martha's Vineyard, for example, the Barn Owl population crashed during the cold winter of 1960-1961, and cold winters may ultimately limit populations in Massachusetts. Elsewhere in their range, populations are generally limited by availability of foraging habitat, nest sites, and rodent populations. Changing agricultural practices, resulting in lowered availability of open farm buildings and lowered rodent populations, are blamed for declines that have occurred in the midwest. In some parts of their United States range, however, populations appear to be increasing, and their vast range worldwide is encouraging for their future. 🦉

William E. Davis, Jr.

About the Cover Artist

Nancy Richards West has been painting professionally since 1971, with a focus on depicting the quiet beauty of wildlife and nature. She enjoys increasing acclaim as an artist, having received numerous honors and awards, including the Ward Foundation's top award for painting. In addition to exhibiting and selling her work in her Chincoteague studio and nearby gallery, Island Arts, Nancy participates in numerous prestigious wildlife and fine arts festivals throughout the East Coast. She is a resident of Chincoteague Island, VA. Her current show schedule is posted on her website <<http://www.nancywest.com>>. 🦉