### OF NORTH DAKOTA

Ĩ



By Sandra Hagen

and

Chris Grondahl



NORTH DAKOTA GAME AND FISH DEPARTMENT

### **ACKNOWLEDGEMENTS**

Thanks to John Schumacher and Scott Gomes for providing some of the original text for this publication.

Graphic art and layout was done by Connie Schiff and editing by Ron Wilson.

The design and printing of this publication was funded by the North Dakota Game and Fish Department.

# TABLE OF CONTENTS

INTRODUCTION	<i>ii</i>
VULTURES	
Turkey Vulture	1-2
EAGLES	
Bald Eagle	
Golden Eagle	
HARRIERS	
Northern Harrier	7-8
Sharn shinned Hawk	0.10
Cooper's Hawk	
Northern Coshawk	∴11 11 12 13-14
HAWKS - DUILU Broad winged Hawk	15 16
Swainson's Hawk	1J-10 17 18
Red tailed Hawk	
Ferruginous Hawk	
Rough-legged Hawk	23-24
FALCONS	
Morlin	25.26
American Kestral	25-20 27-28
Prairie Falcon	29-30
Peregrine Falcon	
Longeared Owl	33-34
Short-eared Owl	
Great Horned Owl	
Snowy Owl	
Burrowing Owl	
Eastern Screech-Owl	
Northern Saw-whet Owl	
*RARE NORTH DAKOTA HAWKS AND FALCONS	
Osprey	
Red-shouldered Hawk	
Gyrfalcon	53-54
*RARE NORTH DAKOTA OWLS	
Barn Owl	55-56
Barred Owl	57-58
Great Gray Owl	59-60
Boreal Owl	61-62
Northern Hawk Owl	63-64
*A species that occurs yearly somewhere in the state, but in very	' low numbers.

### **INTRODUCTION**

### What is a Raptor?

Hawks, eagles, falcons, vultures, and owls are types of birds known as raptors. Raptors are birds that have anatomical features separating them from all other avian species: (1) superb vision and hearing; (2) a hooked upper beak for tearing meat; and (3) strong grasping feet with sharp talons to catch and kill prey.

### **Eyes and Ears:**

Raptors have extraordinary sight and hearing capability. Their eyes are the largest part of the head and usually weigh more than the bird's brain. The highly advanced eye allows for incredible focusing and binocular-like vision. The ears of an owl are even more remarkable. There are openings in the side of the head surrounded by deep, soft feathers, which the owl can shape to direct sound into the ear. The bird's facial disc, generally outlined by some change in feather pattern or color on the face, is also believed to help direct sound into the ear canal. Owl feathers are very soft in comparison to other birds and aid the owl in approaching prey quietly.

### Talons:

A raptor's foot is flawlessly designed to catch, hold, and carry prey. The size of a raptor's toes and talons are related to the type of prey it pursues. Most raptors have three toes pointing forward, one backward, and use these powerful toes to grip or crush their prey to death.

### A Raptor's Diet:

Raptors are excellent predators. Although rodents, small mammals and insects make up the bulk of a raptor's diet, they are very opportunistic feeders. Raptors will concentrate on prey that is abundant and relatively easy to catch. Raptors are often convicted of having a detrimental effect on game bird populations, such as ring-necked pheasants or ducks. Raptors do indeed feed on game birds, in particular, wounded or dying animals. Raptors are an easy predator to see and therefore have often been blamed for "eating all the game birds." However, the impact raptors have on game bird populations is relatively small compared to other mortality factors including natural mortality, weather events, vehicle collisions, and man. Also, raptors will not kill without being hungry since pursuit brings with it the risk of injury to themselves. Raptors are very beneficial in helping keep rodents and other ground predators in check, such as skunks and ground squirrels, that are even more detrimental to game bird populations.

### Laws Regulating Raptors:

The Migratory Bird Treaty Act of 1918 was one of the earliest laws passed to protect wildlife in the United States. This law is an international treaty between the U.S., Canada, Mexico, Great Britain, and Japan. The Act makes it illegal for anyone to take, kill, possess, purchase, or sell any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid federal permit. Raptors were not initially included in the act. They did not receive protection until 1972. Today, ALL migratory raptors are covered by this law. A violation of the law, such as intentionally killing a raptor, can result in fines and/or imprisonment.

The Bald Eagle Act of 1940 was passed in response to the slaughter of eagles during the first half of the twentieth century, and because of the special status bald eagles hold as our national symbol. This law protects both bald eagles and golden eagles, their nests, and nest trees. It specifically prohibits anyone from killing or disturbing either species. Killing an eagle can result in substantial fines and/or imprisonment.

### What to Do If You Find an Injured Raptor:

Every year the North Dakota Game and Fish Department, other wildlife agencies and zoos receive numerous phone calls about injured or abandoned raptors. Although at the top of the food chain, a raptor's life is not easy. The survival of raptors is very low due to starvation, collisions with power lines or towers, electrocution, disease, lead and other poisoning, predation, and humans shooting them (although as previously stated, this act is illegal). Often, wellmeaning individuals make the mistake of bringing an injured animal into their home. First, it is illegal to keep any migratory bird in your possession without the proper permit or authorization. Second, young raptors often incapable of flight commonly move away from the nest and are left unattended throughout much of the day. The parents are probably busy catching prey for the hungry young and will return. You may be interfering with nature's natural process if you touch the animal.

The North Dakota Game and Fish Department recommends that if you find an injured or abandoned raptor to leave the bird alone. If the bird is in your yard or other unwanted place, use a cardboard box to quickly transport it to a protected area such as a group of trees or other cover. There are few wildlife rehabilitators in North Dakota and even so, the rehabilitation of individual raptors has been shown to have little or no impact on the overall population. If the injured bird is an eagle or if the cause of injury is thought suspicious (i.e. the bird appears to have been shot or poisoned), you should contact your local game warden, local North Dakota Game and Fish Department office (call 701-328-6300 for local game wardens or offices), or the U.S. Fish and Wildlife Service (701-250-4418). Otherwise, leave the bird alone and let nature takes its course.

### How to Use This Guide:

The following field guide describes the 31 raptors of North Dakota and is designed to help you identify, locate, and appreciate these fascinating birds of prey. Keep in mind when reading the size descriptions that female raptors are generally larger than males.

### Length: from tip of the beak to end of the tail. Wingspan: from one tip of the wing to the other. Weight: average weights of the raptor.

The Identification section provides plumage and other body characteristics; Life History provides general ecology of each raptor; Distribution and Habitat tells you where raptors can be found in the state and what time of year they can be seen. A range map has also been provided to help you locate where each raptor can be found in North America.

A good pair of binoculars or spotting scope is highly recommended when viewing raptors. This will allow you to bring the raptors in close for a good view and make the experience much more enjoyable.

### How to Distinguish Between Raptor Species:

Raptors can be difficult to identify even for experienced birders. The adult and immature plumages are usually quite different and the males and females of a species may differ. Even within a species there can be great variation in plumage, for example, red-tailed hawks can come in shades from very light with a faint red tail, to nearly all black. Plumages may also be quite different between the seasons of the year. Raptors in flight can appear different colored under different lighting conditions, such as appearing darker than they truly are against whitish skies. Raptors can present a wide array of shapes when in flight, but generally raptors (other than owls) can be assigned to one of the following types on the next page:

Hawks, eagles, falcons, and owls are protected under the Migratory Bird Treaty Act. It is illegal to harm or possess any of these birds.



**BUTEOS,** the soaring hawks, have blocky bodies, broad wings and short tails. Their characteristic hunting strategy involves soaring high over open country, then dropping to the ground to seize prey.

**ACCIPITERS,** the woodland hawks, have short, rounded wings and long tails. These adaptations allow them to maneuver quickly among trees after birds and small mammals. Their tails usually have light and dark bars.



**FALCONS** have long, slim wings which taper to pointed tips. In flight the wings angle back at the wrists and wing beats are rapid. Falcon bodies are sleek; they have very round heads and long, narrow tails. Most falcons have noticeable patterns on their faces, such as the two cheek 'sideburns' of the kestrel.



**EAGLES** are very large and can be distinguished from other raptors by their size and proportionately large, broad wings. They soar, often at great heights, and have slow, deliberate wing beats. Their head-on profile appears very flat.

# TURKEY VULTURE - (Cathartes aura)

Length: 26-32 inches Wingspan: 68-72 inches Weight: 4-5 pounds

#### **IDENTIFICATION**

An adult turkey vulture is easily identified by its reddish head and neck – features absent in immature birds – while the remaining part of the body is blackish-brown. Both sexes are similar in appearance. In flight, the turkey vulture's wings form a characteristic shallow "V," and it rocks from side-to-side, seldom flapping its wings while circling in search of food.

### LIFE HISTORY

Turkey vultures are often seen soaring in search of animal carcasses. They rarely kill small animals and mostly eat dead or decaying animals found along roadsides, rivers and elsewhere. Their highly developed olfactory sense aids in the search for food. The featherless head is a deterrent against bacteria, which would multiply quickly in wet or blood-matted feathers resulting from the bird's feeding habits.

Vultures lay 1-3 eggs on outcroppings, rocks or cliffs, rotted wood inside hollow logs, on top of tree stumps, on the ground in dense vegetation, and even in abandoned buildings in the woods. Both male and female share incubation duties and young hatch in about 39 days.

### **DISTRIBUTION AND HABITAT**

Turkey vultures may be found throughout North Dakota from April through September and are fairly common in the badlands and adjacent lowlands and prairie along the Missouri River. They prefer habitat with a combination of farmland and pasture close to forested areas, used for perching roosting and nesting. The Missouri River corridor in North Dakota, specifically the area from Bismarck to Garrison Dam, is a great location to find this bird.





Unlike other raptors, turkey vultures may congregate to feed or while soaring in search of food. These vultures are roosting in a dead cottonwood tree along the Mis-souri River south of Garrison Dam.

### BALD EAGLE – (Haliaeetus leucocephalus)

Length: 28-38 inches Wingspan: 66-96 inches Weight: 6.5-13 pounds

#### **IDENTIFICATION**

Bald eagles are easily distinguished by their white head and tail, acquired at about 4 years of age. Immature bald eagles are dark brown and may be confused with immature golden eagles. Immature bald eagles typically have more white on the belly and wings than immature golden eagles. Bald eagles have a larger head, yellow bill, and unfeathered yellow legs.

### LIFE HISTORY

The bald eagle feeds primarily on fish caught or stolen from other birds. When fish are not available, it will feed on injured or crippled waterfowl, pheasants, muskrats, squirrels and rabbits. Bald eagles commonly feed on carrion or roadkill.

Nesting is initiated in March or early April. Nests are constructed high in trees by creating a stick foundation and lining it with mosses, grasses, feathers and other soft materials. Every year new nest material is placed on top of the old, which can result in nests being 7-8 feet across, 12 feet deep, and weighing hundreds of pounds. The female lays 1-3 eggs and does most of the incubation, which lasts about 35 days. Young eagles fledge in about 72-75 days.

### DISTRIBUTION AND HABITAT

Bald eagles prefer wooded areas adjacent to water. This bird is becoming more common in North Dakota, and can be seen along the Missouri River yearround. Bald eagles nest along the Missouri River in spring/summer and will winter here, especially around Garrison Dam. Since about 2000, bald eagles have initiated nests in other areas of the state, such as Devils Lake, the Red River, and other smaller waters with adjacent wooded areas. The bald eagle is listed as a threatened species by the U.S. Fish and Wildlife Service. However, because of



the list.



## GOLDEN EAGLE - (Aquila chrysaetos)

Length: 27-33 inches Wingspan: 72-87 inches Weight: 8-14 pounds

#### **IDENTIFICATION**

The golden eagle is named for the golden wash on the backside of its head. The rest of its body is dark brown, although juveniles may have a white band on the tail and white patches above and below each wing (juvenile bald eagles have extensive white on the body). Golden eagles have relatively short heads and feathered legs.

### LIFE HISTORY

The golden eagle is often seen perching on ledges and rocky outcroppings or soaring effortlessly in search of prey. When diving to make a kill, golden eagles can reach speeds of more than 150 miles per hour. They prey primarily on small mammals such as black-tailed prairie dogs, ground squirrels, and dead deer and pronghorn. When its primary prey is scarce, it will take snakes (including rattlesnakes), crows, great-horned owls, coyotes, fox and mink.

Golden eagles build massive nests 8-10 feet across and 3-4 feet deep on cliffs or in trees. A nesting pair may build up to 10 nests, but use only two or three. Nest tending begins in January and eggs are laid in late March. The female does most of the incubating, with eggs hatching about the end of April or early May. After 65-70 days in the nest – and lots of practice at wing flapping and hopping – the eaglet walks, falls, jumps, or flies out of the nest.

### **DISTRIBUTION AND HABITAT**

The golden eagle is most commonly seen throughout the badlands and along upper reaches of the Missouri River in western North Dakota. It may be seen throughout the state during the winter. Golden eagles prefer open shrubland, grasslands and riparian habitats.





Golden eagle perched on a prairie dog mound.



# NORTHERN HARRIER – (Circus cyaneus)

Length: 17-19 inches Wingspan: 41-46 inches Weight: 0.75-1 pounds

#### **IDENTIFICATION**

Northern harriers are slender, long-tailed, and one of the few hawks in which the male and female are easily distinguishable. An adult male is gray above, light below, and has black wingtips. The female is much larger and is predominantly brown with a streaky underside. Juveniles resemble the female, but without streaks. Harriers fly low and slow, revealing a conspicuous white rump patch and an owl-like face, making this raptor unmistakable.

### LIFE HISTORY

Northern harriers are open country birds and most often observed flying 10-30 feet above grasslands and wetlands. This attractiveness toward wetlands explains their marsh hawk moniker. Harriers hunt while flying. When a frog, reptile, small mammal, or small bird is spotted, the bird drops quickly to the ground to catch it. Harriers will spend 50 percent of daylight hours (or about 100 miles on the wing) searching for prey.

The northern harrier breeds from late April to early August. Its ground nest is built in grasslands, low shrubby vegetation, tall weeds, cattails, or marshy areas. The female lays an average of five eggs over a two-week period. She also handles the 26-day incubation.

### **DISTRIBUTION AND HABITAT**

Northern harriers can be found throughout North Dakota from mid-March through October, and occasionally from November through February in mild winters. They are most often observed flying over treeless prairie and wetlands. In particular, look for them cruising large areas of tall, dense grassland or lightly grazed pasture.





## SHARP-SHINNED HAWK – (Accipiter striatus)

Length: 10-14 inches Wingspan: 20-26 inches Weight: 0.25-0.5 pounds

### IDENTIFICATION

The sharp-shinned hawk is the smallest accipiter in North America, about the size of a blue jay, and can be easily confused with the crow-sized Cooper's hawk. It's identified by its long, slender body, short wings, small head, and thin, yellow legs. It sports a blue-gray back and a rusty-barred breast. It can be distinguished from the Cooper's hawk – a larger bird, with a longer, rounded tail – by its thinner legs and squared tail. Male and female sharp-shinned hawks look alike, but the female is much larger. These hawks typically fly with several quick flicking wingbeats and a short glide, but they also soar.

### LIFE HISTORY

Sharp-shinned hawks are fierce, bold hunters preying primarily on small songbirds. They fly low in wooded areas, darting under branches and turning abruptly in flight to drop to the ground and grasp small birds flying or roosting. Once prey is captured, the sharp-shinned hawk takes its meal to a "plucking perch" where it is plucked and eaten. They will occasionally eat mice, shrews, bats, frogs, lizards and butterflies. Sharp-shinned hawks are also proficient at preying on birds at bird feeders.

Sharp-shinned hawks nest from April to July. The female lays 4-5 eggs, and both sexes play a role in the 35-day incubation. Young first fly about 23 days after hatching.

Breeding Year-round Wintering

### DISTRIBUTION AND HABITAT

Sharp-shinned hawks occur throughout most of North America, and prefer a mix of dense coniferous or mixed coniferous/deciduous forests. Coniferous forests are preferred for nesting. In North Dakota they are most common from early April through October, but will occasionally be seen throughout the winter. This hawk can be found nesting in the Turtle Mountains and wooded areas along rivers.



# COOPER'S HAWK - (Accipiter cooperii)

Length: 15-18 inches Wingspan: 29-33 inches Weight: 0.75-1 pounds

### **IDENTIFICATION**

A medium-sized hawk, about the size of a crow, with a relatively large head, rounded wings, and long, rounded tail. The Cooper's hawk is very similar in all plumages to the sharp-shinned hawk, but is larger and its tail is more rounded. The Cooper's hawk has a blue-gray back and yellow legs. The eyes of juveniles are yellow, turning orange to red as adults.

### LIFE HISTORY

The Cooper's hawk prefers to prey on medium-sized birds such as starlings, robins, blackbirds and meadowlarks. It will also take small mammals such as chipmunks and red squirrels. Its main hunting tactic is to sit atop an inconspicuous perch and carefully look for prey. Most Cooper's hawks do not chase down prey in flight, but rather use an ambush approach. On occasion they may take prey to water and drown it.

Nests are built in deciduous and evergreen trees 20-40 feet off the ground. A female Cooper's hawk lays four to five eggs and incubation lasts 36 days. After hatching, the male is never allowed to sit on the nest and must instead meet the female on a nearby perch, where he gives her food for the young. The young grow rapidly and leave the nest 30 days after incubation, although only 25 percent will survive their first year.

### DISTRIBUTION AND HABITAT

The Cooper's hawk is a woodland accipiter most commonly found in the Pembina Hills, Turtle Mountains, and wooded valleys of the Missouri, Sheyenne, and Red rivers. It can be seen from April through October in North Dakota. In recent years, Cooper's hawks have begun nesting in wooded urban areas.





# NORTHERN GOSHAWK – (Accipiter gentilis)

Length: 19-27 inches Wingspan: 40-47 inches Weight: 2-4 pounds

#### **IDENTIFICATION**

The northern goshawk is the largest and most aggressive accipiter in North America. This hawk is about the size of the red-tailed hawk, is uniformly slate gray in color, has a black crown, white underparts mottled with gray, and a distinctive white stripe over each orange-red eye.

Female plumage is similar to the males, but they are considerably larger. Juveniles are mostly buffy brown with dense streaking. A goshawk's flight consists of rapid, steady wingbeats, alternated with a glide.

#### LIFE HISTORY

Northern goshawks are efficient predators and prey on large and medium-sized birds and mammals like rabbits, squirrels, chipmunks and weasels. They are extremely audacious when hungry and disregard any presence of humans when seizing prey.

Females are fierce in defense of nests, eggs, and young, and often attack intruders. Incubation is primarily done by the female, lasting 36-38 days. Young are able to fly about 45 days after hatching. Goshawks will frequently reuse the same nest for years. If not, they at least breed in the same area. This hawk will also return to the same wintering location year after year.

### **DISTRIBUTION AND HABITAT**

The goshawk inhabits deep conifer-dominated mixed woodlands in the western United States, Canada and Alaska. While goshawks do not breed in North Dakota they are seen wintering in the state from October through March. They can be particularly common if food is in short supply in their northern home range.







Adult

## BROAD-WINGED HAWK – (Buteo platypterus)

Length: 13-17 inches Wingspan: 32-36 inches Weight: 0.75-1 pounds

### **IDENTIFICATION**

The broad-winged hawk is the smallest buteo. Its small size, chunky appearance, and a prominent white band across the middle of its black tail are good identification clues. A smaller white band is present at the base and edge of the tail. Broad-winged hawks have brown backs with cinnamon barring underneath and a blackish band along the trailing edge of the wings.

### LIFE HISTORY

Prey is primarily small mammals and reptiles, but broad-winged hawks will also take small birds, amphibians, insects and even earthworms. It usually watches for prey from a perch such as a telephone pole or fence post, and occasionally hunts while flying. Broad-winged hawks form large flocks or "kettles" during migration. Kettles in North Dakota may only consist of several individuals, but elsewhere may include thousands of the hawks.

Breeding occurs in late May and June in the hawk's northern U.S. range. Nests are placed in trees, are rather small and poorly built, and are ordinarily used once. Broad-winged hawks lay two to three eggs and both male and female incubate and care for young. Incubation takes about 28 days and young leave the nest for their first flight 44-48 days after hatching.

### **DISTRIBUTION AND HABITAT**

In North Dakota, broad-winged hawks are found primarily in the Turtle Mountains. They can be seen in the state from April through early October, with peak spring migration from mid-April to mid-May. Broad-winged hawks are usually found in mature deciduous forests that harbor brushy, woody margins, and nearby water.





# SWAINSON'S HAWK – (Buteo swainsoni)

Length: 18-20 inches Wingspan: 50-52 inches Weight: 2-3 pounds

### **IDENTIFICATION**

Swainson's hawks are the most slender of the buteos and one of the larger hawks of the western plains. Its size and shape resembles that of the red-tailed hawk, but is distinguished in flight by a dark bib extending from the throat to mid-breast, and has longer, narrower, pointed wings. When sitting, its wingtips extend beyond its tail.

### LIFE HISTORY

During the breeding season, these hawks prey primarily on ground squirrels and other small mammals. Swainson's hawks are often seen perched on fence posts, utility poles, or hay bales watching for rodents. When not breeding, this hawk relies on large concentrations of insects such as grasshoppers, dragonflies, butterflies and beetles.

Its breeding season runs from April to August, and nests either in a lone tree on the prairie, or close to or on the ground. The female lays 2-4 eggs and both adults participate in incubation, which lasts about 28 days.

### **DISTRIBUTION AND HABITAT**

Swainson's hawks are found statewide, with the largest concentrations in western North Dakota, and are often seen soaring over open plains and prairie.

They can be seen in North Dakota from late March through late September. This hawk migrates for the winter to South America, often traveling in large flocks or kettles of several thousand birds. The entire roundtrip from breeding to wintering grounds can surpass 10,000 miles.





# **RED-TAILED HAWK** – (Buteo jamaicensis)

Length: 17-22 inches Wingspan: 43-56 inches Weight: 1.5-4 pounds

### **IDENTIFICATION**

The red-tailed hawk is one of the best known, most common, and widely distributed hawks in North America. It is also one of the largest buteos and shows great variation in plumage. Most distinctive is the red tail, broad barring on a white belly, which may form a band, and dark "patagial marks" on the shoulders. However, these hawks vary from black and white plumage with no red tail (Harlan's variant) to nearly all white below with a faint red tail (Krider's variant).

### LIFE HISTORY

Red-tailed hawks are opportunistic predators. Food selection is extremely varied, but small and medium-sized rodents, birds and snakes are staple prey. It hunts while soaring or from an elevated perch and has phenomenal eyesight, enabling it to see mice or other prey at great distances.

They build large nests of twigs lined with finer material about 15-70 feet off the ground in large trees. Nest building begins in February, followed by the female laying two or three eggs in April or May. Incubation is done mostly by the female and the eggs take 28-32 days to hatch. About 45 days later, young are ready to fly, but stay with the parents for several months after leaving the nest.

### DISTRIBUTION AND HABITAT

The red-tailed hawk can be seen throughout North Dakota from March through October. The heaviest concentrations range from the Turtle Mountains south across the Missouri Coteau to the South Dakota border. Red-tailed hawks use a variety of open habitats such as grasslands, agricultural fields, urban areas, woodlands, or virtually any area with scattered, elevated perches. The introduction of shelterbelts and telephone poles, for example, have provided ideal habitat for these hawks, resulting in increasing populations.



# FERRUGINOUS HAWK - (Buteo regalis)

Length: 22-25 inches Wingspan: 56 inches Weight: 3-4 pounds

### **IDENTIFICATION**

The ferruginous hawk is the largest hawk in North America. It sports a broad, pale head and fully feathered legs. It is brown above with rusty streaks and white below. When seen at rest, its reddish-brown back and wings contrast with its white head and underside. In flight, the ferruginous hawk looks similar to the red-tailed hawk, but its tail is white. The hawk's reddish-brown legs show a dark 'V' against whitish underparts, a key characteristic to identifying it in flight.

### LIFE HISTORY

Ferruginous hawks tend to hunt from a perch in early morning and late afternoon, waiting for their favorite prey of black-tailed prairie dogs and ground squirrels. Other prey include rabbits, small birds and snakes. These hawks will hunt together in small groups of 5-10 birds.

Their breeding season runs from April to mid-July, nesting in single trees or on the ground in open prairie. It will also nest on a rocky cliff outcrop, among boulders, on haystacks, hillsides, or utility structures. Both male and female participate in nest building, followed by incubation of the eggs. The downy young hatch in about 28 days between May and July. Once hatched, young can fly in about 60 days.

Breedina

Wintering

Year-round

#### **DISTRIBUTION AND HABITAT**

Historically, this hawk was abundant and widely distributed in North Dakota in the early 1900s, but destruction of native prairie through agricultural development has caused ferruginous hawk populations to decline thereby restricting its range to limited areas. Presently, the ferruginous hawk is most commonly seen on the Missouri Coteau and in western North Dakota. Ferruginous hawks are found on open mixed-grass prairies, shrub steppe, and dry habitats that support ground squirrels, prairie dogs and rabbits. They can be seen in North Dakota from mid-March to early October.



# ROUGH-LEGGED HAWK - (Buteo lagopus)

Length: 18-23 inches Wingspan: 48-56 inches Weight: 1.5-3 pounds

#### **IDENTIFICATION**

The rough-legged hawk is named for the resemblance of the feathers on its yellow legs and feet to that of a hare's furry foot. The dark belly band contrasts sharply with the lighter colored head. In flight, the undersides of the wings have conspicuous black patches at the wrist and a broad black band at the base of its white tail. This buteo has relatively long wings and a small bill.

### LIFE HISTORY

The rough-legged hawk's small feet are adapted to killing small animals such as mice, voles and small birds. When hunting, it soars or hovers over an area or may hunt from a perch.

This hawk does not breed in North Dakota, but migrates from its arctic nesting grounds in northern Alaska and Canada to spend winter here. It typically builds a nest on a rock ledge or sometimes in trees. During years of lemming (a small rodent) abundance, its primary prey while on the breeding range, rough-legged hawks may lay five to seven eggs. However, in lean lemming years, only two to three eggs will be laid.

### **DISTRIBUTION AND HABITAT**

Rough-legged hawks arrive in North Dakota in mid-October and can be seen throughout North Dakota until April. It spends winter in relatively open, treeless areas such as prairie, marshes, or shrub-steppe. The roughlegged hawk is generally a tame species and usually allows humans to approach within close range.

> Breeding Winter





### MERLIN - (Falco columbarius)

Length: 9-10 inches Wingspan: 23-25 inches Weight: 0.25-0.5 pounds

### **IDENTIFICATION**

A small, fast falcon found in wide-open spaces and open woods. The male, which is smaller than the female, has a blue-gray back and lightly streaked, orange-tinted underparts. Females and immature birds are dark brown above and whitish spotted with brown below. There are three subspecies of merlins in North America, with North Dakota's most common and unique being the prairie merlin. The prairie merlin is lighter than the other subspecies, with a distinguishing characteristic being broad white bars on the underside of the tail.

### LIFE HISTORY

Once known as the pigeon hawk for its resemblance to a pigeon in flight, the merlin is a falcon. Merlins are well known for attacking any birds of prey, even eagles. They rely on speed and agility to hunt small birds such as pigeons, doves, larks and large insects. It spends much of its time perched in the tops of trees and on fence posts or flying low to the ground searching for prey.

Nesting takes place from May through June when the female lays 5-6 eggs. Merlins usually nest in abandoned nests of other birds, but will occasionally nest on the ground. Incubation is done primarily by the female and lasts 28-32 days, with the young taking flight 25-30 days after hatching.

Breeding Year-round Wintering

### **DISTRIBUTION AND HABITAT**

The merlin can be seen yearround in North Dakota, but is more common from August through March. It prefers mixed deciduous/coniferous forests along edges of lakes and ponds in northern and western North Dakota, and also agricultural fields, grasslands and meadows. In recent years merlins have begun nesting in urban areas.



Male

OB GI

# AMERICAN KESTREL – (Falco sparverius)

Length: 9-10 inches Wingspan: 21-22 inches Weight: 0.25 pounds

### **IDENTIFICATION**

The American kestrel is the smallest and most common falcon found in North Dakota. It is a colorful falcon, with males sporting blue-gray wings, rust-colored back and tail, and double black stripes running vertically on a white face. The female lacks the blue-gray wings and is heavily barred across the back and tail. The kestrel's nickname is sparrow hawk, although this is misleading since it is not a hawk and rarely eats sparrows.

### LIFE HISTORY

The kestrel preys chiefly on large insects such as grasshoppers, beetles, dragonflies and butterflies during the summer. In winter, it preys on mice and small birds. Prey is located visually from a perch, frequently utility lines and poles. When prey has been located, kestrels bob their heads to view prey from different positions, which helps determine a more accurate distance. Kestrels rarely catch prey in air. Instead, it will pounce on or land next to prey where it may be grabbed with its bill. Due to the kestrel's tolerance of heat, it rarely needs to drink, but instead obtains water from its carnivorous diet.

The American kestrel is a cavity nester and often nests in natural holes, tree crevices, holes in riverbanks, or man-made nest boxes. The female lays four to five eggs from mid-April to June. She does most of the incubating, which lasts about 30 days, and young fledge in roughly the same amount of time.

Breeding Breeding and Winter Wintering

### **DISTRIBUTION AND HABITAT**

American kestrels are often seen perched on fences, utility poles and lines next to county roads, or hovering in open fields searching for prey. They can be seen throughout North Dakota from mid-March until October, but may occasionally be seen during the winter months.



Male
## PRAIRIE FALCON – (Falco mexicanus)

Length: 15-18 inches Wingspan: 36-44 inches Weight: 1-2.5 pounds

#### **IDENTIFICATION**

Prairie falcons are a rather plain, light brown bird. They sport a light mustache and white between the eye and ear. Adults have yellow legs, yellow around the eyes, and under parts are slightly barred or spotted. Juveniles have gray legs and more streaking underneath. When perched, wingtips do not quite reach the tail. In flight, this falcon is distinguished from others by dark brown/black "wingpits" surrounded by pale wings.

## LIFE HISTORY

The prairie falcon is more lightly built than the peregrine falcon, but almost equally rapid in flight. Its usual method of hunting is to fly at a moderate elevation – 50 to 300 feet – and descend in a long, slanting stoop. The prairie falcon feeds extensively on small mammals such as prairie dogs and young rabbits, but is capable of catching most birds in flight.

Prairie falcons prefer cliff ledges with small holes, caves, or crevices to nest. Nests consist of a slight scrape made in loose dirt, but prairie falcons commonly lay eggs in nests abandoned by other birds. The female lays 4-5 eggs and incubation, which lasts 29-31 days, is done mainly by the female. Young falcons take flight in about 40 days.

## **DISTRIBUTION AND HABITAT**

The prairie falcon inhabits dry prairie, particularly with cliffs and buttes such as in the badlands of western North Dakota. Most nesting pairs are concentrated along the Little Missouri River valley and adjoining prairie. The prairie falcon can be seen in North Dakota throughout the year.





## PEREGRINE FALCON – (Falco peregrinus)

Length: 15-17 inches Wingspan: 38-44 inches Weight: 1.2-1.75 pounds

## **IDENTIFICATION**

The peregrine falcon is identified by its dark blue to slate gray back, white throat, heavy barring, and pointed wings. A black teardrop-shaped marking beneath each eye, often referred to as its mustache, is key to identification. Peregrine falcons are among the largest and most powerful falcons in North America.

## LIFE HISTORY

Peregrine falcons prey primarily on birds from small-sized songbirds and pigeons to ducks and small geese. Prey is taken by swooping down at 200 miles per hour or more and striking a severe blow with its talons. Its diving speed may make it the fastest animal on the planet.

In North Dakota, peregrine falcons have not been reported as nesting in the wild since 1954 when a pair nested southwest of Medora. Nests consist of a scraped out bowl in dirt or gravel of a high ledge where four eggs are typically laid. Nesting structures placed on very tall buildings to encourage nesting has been successful in the city of Fargo.

The peregrine falcon was listed as an endangered species in 1970. A rapid decline in the population in the 1950s and 1960s was due primarily to eggshell thinning caused by the pesticide DDT. The

Breeding

U.S. Fish and Wildlife Service removed the peregrine falcon from the endangered list in 1999 because population numbers increased after DDT was banned.

## **DISTRIBUTION AND HABITAT**

Peregrine falcons may be found in a wide variety of habitats that provide hunting opportunities, including tall buildings in cities. They are most often seen in April, May, September and October during migration to and from northern breeding grounds.



## LONG-EARED OWL - (Asio otus)

Length: 13-16 inches Wingspan: 36-40 inches Weight: 0.5-1 pounds

#### **IDENTIFICATION**

Sometimes referred to as the lesser-horned owl, the long-eared owl is a slender crow-sized owl. It closely resembles the great horned owl, but can be distinguished by its smaller size, lack of a white throat bib, and longer, more upright and closely spaced ear tufts. This owl is mostly gray to brownish-gray with areas of black, buff, orange and white. In flight, it sports long wings with a rounded edge and a buff patch on the upper wing.

## LIFE HISTORY

The long-eared owl hunts almost exclusively at night and eats primarily mice, squirrels and pocket gophers. It will occasionally eat small birds, as well as insects, frogs and small snakes. This owl is more secretive than most owls. When spotted, they are usually found statue-still close to the trunks of large trees.

Like the great horned owl, the long-eared owl occupies nests abandoned by hawks, crows, magpies, herons, or squirrels, and occasionally nests on the ground if tree nests are scarce. The female lays 2-6 eggs and almost never leaves them until they've hatched, relying on the male for food. The long-eared owl will boldly defend its young and may strike at intruders.

## DISTRIBUTION AND HABITAT

The long-eared owl is found in North America, Europe and Asia. It prefers thick woods, but can be found in tree belts, along streams, and dense vegetation adjacent to open country or grasslands. There is some southward migration in fall from the northern parts of its range. Long-eared owls are rare in North Dakota, but can be seen from April through December.





## SHORT-EARED OWL – (Asio flammeus)

Length: 15-16 inches Wingspan: 41-42 inches Weight: 0.75 pounds

#### **IDENTIFICATION**

The short-eared owl is readily identified by its distinctive moth-like, flopping flight. It is tawny brown overall with bold streaks on the breast and a pale, lightly streaked belly. It has small ear tufts, which are barely visible, and shows black wrist marks on the bottom of its wings during flight.

## LIFE HISTORY

This bird hunts day and night, chiefly at dawn and dusk, over prairies, marshes, tundra and weedy fields. It quarters across fields, circling and gliding close to the ground, and will often drop straight down with wings upheld to pounce on a mouse. Rodents are primary prey, especially voles, but they will also eat insects and small birds.

The short-eared owl nests in grasslands, generally in a slight depression on the ground lined with grass and feathers. Usually four to eight eggs are laid, but up to 14 is possible when food is plentiful. Incubation lasts 24-28 days and young leave the nest only 12-17 days after hatching, but aren't ready to fly for another 10 days. If the nest is threatened, adults will perform a broken wing act to lure away intruders, or they may attack. Adults have also been known to remove eggs or young from nests threatened by high water.

## **DISTRIBUTION AND HABITAT**

The short-eared owl is found almost worldwide and throughout North Dakota in all months. A bird of open country, it prefers large expanses of relatively tall, dense, ungrazed grassland and marshes. When snow cover conceals food, birds will migrate as far south as Texas, the Gulf Coast and Florida. The population of shorteared owls is associated with rodent population cycles.





# GREAT HORNED OWL - (Bubo virginianus)

Length: 17-25 inches Wingspan: 36-60 inches Weight: 2-5.5 pounds

#### **IDENTIFICATION**

The great horned owl is one of the most widespread and recognized owls. It is large and bulky, the female more so than the male. The great horned owl ranges in color from brown to light gray and is heavily barred crosswise, with a white throat patch, distinct ear tufts, and large yellow eyes. In flight, the great horned owl is as large as our largest hawks, except it appears neckless and large-headed.

#### LIFE HISTORY

The great horned owl is primarily nocturnal, but will hunt during the day. It is one of the largest and most powerful owls, taking prey as large as skunks and will even attack porcupines and other raptors. Primary foods include ground squirrels, rabbits, ducks and voles. This owl can sometimes be seen in daylight as it's being pursued, or "mobbed," by strings of noisy birds.

The great horned owl usually nests in trees, using abandoned nests of hawks, eagles, crows, herons, or squirrels, but will also nest in caves, hollow trees, and even on the ground. After young leave the nest, adults feed them on the ground before they are able to fly. In North Dakota, great horned owls initiate nests as early as February. Birds are easy to locate because nests are large and quite often in small groups of mature trees or tree rows. Nests at this time of year are visible without leaves to hide them. The owl's head generally extends above the edge of the nest, and its ear tufts are visible.

Year-round

#### **DISTRIBUTION AND HABITAT**

The great horned owl is found throughout North and South America, inhabiting many habitats from dense forests to open desert and even urban areas. It is a permanent resident throughout much of its breeding range, including all of North Dakota.



## SNOWY OWL – (Bubo scandiacus)

Length: 23-26 inches Wingspan: 62-65 inches Weight: 3.5-4.0 pounds

#### **IDENTIFICATION**

The snowy owl is the heaviest and most powerful of all North American owls. It has no ear tufts and is white with dark barring. The barring is heaviest on young birds, lighter on females, and may be nonexistent on older males. The feet are heavily feathered, partly concealing toes and claws.

## LIFE HISTORY

The snowy owl is active day and night feeding almost exclusively on lemmings (a type of rodent) on their breeding grounds. This owl may not attempt to nest in years when lemmings are scarce. However, snowy owls will also eat ptarmigans, gulls and waterfowl, and have been known to wade and catch fish and small marine animals. In hard winters, snowy owls will eat whatever they can find, including mice, voles, rabbits, ground squirrels, rats, upland birds, carrion and furbearers caught in traps.

The snowy owl nests on the ground north of the treeline, usually on a hilltop or other rise of land. Its nest is a scooped out hollow lined with moss and feathers. The male will defend his mate, nest and young against enemies, even wolves, by swooping low and striking at intruders.

## **DISTRIBUTION AND HABITAT**

Usually shy and wary, the snowy owl is a regular wintering bird in North Dakota and can often be seen perched on haystacks, fence posts and stumps. While an owl of the open tundra, snowy owls winter south from the Arctic coast to the southern Canadian provinces and North Dakota. It has also been documented irregularly as far south as California and Texas.





Male

BOB GRESS

## BURROWING OWL – (Athene cunicularia)

Length: 9-11 inches Wingspan: 20-24 inches Weight: 0.25 pounds

#### **IDENTIFICATION**

The burrowing owl is a small ground-dwelling bird standing less than a foot high with a short tail and long legs. It has a brown back with pale spots, a lighter underside with distinct barring, and lacks ear tufts. It is the only small owl likely to perch, either on the ground or higher, in the open during daylight.

## LIFE HISTORY

Burrowing owls require underground burrows for living quarters. Most often, these are previously excavated by animals like the black-tailed prairie dog, Richardson's ground squirrel, or badger. They also seem to prefer areas lacking vegetation. This ensures a good view to avoid predators and may aid in the search for insects, its primary food source.

Burrowing owls use the same burrow for nesting year after year if not disturbed. Usually 7-9 white eggs are laid and incubated by the female. During this time, the male brings food. The eggs hatch after about 28 days, but young birds will not emerge from the burrow for about two weeks.

## **DISTRIBUTION AND HABITAT**

The burrowing owl's range extends from the prairies of southern Canada to South America. In southern areas, the bird is a year-round resident. In North

Dakota, they are migratory, arriving in early May and return to wintering areas like Texas and Mexico by late September. Burrowing owl populations have been decreasing throughout its range. Loss of grassland habitat to agriculture and elimination of burrowing rodents such as prairie dogs have contributed to their decline. Historically, the owl was quite common throughout much of western North Dakota. Today, the owls are mostly restricted to prairie dog towns in southwestern North Dakota.





## EASTERN SCREECH OWL - (Otus asio)

Length: 8-9 inches Wingspan: 21-22 inches Weight: 0.5 pounds

## **IDENTIFICATION**

The eastern screech owl, which looks like a miniature great horned owl, is our only small owl with ear tufts. The gray phase is most common in North Dakota, but they may also be red-brown. It is best located and identified by its voice, which is not actually a screech, but a series of mournful, quavering whistles descending in pitch. It is heard most often in spring and fall.

## LIFE HISTORY

The eastern screech owl is nocturnal. It hunts shortly after dusk, flying over meadows and treetops. It catches mice and insects, but will also eat pocket gophers, crayfish, snakes, frogs, fish and small birds.

The eastern screech owl prefers to nest in tree cavities, usually without nesting material. Nest boxes can be provided for additional nesting opportunities. The male provides food for the female while she is incubating, but both parents feed young. Adults may dive at and even strike intruders near the nest.

## **DISTRIBUTION AND HABITAT**

The screech owl is found throughout North Dakota year-round. It is common in a wide variety of habitats, including small woodlots, forests, marshes, parks and suburban gardens. It is more closely associated with human activi-

ties than other owls, perhaps due to prey abundance, numerous nesting and roosting sites, and reduced competition in urban areas.





# NORTHERN SAW-WHET OWL – (Aegolius acadicus)

Length: 7-8.5 inches Wingspan: 17-20 inches Weight: 0.25 pounds

#### **IDENTIFICATION**

The saw-whet owl has a reddish facial disk and no ear tufts. They are a rich dark brown above, dappled with white spots, and have white under parts streaked with reddish-brown. This is the smallest owl in North Dakota. Their flight is rapid and quiet, and is named for some of its calls which resemble the sounds made when someone is sharpening, or whetting, a mill saw.

## LIFE HISTORY

Strictly nocturnal, saw-whet owls prefer coniferous woods in swampy areas. When hunting, they float silently along the edge of open parks and meadows, dropping on their prey. Their primary food is insects, but will also eat mice, rats, small squirrels, chipmunks and occasionally some songbirds.

Saw-whet owls nest in abandoned woodpecker holes, and also in natural tree cavities. Saw-whet owls will also use man-made nest boxes. A clutch of 4-7 eggs is laid on wood chips.

## **DISTRIBUTION AND HABITAT**

The saw-whet owl is found throughout North American from southern Alaska and Canada to central Mexico. They inhabit dense coniferous or mixed forests,

and wooded swamps. The saw-whet may be a more common winter resident in North Dakota than is believed due to their habit of roosting silently and being difficult to flush. They are typically found from mid-October through March, and have been known to nest on rare occasion in North Dakota.







## **OSPREY** – (Pandion haliaetus)

Length: 21-23 inches Wingspan: 59-71 inches Weight: 3-4 pounds

## **IDENTIFICATION**

The osprey is a fish-catching hawk and has a number of anatomical distinctions setting it on its own evolutionary course. For instance, the bottoms of the osprey's feet have spiny pads to help grip slippery fish. The outer toe is reversible, allowing the bird to grip a fish equally with two toes forward and two back. The osprey is identifiable by a black band through its yellow eye separating a white crown and white throat, along with a strongly-hooked bill and long narrow wings.

## LIFE HISTORY

The osprey's diet is almost entirely fish taken alive and weighing up to four pounds. It takes fish near the surface because it can't dive in deep water. When an osprey spies a fish, it hovers briefly in flight and then plunges. Ospreys are very skilled fishers and are successful up to 90 percent of the time.

Historically, ospreys nested in trees or rocky cliffs. Today, nesting has shifted from these natural sites to radio towers, utility structures, and man-made osprey nesting platforms.

## **DISTRIBUTION AND HABITAT**





# **RED-SHOULDERED HAWK** – (Buteo lineatus)

Length: 15-19 inches Wingspan: 37-42 inches Weight: 1-2 pounds

#### **IDENTIFICATION**

As its name implies, red shoulders are characteristic of this species. Seen from above, it has black-and-white checkered flight feathers and a translucent crescent-shaped wing panel in the outer primaries. This whitish patch can also be seen from below when the wing is backlit.

## LIFE HISTORY

The red-shouldered hawk preys mainly on small mammals, but also feeds on small birds, reptiles, amphibians or even crayfish.

Red-shouldered hawks likely do not breed in North Dakota. They prefer to nest in deciduous/coniferous forests where nests are placed high in a tree, but below the canopy.

## **DISTRIBUTION AND HABITAT**

A rare species in North Dakota, red-shouldered hawks have been seen primarily from mid-March through May in eastern portions of the state. They inhabit a broad range of forests, but favor extensive, mature, mixed deciduous-coniferous woodlands, especially bottomland hardwood, riparian areas. Likely areas for these hawks are the Red River, Pembina Hills or Turtle Mountains.





## GYRFALCON – (Falco rusticolus)

Length: 19-25 inches Wingspan: 48 inches Weight: 2-4.5 pounds

#### **IDENTIFICATION**

This is our largest falcon. While chunky in appearance, it is powerful and fast. Most gyrfalcons are gray, but can range from nearly all white to nearly all dark brown/gray or black. The long tail is barred and a faint mustache against a solid cheek patch is present. Immature birds are more streaked, and adults are barred or spotted. Females are much larger – nearly twice the weight – than males. Gyrfalcons are similar to peregrine falcons, but the latter have starker black and white facial features.

## LIFE HISTORY

In their breeding range, gyrfalcons feed mostly on birds, especially ptarmigan. They will feed on birds from small songbirds to geese, and mammals from mice to rabbits. Gyrfalcons may perch and scan for prey or soar at lower altitudes. They will catch prey on the ground, chase prey in air to exhaust it, or often drive prey to the ground before attacking.

Gyrfalcons use nests of other raptors, especially common ravens or golden eagles, or may scratch out a hollow on a ledge or cliff where 3-5 eggs are laid.

## **DISTRIBUTION AND HABITAT**

Gyrfalcons prefer arctic and alpine tundra of northern Alaska, Canada and Greenland for breeding. They're found in rolling, open country to river and lake habitats. Most remain on breeding grounds year-round, and some are common winter migrants to southern Canada, while few migrate farther south than North Dakota. These rare falcons are seen in open habitats in North Dakota from about November through March.

> Breeding Southern Limit of Regular Winter Occurrence Limit of Occasional Winter Occurrence



## BARN OWL - (Tyto alba)

Length: 17-18 inches Wingspan: 42-44 inches Weight: 1 pound

#### **IDENTIFICATION**

The barn owl is a slim, pale owl with a large round head, no ear tufts, and a white heart-shaped face. It has long legs and long pointy wings with a light, moth-like flight. Barn owls are rusty buff above and whitish below, speckled with black. The females are darker and slightly larger than males.

## LIFE HISTORY

The barn owl hunts at night over open fields and wetland edges, around granaries and barns, and in towns. It eats primarily mice, rats, ground squirrels and rabbits, but a small part of its diet consists of small birds such as pigeons, blackbirds, sparrows and swallows. The barn owl will occasionally fall prey to a great horned owl.

The barn owl is a cavity nester. It doesn't make an actual nest, but simply lays its eggs in the basin of a secluded spot found in caves, barns, bird boxes, belfries, and abandoned mines. The female incubates the eggs while the male helps feed and guard young. Barn owls are believed to mate for life.

## **DISTRIBUTION AND HABITAT**

The barn owl is found on all continents except Antarctica. In the Western Hemisphere, it is found from southern Canada to the southern tip of South America. It roosts during the day in large trees, barns, and old buildings. Barn owls are considered a species of special concern throughout most of their range and are not common anywhere in the Midwest. They breed only sporadically in North Dakota, where they are considered rare.



## BARRED OWL - (Strix varia)

Length: 19-20 inches Wingspan: 42-44 inches Weight: 1 pound

#### **IDENTIFICATION**

The barred owl is one of the most common owls of deep woods. It is a large gray-brown owl barred with buff, dark brown and white. The barring is crosswise on its breast, but streaked lengthwise on its belly, while its back is spotted with white. It has a round, puffy head with large brown eyes and lacks ear tufts. The barred owl is just slightly smaller than the great horned owl.

## LIFE HISTORY

While usually nocturnal, the barred owl will hunt on cloudy days at dawn or dusk. Its flight is silent and skillful through the forest, and its eyesight is especially keen. Barred owls eat mostly mice, but will also catch chipmunks, squirrels, rabbits, fox, crows, frogs, and small snakes, as well as spiders, grasshoppers, and large beetles. While their diet is almost as varied as the great horned owl's, they are considered gentle in comparison.

The barred owl nests in tree cavities, or in the abandoned nests of hawks, crows or squirrels. The two to three eggs are incubated by both adults with the female doing most of the work.

## DISTRIBUTION AND HABITAT

The barred owl is a permanent resident of dense, mature woodlands, river bottoms and swamps. It is usually found east of the prairie states and is considered rare in North Dakota. There is some evidence that barred owls breed in southeastern North Dakota along wooded portions of the Sheyenne River. The barred owl's range is actually expanding in North America, and because of its aggressiveness, can displace other owls.





## GREAT GRAY OWL - (Strix nebulosa)

Length: 24-33 inches Wingspan: 54-60 inches Weight: 2-3 pounds

#### **IDENTIFICATION**

In appearance, the great gray owl is North America's largest owl, yet it doesn't weigh as much as the snowy owl. From the side, this owl has a flat face on a large, rounded head with no ear tufts. As the name implies, this owl is mostly gray, except for white and black around the chin, and small yellow eyes. Great gray owls have large, broad wings visible in flight.

## LIFE HISTORY

Great gray owls hunt primarily for rodents, but occasionally take gophers, rabbits, squirrels and small birds. This owl has extraordinary hearing. In winter, it can hear prey under the snow's surface. Once located, the owl will hover where the rodent is heard, then plunge face first into the snow. They have been known to reach prey in 18 inches of snow and break through crusted snow hard enough to support a 175-pound person.

Great gray owls will start courtship as early as January, with eggs being laid in March in its southern range. Great gray owls do not build a nest, but use abandoned hawk or eagle nests. The female incubates the 2-3 eggs.

 Year-round
Southern Limit of Wintering Range

## **DISTRIBUTION AND HABITAT**

These large owls can be found in the boreal forests of Ontario, Canada, northwest to Alaska, and the northern reaches of the Rocky Mountains in the United States. Great gray owl sightings are rare in North Dakota. Only in tough winter years when prey is limited will these owls travel south to northern Minnesota, the Great Lakes, and perhaps a few may wander into heavily wooded areas of North Dakota. These movements are also referred to as an irruption because of the great numbers of owls that may appear.



59



## BOREAL OWL - (Aegolius funereus)

Length: 9-11 inches Wingspan: 20-21 inches Weight: 0.25-0.5 pounds

#### **IDENTIFICATION**

The boreal owl is a small owl with a large head and long wings. Females are noticeably larger than males. Both sexes have a conspicuous gray-white facial disk within a brown-black frame. The cream-white under parts are heavily streaked and spotted with brown. The back is a darker brown with white spots and blotches. Yellow eyes, pale bill, and a rather angry expression on this owl's face are also characteristic.

## LIFE HISTORY

This owl sits and waits for its prey of small mammals, birds or insects. Prey is usually attacked within 10 yards of its perch. Hunting occurs in the dark, which could be during the day in the northern latitudes in which it is found.

Male boreal owls attract a mate by singing from one to five potential nest cavities. His singing catches the attention of a female that choose the nest site. Boreal owls will use nest boxes, but natural tree cavities or those created by woodpeckers are preferred. Cavities will not be used in consecutive years. The female lays three to six eggs and incubates alone for 26-36 days. The male does most of the hunting and brings food to the female. She feeds the young.

## **DISTRIBUTION AND HABITAT**

The boreal owl is found across Canada, Alaska and the northern U.S., eastward to Scandinavia and northern Siberia. In North Dakota they can occasionally be seen from October through April in heavily forested areas. These owls prefer boreal forest, which is characterized by black and white spruce, aspen, poplar, and birch. However, they will use mixedforest sites with spruce or pine.





# NORTHERN HAWK OWL - (Surnia ulula)

Length: 15-17 inches Wingspan: 30-35 inches Weight: 0.75 pounds

## **IDENTIFICATION**

This owl is aptly named for its hawk-like appearance. Its long tail and pointed wings at first glance lead one to believe it is an Accipiter. A closer look, however, makes this owl unmistakable from others. Hawk owls have heavy, horizontally-barred bellies, black framing on a white face, white spotting and streaking on head and back. The most obvious distinction is its long, pointed tail.

## LIFE HISTORY

Hawk owls prefer a tall, conspicuous perch in open habitat from which to hunt. They will hunt day or night for rodents, but have been known to take grouse and ptarmigan. When prey is located, they lean forward and nearly fall off the perch into a graceful dive.

Nests are located in tree cavities, open holes where tree tops have broke off, woodpecker nest holes, or occasionally they will use or make stick nests. Typically 7 eggs are laid.

## **DISTRIBUTION AND HABITAT**

Northern hawk owls can be found in the boreal forests across northern Canada and Alaska. The owls are rare visitors to North Dakota, typically appearing when food runs short in their northern

range, forcing birds to migrate south in an irruption, similar to great gray owl movements.





Game and Fish Department Headquarters Office: 100 N. Bismarck Expy. Bismarck, ND 58501 (701) 328-6300

Devils Lake Office: 7928 45th St. NE Devils Lake, ND 58301 (701) 662-3617

Dickinson Office: 225 30th Ave. SW Dickinson, ND 58601 (701) 227-7431

Lonetree WMA: Headquarters 1851 23rd Ave. NE Harvey, ND 58341 (701) 324-2211

**Riverdale Office:** 406 Dakota Ave. Riverdale, ND 58565 (701) 654-7475

Jamestown Office: 3320 E Lakeside Rd. Jamestown, ND 58402 (701) 253-6480

Williston Office 13932 W. Front St. Williston, ND 58801 (701) 774-4320

e-mail: ndgf@nd.gov website: gf.nd.gov

The NDGFD receives federal financial assistance from the US Fish and Wildlife Service. In accordance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972, the NDGFD joins the US Department of the Interior and its Bureaus in prohibiting discrimination on the basis of race, color, national origin, age, disability, sex (in education programs or activities) and also religion for the NDGFD. If you believe you have been discriminated against in any program, activity, or facility as described above, or you desire further information, please write to: ND Game and Fish Department, Attn: Chief Administrative Services, 100 N. Bismarck Expressway, Bismarck, ND 68501-5095 or to: U.S. Fish and Wildlife Service, Attn: Civil Rights Coordinator, 4401 N. Fairfax Drive, Mail Stop: MBSP-4020, Arlington, Virginia 22203. The TTY/TTD (Relay ND) number for the hearing or speech impaired is 1-800-366-6888.