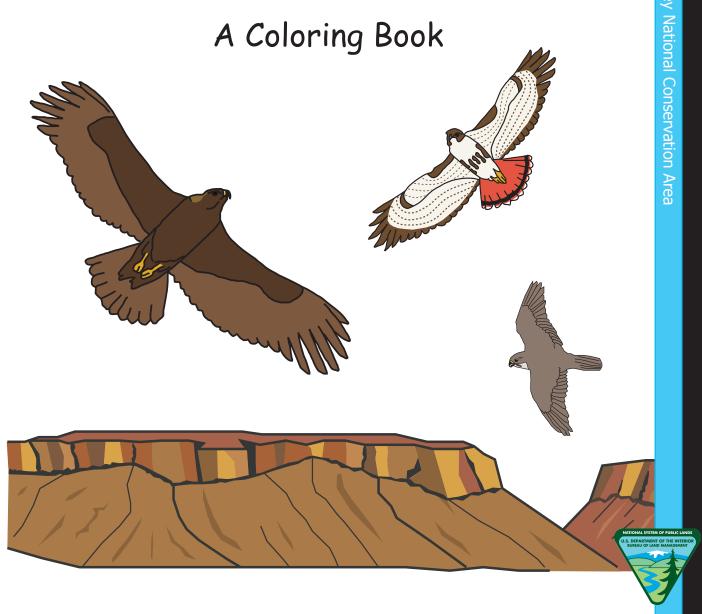
Raptors of the Morley Nelson Snake River Birds of Prey National Conservation Area



The following images are used with permission of Hawk Mountain Sanctuary Association:

Bald Eagle - perched and in flight, Red-tailed Hawk - perched and in flight, Rough-legged Hawk - perched and in flight, American Kestrel - perched and in flight, Merlin - perched and in flight,

Peregrine Falcon - perched and in flight,

Golden Eagle - perched and in flight,

Northern Goshawk - perched and in flight,

Cooper's Hawk - perched and in flight,

Sharp-shinned Hawk - perched and in flight,

Osprey - perched and in flight,

Northern Harrier - perched and in flight,

Turkey Vulture - perched and in flight.

Hawk Mountain Sanctuary is an international center for raptor conservation, education, observation and research located near Kempton PA. Visit their website at www.hawkmountain.org

Raptors of the Morley Nelson Snake River Birds of Prey National Conservation Area

A Coloring Book

This coloring book describes the 16 species of diurnal raptors (eagles, hawks, falcons, accipiters, osprey, harrier, and vulture) that live in the Morley Nelson Snake River Birds of Prey National Conservation Area (NCA) - either part of the year or year round. We hope you have fun coloring and learning about these birds which are also called birds of prey.

This book will help you learn: (1) what raptors look like when perched and in flight, (2) where raptors like to live, (3) what raptors like to eat, (4) what time of year you are likely to see them in the NCA, and (5) how their populations are doing. The glossary will help you understand some of the words that might be new to you. Once you learn about raptors, try to spot as many of them as you can!

Snake River Canyon



The Morley Nelson Snake River Birds of Prey National Conservation Area

The Morley Nelson Snake River Birds of Prey National Conservation Area (NCA) was established in 1993 to protect a unique environment that supports one of the world's densest concentrations of nesting birds of prey, also called raptors. Falcons, eagles, hawks, owls and vultures occur here in unique abundance and variety.

Located along 81 miles of the Snake River in southwest Idaho, the NCA encompasses 485,000 acres of public land. Here the river lies within a deep canyon that is surrounded by a vast plateau. Cliffs towering up to 700 feet above the river provide countless ledges, cracks and crevices used as nesting sites by birds ofprey. While the surrounding plateau looks unremarkable, it holds the key that makes this area so valuable for raptors. A deep layer of finely textured soil on the plateau north of the canyon and the plants that grow in it support large populations of ground squirrels and jackrabbits which are the main food source for these birds.

The combination of ideal nesting habitat in the Snake River Canyon and the extraordinarily high numbers of prey on the adjacent plateau make this a place like no other for birds of prey. The area is actually a giant natural raptor nursery. Sixteen species nest here each spring. Eight other species use the area during winter or pass through during fall and spring migrations.

To learn more about the NCA and raptors, visit our website at www. blm.gov/id/st/en/prog/NLCS/MNSRBP_NM.html.

What are Raptors?

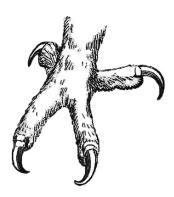
All of the birds in this coloring book are diurnal raptors - birds of prey that hunt during the day. All raptors, both diurnal and nocturnal (owls) are predators meaning they hunt, capture, kill and eat other animals for food. Although the diet varies from species to species, all raptors are meat eaters. They are strictly carnivores. There are many carnivorous and predatory birds, but not all of them belong to the group we call raptors. We distinguish raptors from other birds because they have:

1. Strong, powerful feet with sharp curved talons. Raptors' feet are perfectly designed to catch and kill prey, and to defend themselves.

The length and size of a raptor's toes, and the curvature and thickness of its talons are related to the type of prey it hunts. Most birds of prey have three toes pointing forward and one pointing backward. Owls and osprey can move their outer front toe to the back giving them a two front and two back toe arrangement.



hawk foot



owl foot

2. Sharp, hooked beaks. All raptors have beaks curved at the tip with sharp cutting edges to rip and tear apart their prey. Their beaks are also strong enough to break the bones in their prey.

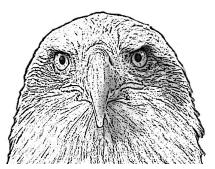




Falcons have a "toothed" beak which is an adaptation that allows falcons to sever the spinal cord of their prey, thus killing it.

3. **Keen eyesight**. Raptors can focus on objects that are far away from them. With large forward facing eyes, raptors have a large area of binocular vision - like humans. This gives raptors very accurate depth perception which in turn aids them in catching moving objects (prey).

Diurnal raptors have full color vision; nocturnal raptors (owls) see in shades of gray. Nocturnal raptors also have remarkable night vision. They can see in very low light conditions.



Bald eagle



Short-earred owl

Conservation Status of Raptors

All birds of prey are protected by the Migratory Bird Treaty Act. This means that it is illegal for anyone to take (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such behavior), possess, import, export, transport, sell, purchase, barter or offer for sale, purchase, or barter, any migratory bird, or the parts (feathers, wings, etc.), nests, or eggs of such birds except under terms of a valid permit issued according to Federal regulations.

However, even with this Act, humans, indirectly and directly, remain the greatest threat to these birds through:

- Habitat loss due to agricultural development, livestock grazing, and urbanization. This is primarily a loss of nesting sites ("shelter"), reduction of prey populations ("food"), and enough "space" to fulfill these needs.
- Habitat alteration due to wildfire.
- Electrocution by wires and powerlines.
- Collisions with vehicles, wires, fences, windows, powerlines, wind turbines, buildings, bridges, and aircraft.
- Poisoning and pesticides.
- Illegal shooting and trapping.
- Environmental contaminants such as oil spills.
- Ingestion of lead and plastics.
- Human disturbance of nest sites.

- Being trapped in chimneys.
- Drowning in livestock water tanks.
- Being trapped in fresh tar on resurfaced roads.
- Predation by cats.



BLM file photo

Parts of Raptors

In describing the field marks of each raptor in this coloring book, we may use words that you do not know or you do not know where these field marks are located on the body of a raptor. Use the glossary below plus the following "maps" of raptor bodies to get a better understanding of these terms and their location on a raptor.

<u>Carpal</u> - the wrist of a bird. Carpal patches on the underwing are about half-way between the base and the tip of the wing.

<u>Cere</u> - the thick skin at the base of the upper beak of some birds such as raptors, which contains the bird's nostrils.

<u>Coverts</u> - the smaller feathers that partly overlap the flight feathers of the wing and tail at their bases.

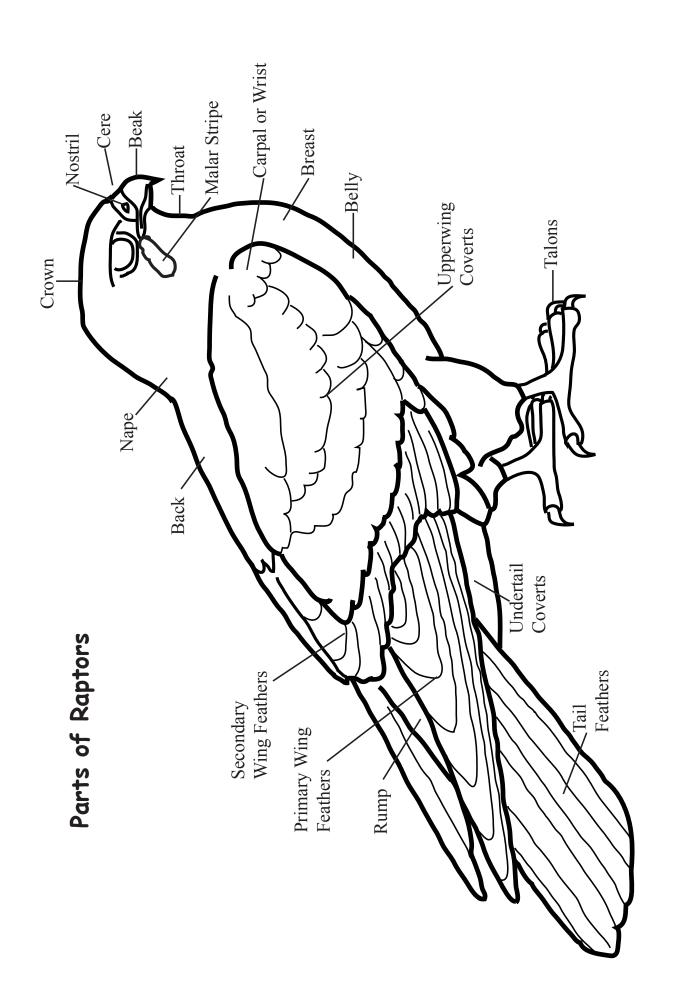
Crown - top of the head.

Flight Feathers - the long feathers of the wing and tail.

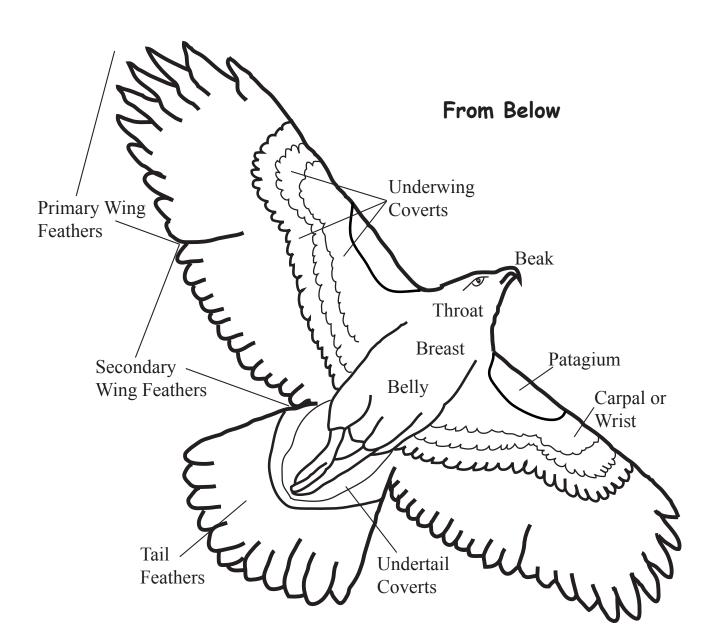
<u>Malar Stripe</u> - a distinctively colored stripe on the cheek. Often referred to as a "mustache." Found only on falcons.

Nape - the back of the neck.

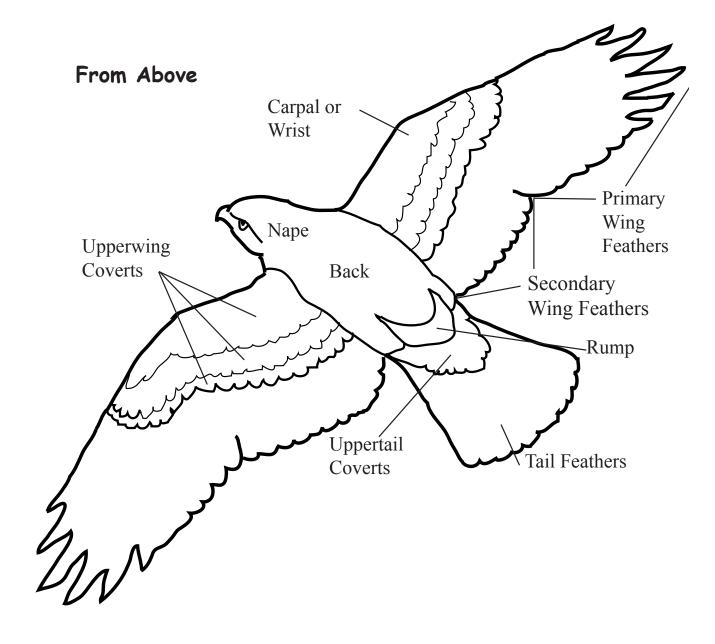
<u>Patagium</u> - the area on the leading edge of the wing between the body and wrist. Red-tailed hawks have dark patagial markings.



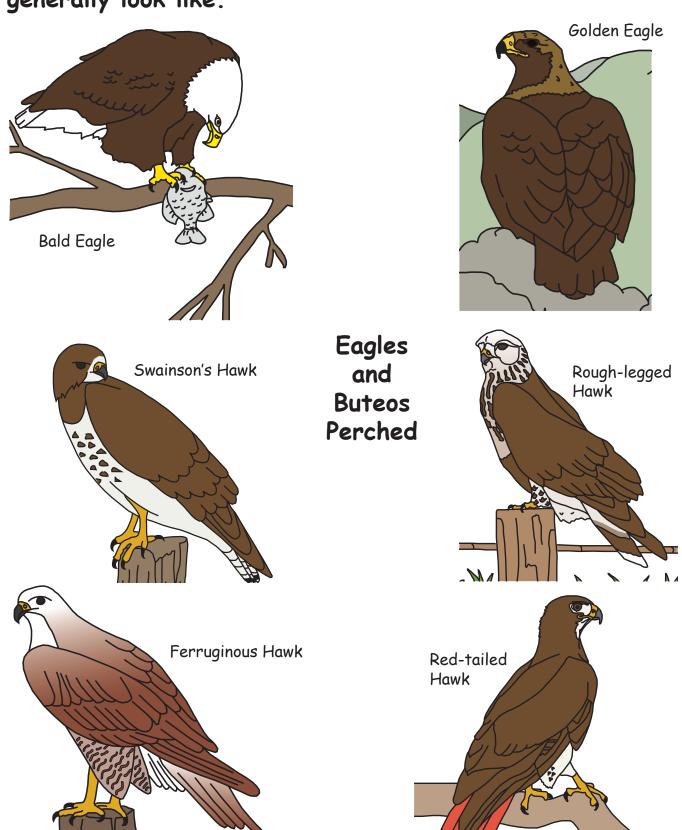
Parts of Raptors - in Flight

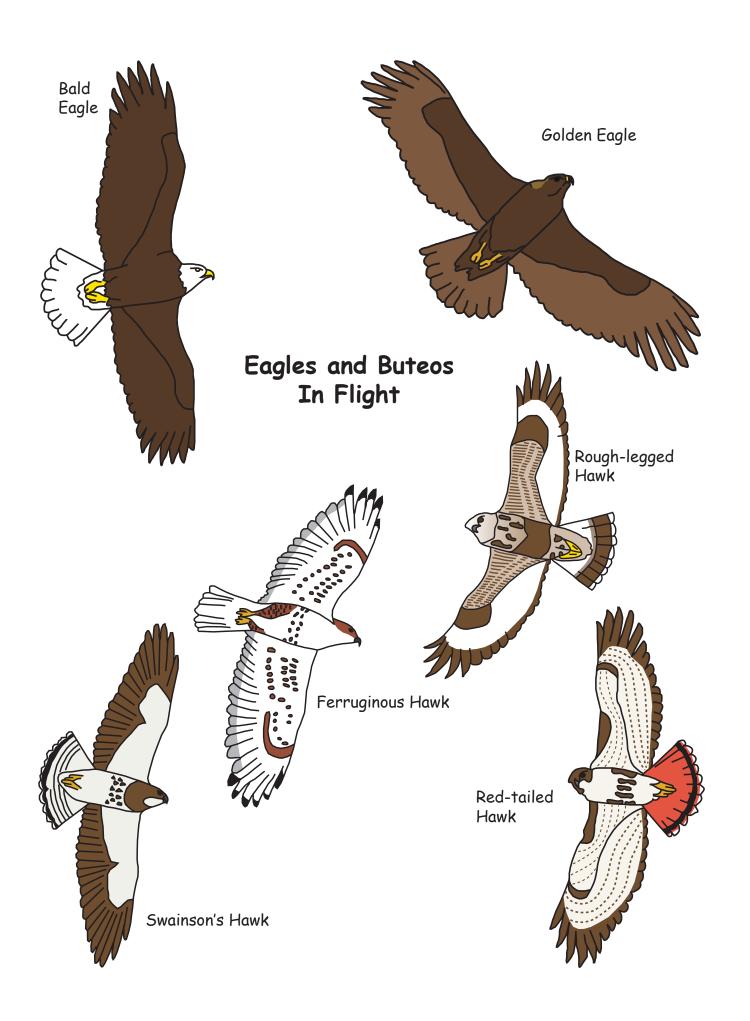


Parts of Raptors - in Flight



To help you color the raptors, here's what each should generally look like.



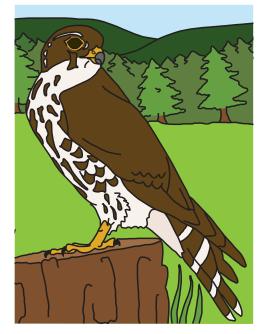


Falcons Perched





American Kestrel (male)



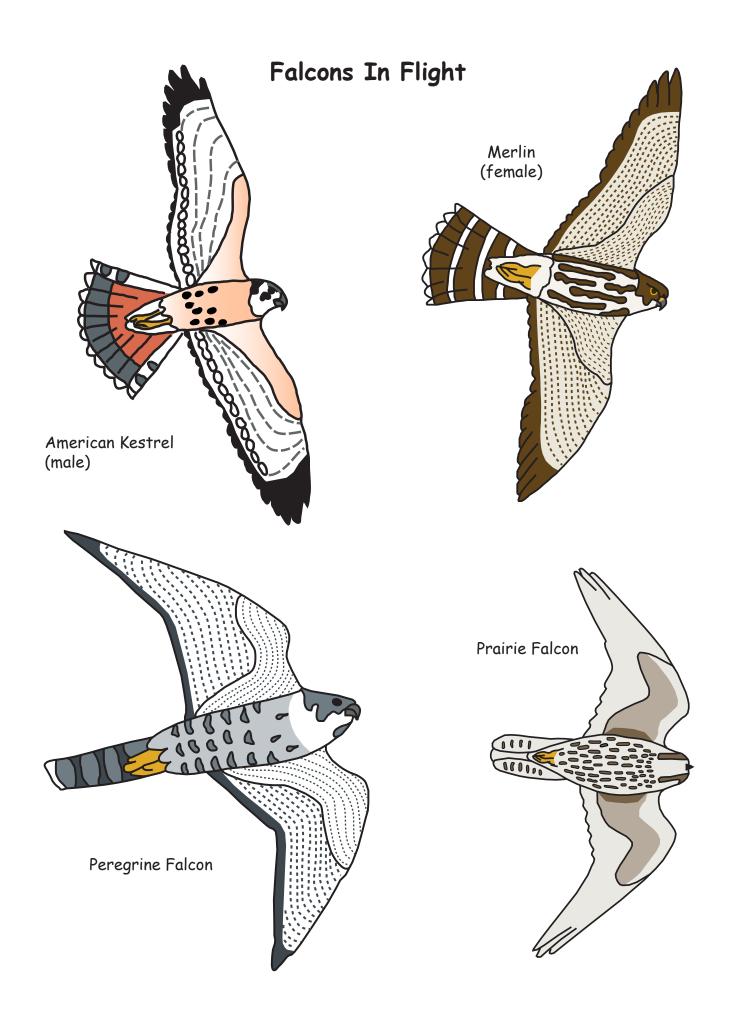
Merlin (female)



Peregrine Falcon



Prairie Falcon





Accipiters Perched

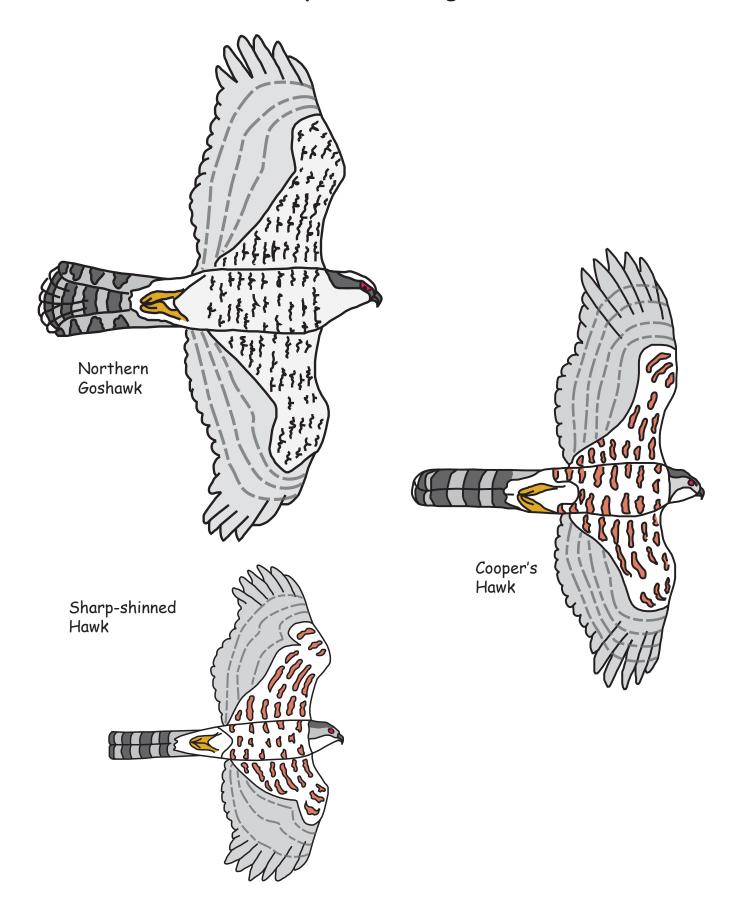


Cooper's Hawk



Sharp-shinned Hawk

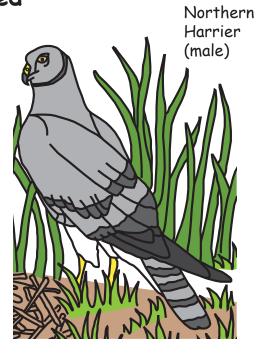
Accipiters In Flight

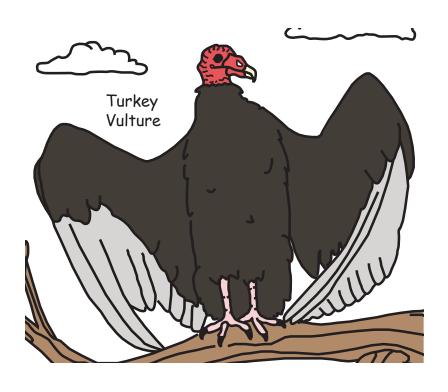


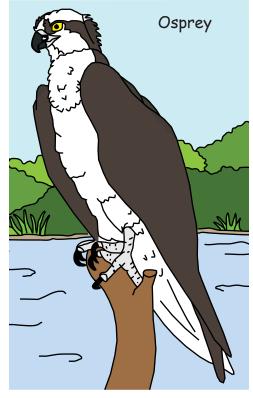
Northern Harrier, Osprey, and Turkey Vulture Perched

Northern Harrier (female)

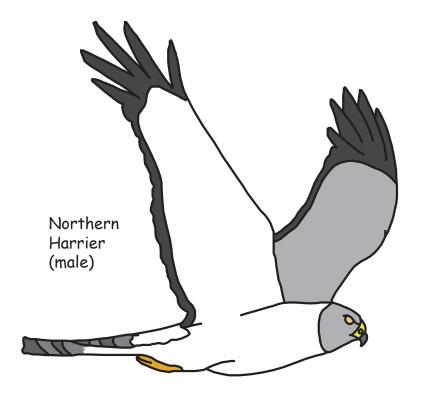


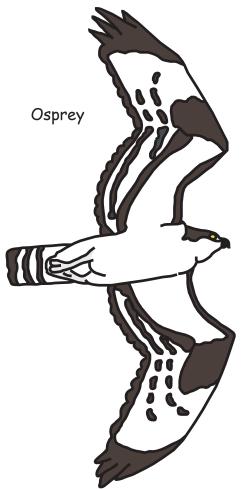


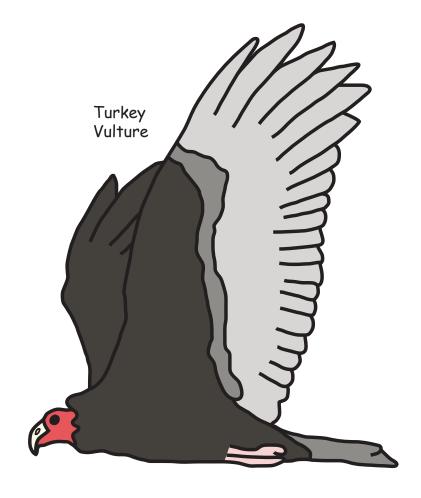




Northern Harrier, Osprey, and Turkey Vulture In Flight

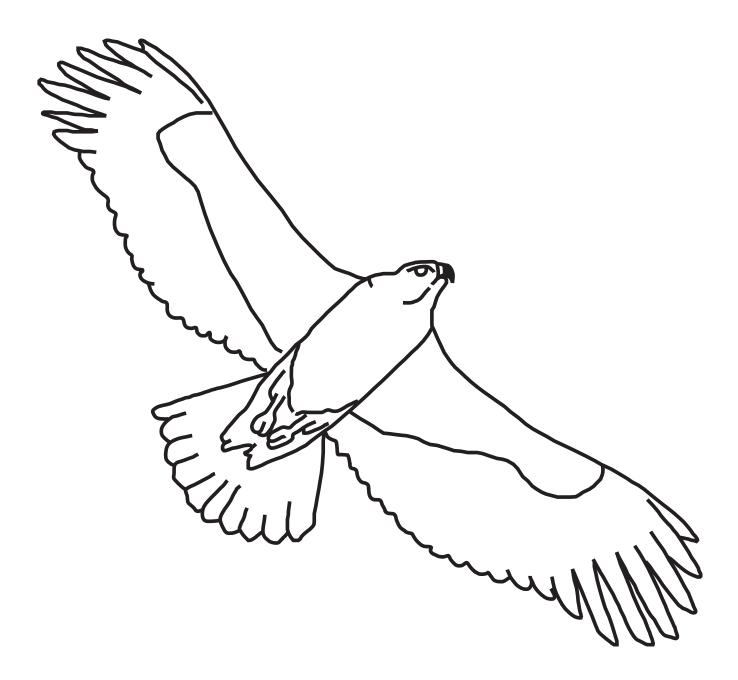




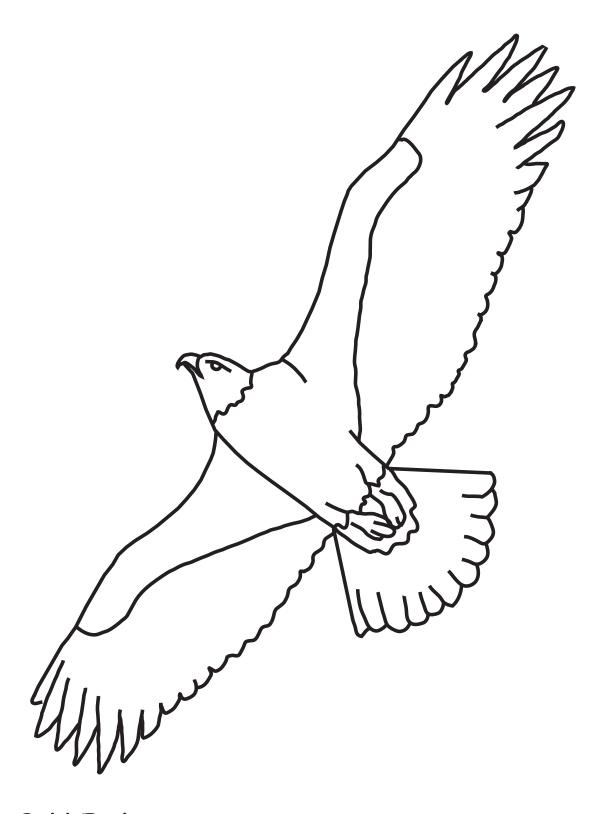


Eagles

These very large raptors have long, broad wings.



Golden Eagle - I soar with my wings in a slight "V" shape. I have slow, powerful wing beats and I usually glide briefly after flapping 6 to 8 times. From below I am dark brown.



Bald Eagle - I soar and glide with my wings held flat. I have steady and slow wing beats. I am a very agile flyer and can perform spectacular aerial maneuvers at times. I'm dark brown with a white head and tail.

I am an adult Golden Eagle.

My scientific name is Aquila chrysaetos.

Field Marks

I am a very large raptor with a six to seven foot wingspan. My body and wings are dark brown and the back of my head and neck have golden or light brown feathers. I also have dark eyes and beak. My legs are feathered to the toes. I acquired my adult plumage when I was four or five years old. Before then, my tail feathers were white at the base and I had white patches on my wings.

Habitat

I am found throughout the Northern Hemisphere - North America, Europe, Asia, and nothern Africa. In the United States you will find me more often in the West. I prefer open terrain such as deserts, high mountains, plateaus and plains cut by canyons, gullies or outcrops.

Food

I like to eat medium sized mammals and birds. In the NCA my favorite food is the black-tailed jackrabbit.

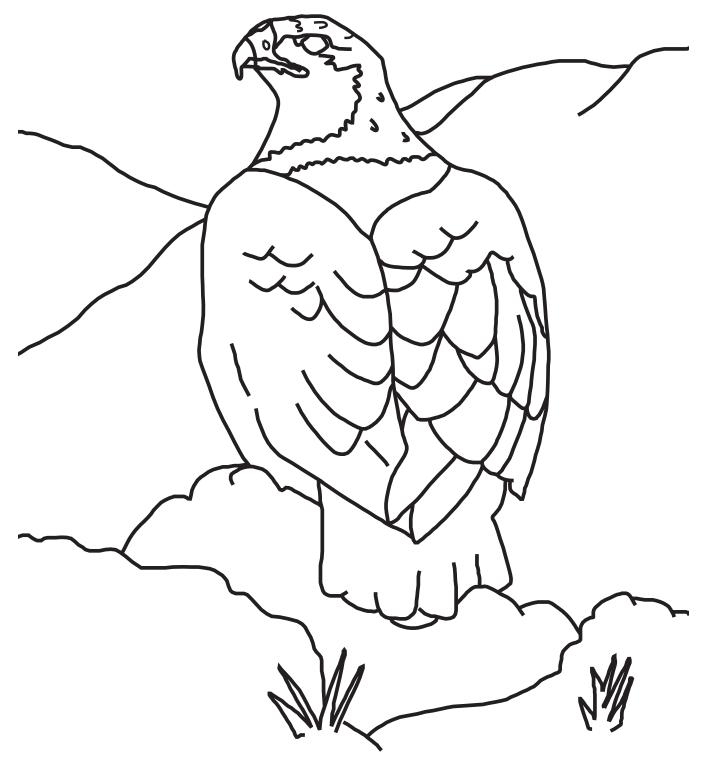
When you'll see me in the NCA.

I am seen in the NCA year-round, either as a resident or a winter visitor. You can see me nesting on cliffs, soaring over the canyon and desert, or perched on utility poles looking for prey.

Conservation Status

I am considered to be fairly common in the western US, Canada and Alaska. I have few natural enemies. Human disturbance around my nests can lead me to abandon my nest. Habitat change due to urbanization, new farms, and wildfire decreases my available habitat and reduces the population of my prey.

Golden Eagle



I am dark brown with golden or light brown feathers on the back of my head and neck. My eyes and beak are dark. Relative to the Bald Eagle, my head and bill are small.

I am an adult Bald Eagle.

My scientific name is Haliaeetus leucocephalus.

Field Marks

I am a very large raptor with a six to eight foot wingspan. My body and wings are dark brown and my head and tail are white. My eyes, large beak and feet are yellow. I acquired my adult plumage when I was four or five years old. Before then, my feathers were brown with varying degrees of white on my belly, under my wings and on my back. My beak and eyes were dark brown and gradually changed to yellow as I matured.

Habitat

I am found only in North America from Alaska and Canada to northern Mexico. I prefer to live near large bodies of water such as lakes, rivers and coastal areas with forests nearby.

Food

I like to eat a variety of animals, but fish is my favorite food. I can catch fish that are six to twelve inches under the water's surface.

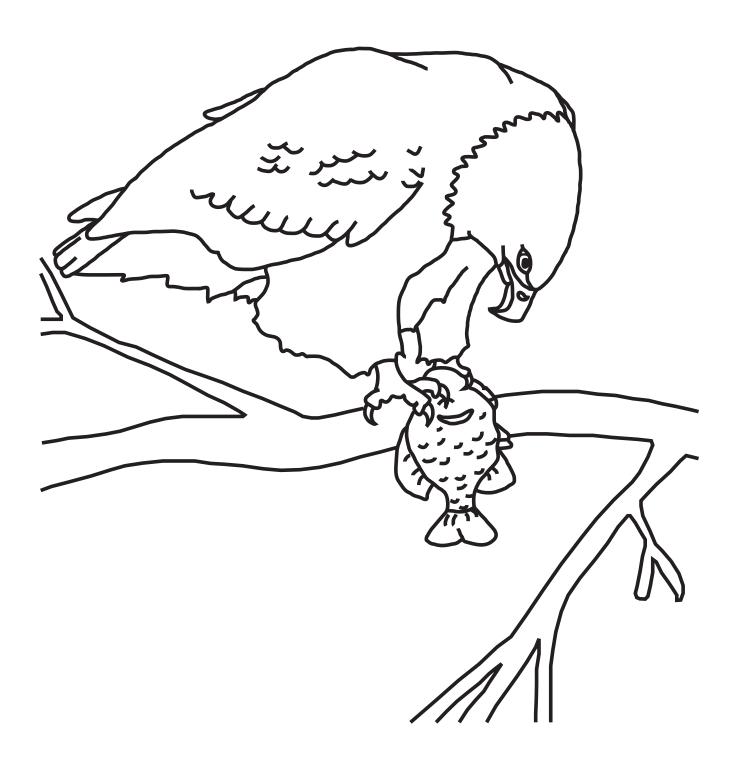
When you'll see me in the NCA.

I winter along the Snake River in the NCA from November to March. I sometimes nest in the NCA but not consistently from year to year. I have also nested close by in the Deer Flat National Wildlife Refuge at Lake Lowell, south of Nampa, Idaho.

Conservation Status

I was taken off the Threatened Species List in 2007. I am protected by two laws - the Bald Eagle Act and the Migratory Bird Treaty Act. Human development along the coast and near inland rivers and waterways results in loss of my habitat.

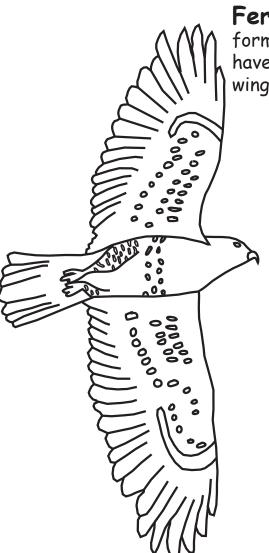
Bald Eagle



I am dark brown with white head and tail. My eyes, beak and feet are yellow. Relative to the Golden Eagle, my head and bill are large.

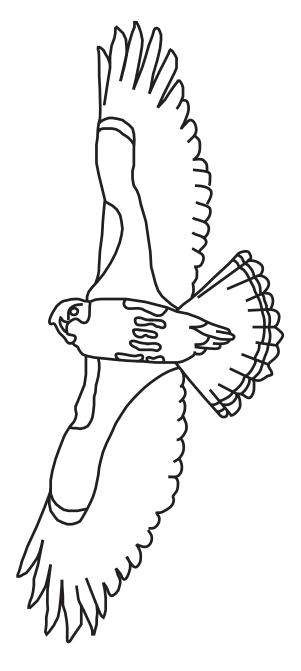
Buteos

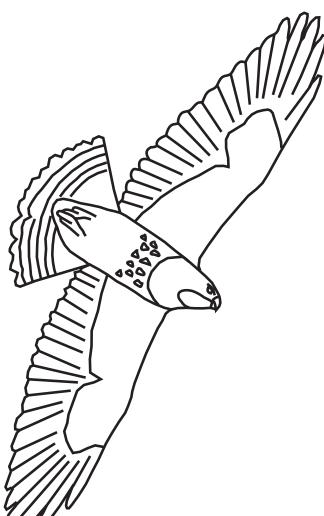
These raptors have chunky bodies and broad wings.
They are also called hawks.



Ferruginous Hawk - My reddish legs form a "V" against my white underside and I have small dark commas at the wrists of my wings.

Red-tailed Hawk - My underparts are whitish. I typically have a darker band of feathers across my belly. In flight you can see the dark patagium along the leading edge of my wings and bold commas at my wrists.

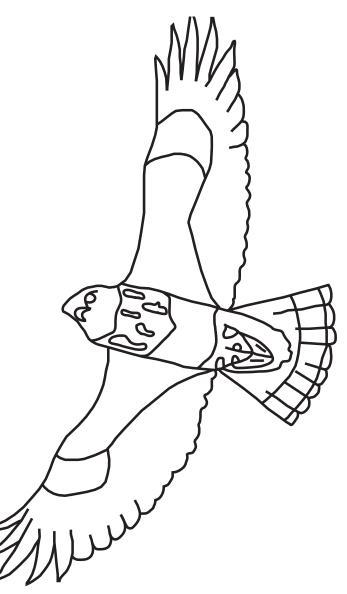




Swainson's Hawk - I soar with my wings in a slight "V" shape and teeter in flight a little like a Turkey Vulture. From below, I have pale underwing coverts contrasting with my dark flight feathers. My dark "bib" and pale chin are also visible from below.

Rough-legged Hawk - I have dark carpal patches on each wing, and a black band on the trailing edge of the wings. I'm heavily streaked on my chest.

I often soar with my wings held in a strong "V." I'm known for hovering over my prey.



I am an adult Ferruginous Hawk.

My scientific name is Buteo regalis.

Field Marks

I am the largest hawk in North America with a wingspan of 4.5 feet. I have a broad head and barrelled chest. My feet are large; my legs are feathered. I appear starkly white at a distance though my back and shoulders are reddish. In flight I display three white spots: two on top - one near each wing tip, and one at the base of my tail. My reddish legs form a "V" against my white underside and I have bold black commas at the wrists of my wings.

Habitat

I am found in western North America - southwest Canada, western United States, and northern Mexico. I prefer open terrain largely devoid of trees.

Food

I like to eat medium sized mammals, and sometimes birds, reptiles and insects. In the NCA my favorite food is the black-tailed jackrabbit and ground squirrels.

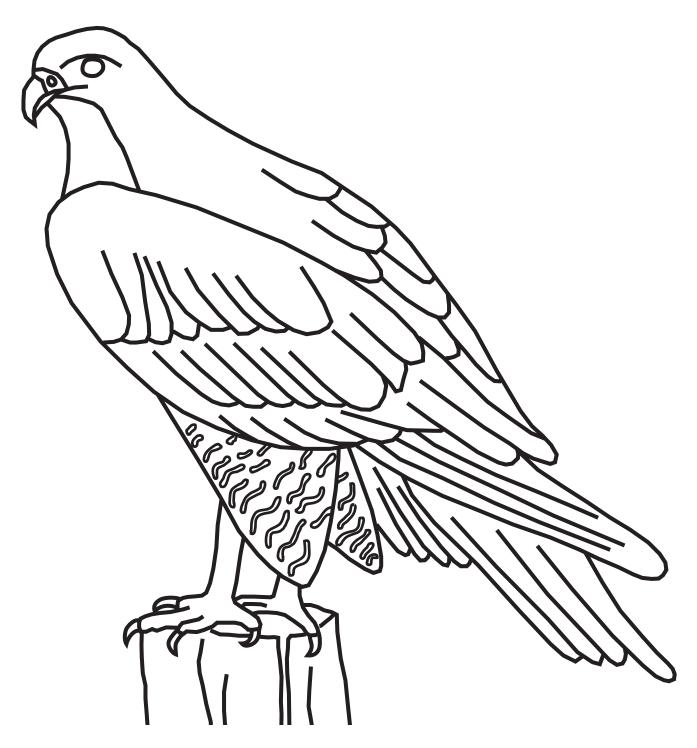
When you'll see me in the NCA.

I am seen in the NCA from April through July. You may see me sitting on the ground, a rock, fence posts, or utility poles or soaring high over the desert. I nest on the ground, steep hillsides, rock outcrops, isolated trees, nest platforms, and utility poles.

Conservation Status

While not on the Endangered/Threatened Species list, the BLM considers me to be an imperiled species in Idaho. That means I am experiencing declines in population or habitat, and am in danger of regional or local extinctions in Idaho in the foreseeable future. The NCA has put up nesting platforms for me in an attempt to increase my population. Habitat loss to agricultural development and urbanization is one of the biggest threats to my population.

Ferruginous Hawk



My back and shoulders are reddish, my underparts are white with some flecking of red and gray. My head is whiter than that of most hawks. My beak is dark blue-gray. My cere, feet and toes are yellow. My eyes are dark brown.

I am an adult Red-tailed Hawk.

My scientific name is Buteo jamaicensis.

Field Marks

I am a large buteo with a four foot wingspan. I have a chunky body and broad rounded wings. My head, back and wings are brown and my underparts are whitish. I typically have a dark band of feathers across my belly. In flight you can see the dark patagium along the leading edge of my wings and bold commas at my wrists. As an adult, I typically have a red tail. When younger, my tail was light brown with many darker bars.

Habitat

I am the most common and widespread buteo in North America. I am also found in Central America and the West Indies. I prefer open terrain with scattered elevated perches – deserts, broken forests, farm lands, and some urban areas.

Food

I like to eat small to medium sized mammals such as mice, ground squirrels and jackrabbits. I also eat birds and reptiles and on occasion insects. When available I will eat carrion.

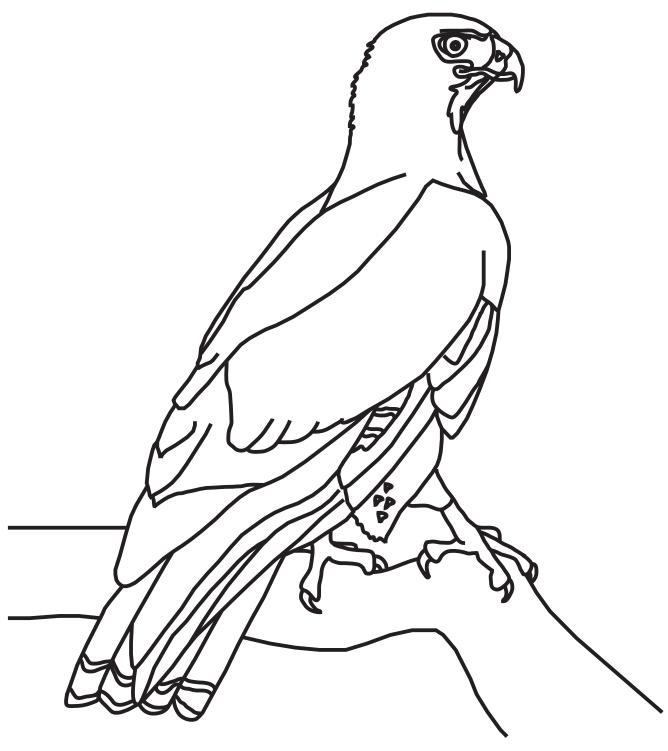
When you'll see me in the NCA.

I am seen in the NCA year-round - either as a resident or a winter visitor. I nest on cliffs, in trees, and on utility poles. You can see me anywhere in the NCA. I am commonly seen perched on utility poles searching for food.

Conservation Status

My population is increasing in much of North America due to deforestation and fire suppression which is creating habitats that I prefer. Vehicle collisions, illegal shooting and disturbance of my nest are the biggest threats I face.

Red-tailed Hawk



My head, back and wings are dark brown. My undersides are whitish. As an adult my tail is typically red. My legs and feet are yellow with dark talons. My eyes are dark brown. My beak is also dark.

I am an adult Swainson's Hawk.

My scientific name is Buteo swainsoni.

Field Marks

I am a slender buteo with a long tail, and long tapered pointed wings. I am dark brown on my back and head. I have a pale chin, a dark brown "bib", and a off-white belly with darker streaks.

Habitat

I am found in the Western Hemisphere. I "summer" in North America and "winter" in South America - primarily Argentina. In the United States you will find me west of the Mississippi. I prefer open terrain such as deserts, grasslands, prairies, shrublands and farmlands.

Food

I primarily like to eat insects such as grasshoppers, crickets, moths and butterflies. During the breeding season, my diet switches to small mammals, small birds, reptiles and amphibians - it's my way of getting water to my young.

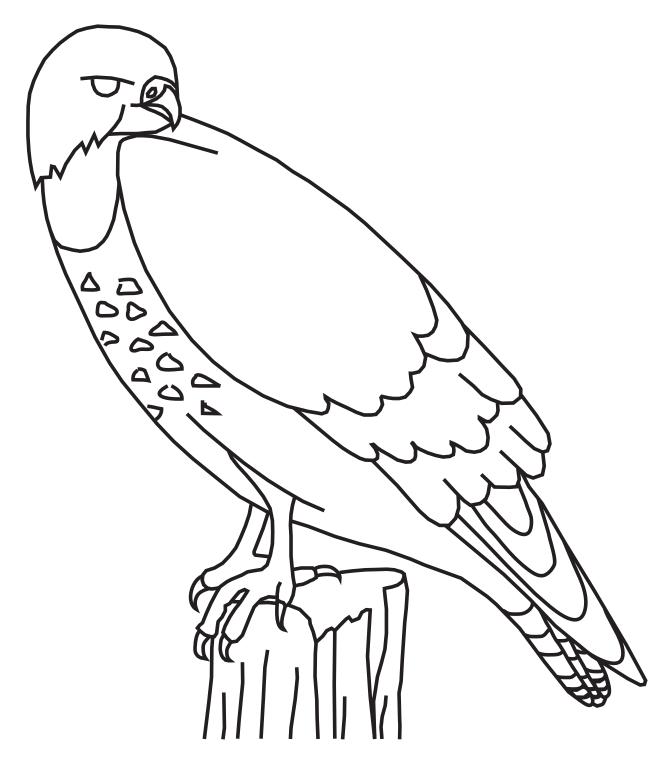
When you'll see me in the NCA.

I am seen in the NCA from April through September. I nest in trees and shrubs on or near farmland. Look for me on utility poles along roads near farms.

Conservation Status

While not on the Endangered/Threatened Species list, my numbers have declined significantly in parts of the western US. The BLM considers me to be a Watch List species in Idaho - my current population or habitat information suggests that I may need to be listed as a sensitive species in the future. Lack of suitable nest trees, and incompatilbe agriculture practices which reduce prey populations are my biggest threats. In South America the use of insecticides is also a major threat.

Swainson's Hawk



I am dark brown on my back and head. I have a pale chin, a dark brown "bib", and a streaked belly. My bill is dark gray to black. My cere is yellow. My eyes are dark brown. My legs and feet are yellow.

I am an adult Rough-legged Hawk.

My scientific name is Buteo lagopus.

Field Marks

I am a relatively small buteo with long broad wings and a long tail. I have small feet, a small beak, and my legs are feathered to my toes. Typically I have a brown back and a creamy head. My tail is white except for a broad dark band at the tip. I have heavy to light brown marking on my whitish underparts. If I'm male, the markings are heavier on my breast. If I'm female, the markings are heavier on my belly.

Habitat

I am found in the Northern Hemisphere - North America, Europe, and Asia. I prefer open treeless areas such as tundra, grasslands, and shrub steppe deserts. In North America, I breed in arctic and subarctic Alaska and Canada. I migrate south and "winter" in southern Canada and the U.S.

Food

I like to eat voles, lemmings and mice, but will also take birds. I will eat carrion when live prey is limited.

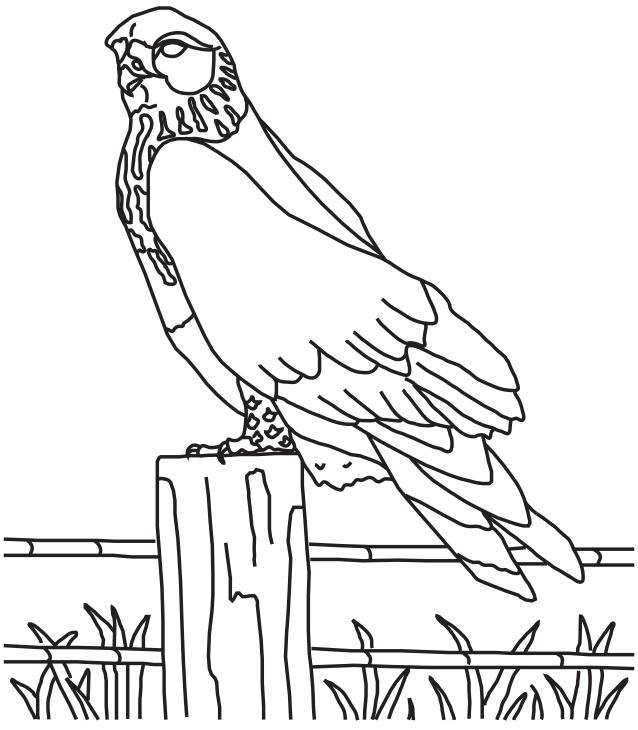
When you'll see me in the NCA.

I am seen in the NCA from November through April. I'm a winter visitor. I am often seen perched on utility poles, soaring, or hovering over the desert searching for prey.

Conservation Status

My population is under no immediate threat and I'm fairly common within my range. As petroleum reserves and other resources in the arctic are developed, maintenance of my habitat is critical to the long term survivial of my species.

Rough-legged Hawk

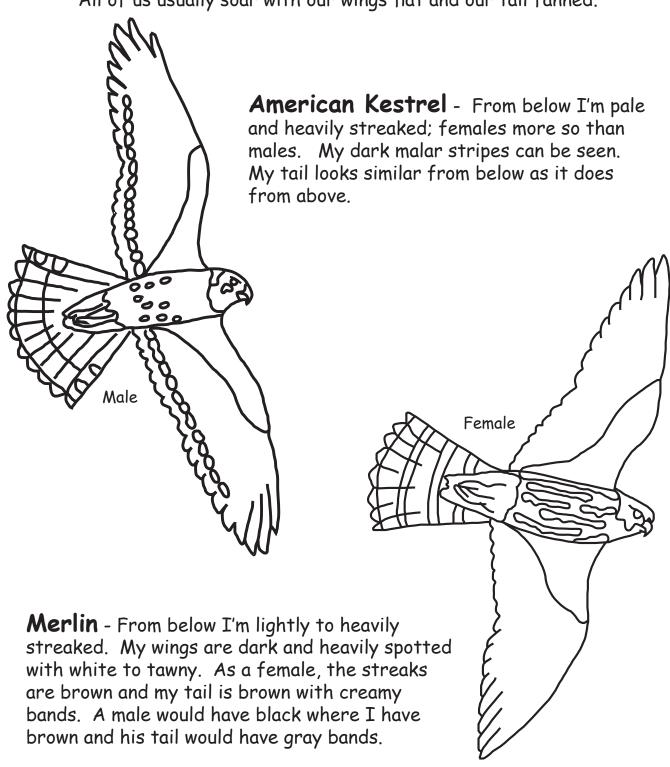


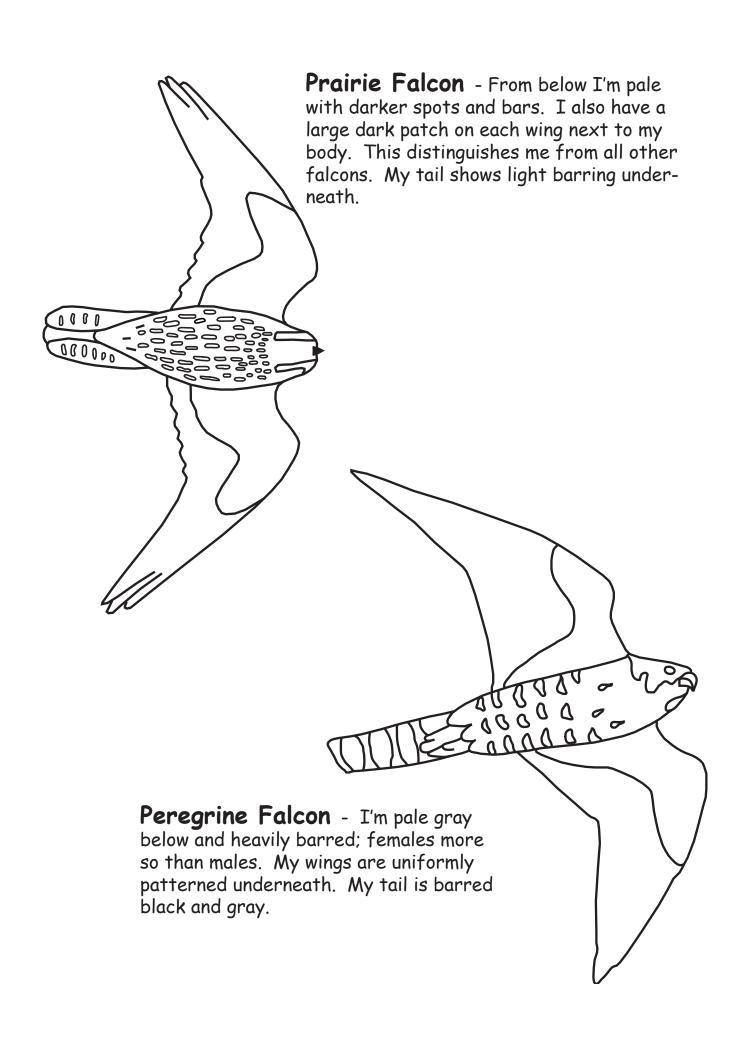
I have a brown back and a creamy head. My tail is white with a broad dark band at the tip. My wing tips exceed beyond my tail tip. My beak is dark, my cere is orange-yellow, my eyes are dark brown, and my feet and toes are bright yellow.

Falcons

These raptors have long, pointed wings and their wingbeats are rapid compared to other raptors.

All of us usually soar with our wings flat and our tail fanned.





We are adult American Kestrels.

Our scientific name is Falco sparverius.

Field Marks

We are the smallest falcon in North America. Like all falcons, we have a large head, "toothed" beak, and streamlined body. Unlike most raptors, males and females have different plumages. We both have reddish brown backs and tails, a blue-gray crown, and a white face with two black malar stripes. Males have blue-gray wings while females have reddish brown wings. Males have a wide black tail band near the white tip; females have many black bands.

Habitat

We are found throughout the Western Hemisphere - North, Central, and South America, plus the Bahamas and Antilles (islands in the Caribbean Sea). We prefer open terrain such as deserts, praires, and farm lands.

Food

We like to eat insects such as grasshoppers, dragonflies and crickets. We also eat small mammals, birds, reptiles and some amphibians.

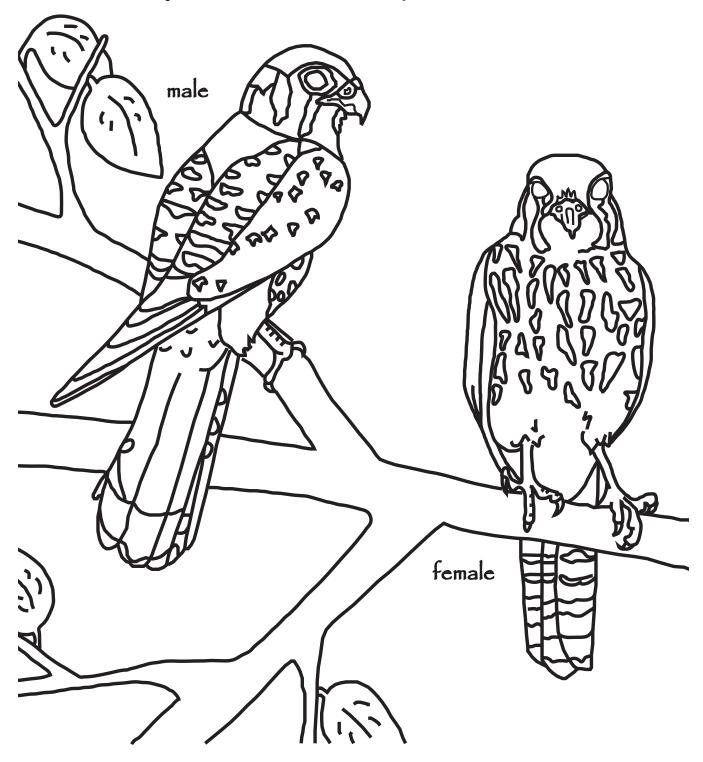
When you'll see us in the NCA.

We are seen in the NCA year-round. You can see us perched on telephone wires and poles or hovering over fields hunting for prey. When perched, we commonly bob our tails up and down. We nest in cavities in trees, cliffs, buildings and man-made nest boxes.

Conservation Status

We are considered to be abundant through most of North America. However, recent unexplained declines in our population have been noted. Collisions with vehicles, wires, and windows; being trapped in chimneys, drowning in water tanks, and electrocution on power lines are some of the threats to our population.

American Kestrel



Our eyes and beak are dark. Our legs and feet are yellow. If a male, my wings are blue-gray and my tail feathers are reddish brown with one wide black band near the white tips. If a female, my wings and tail are reddish brown and my tail has many fine black bands.

I am an adult Merlin.

My scientific name is Falco columbarius.

Field Marks

I am a small dark falcon about the size of an American Robin. Like other falcons, I have a large head, "toothed" beak, and streamlined body. There are subtle differences in the plumages of male and female. Males have blue-gray backs and wings, with a black tail with gray bands. Females have brown replacing the blue-gray and black. The bands on her tail are buffy. Both have pale underparts that are streaked.

Habitat

I am found throughout the Northern Hemisphere - North America, Europe, and Asia. In the U.S. I am rare in the Mid-west and eastern states. I prefer open to semi-open habitats such as deserts, prairies, and forests.

Food

I like to eat small to medium sized birds. I will also eat small rodents, insects and small reptiles and amphibians. I hunt bats at cave openings. I like to ambush my prey.

When you'll see me in the NCA.

I am seen in the NCA from November through February. Look for me perched on utility poles or fence posts. I often hunt near livestock feed yards because starlings and house sparrows are abundant at these sites.

Conservation Status

I am widespread but uncommon throughout my range. I experienced serious population declines due to the use of DDT during the 1950s, 60s and early 70s, but my population has increased since the ban of DDT in 1972. Threats include collisions with vehicles, poisoning, and predation by cats.

Merlin



My eyes are dark brown. My beak is dark blue-gray. My cere and legs are bright yellow. If I'm a male my back and wings are blue-gray; my tail is blue-gray with darker bands. If I'm female my back and wings are brown; my tail is brown with buffy bands.

I am an adult Prairie Falcon.

My scientific name is Falco mexicanus.

Field Marks

I am a medium sized falcon. Like all falcons, I have a large head, "toothed" beak, and streamlined body. My back and wings are medium brown, while my underside is pale with darker spots and bars. I have a dark brown malar stripe (mustache) from each eye down along my chin.

Habitat

I am found only in western North America - SW Canada, western US, and northern Mexico. I prefer open terrain such as deserts and grasslands where there are cliffs or bluffs that provide nest sites.

Food

I like to eat medium sized mammals, lizards and birds. In the NCA my favorite food is the Piute ground squirrel.

When you'll see me in the NCA.

I am seen in the NCA from February to late July. You can see me nesting on cliffs, soaring back and forth in front of cliff faces or hunting the desert north of the Snake River. I am also seen on utility poles or rock outcrops in the desert waiting for prey or I may be seen flying rapidly low across the desert hunting. Listen for my kik-kik-kik call.

Conservation Status

While my population is characterized as stable, it has declined in some areas including southwest Idaho. The BLM considers me an imperiled species in Idaho meaning I am experiencing declines in population or habitat and I am in danger of regional or local extinctions in Idaho in the foreseeable future. Habitat loss and habitat alteration due to wildfire are some of my threats.

Prairie Falcon



I am medium brown on my back and wings, while my underside is pale with darker spots and bars. My wing tips do not reach the tip of my tail. My eyes are dark brown. My cere, legs and feet are bright yellow. My beak and talons are blue-black.

I am an adult Peregrine Falcon.

My scientific name is Falco peregrinus.

Field Marks

I am a medium to large falcon - about the size of a crow. I have a dark gray head, and dark malar (mustache) patches on white cheeks. My chin and throat are white. My back and wings are dark grey; underneath I'm pale but heavily barred and spotted.

Habitat

I am found all over the world except Antarctica. I can live in a variety of habitats as long as there is open country with suitable cliffs for nesting. I also live in cities where tall buildings resemble cliffs and where there is an abundance of pigeons and other birds. I have nested at the sugar beet plant in Nampa, Idaho and on a building in downtown Boise, Idaho.

Food

I am a bird hunter, but occasionally will eat mammals, reptiles, insects and amphibians. I catch most of my prey when I'm flying, either by diving in a "stoop" or after a long chase.

When you'll see me in the NCA.

I am a very rare visitor to the NCA. You might see me migrating through the area in the fall and spring. I often follow the path of the Snake River during migration.

Conservation Status

At one time I was on the U.S. Endangered Species List. Pesticides like DDT were causing me to lay thin-shelled eggs which were easily broken killing the embryo inside. DDT was banned in 1972, and programs to breed me in captivity were started. The Peregrine Fund released 4000+ captive-reared birds over a 25 year period. In 1999, I came off the US Threatened/ Endangered Species List. Environmental contaminants continue to be one of the threats to my species.

Peregrine Falcon

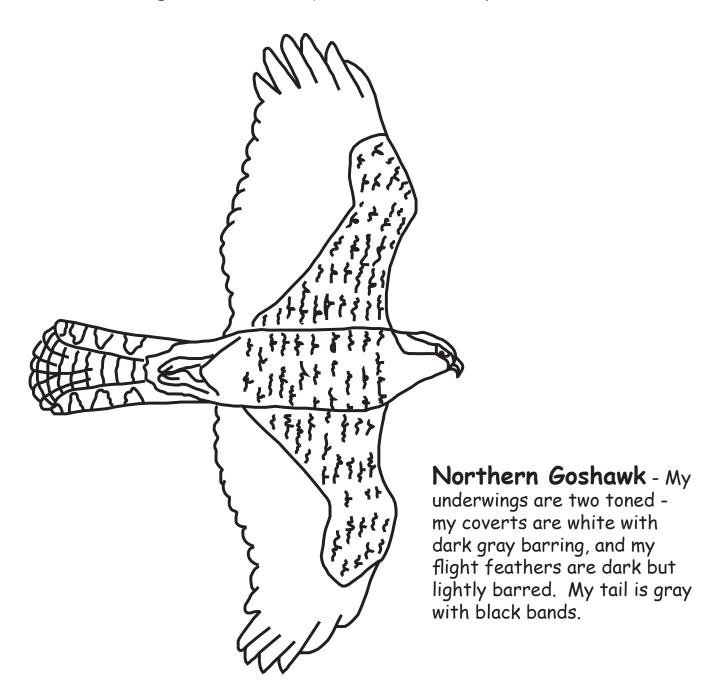


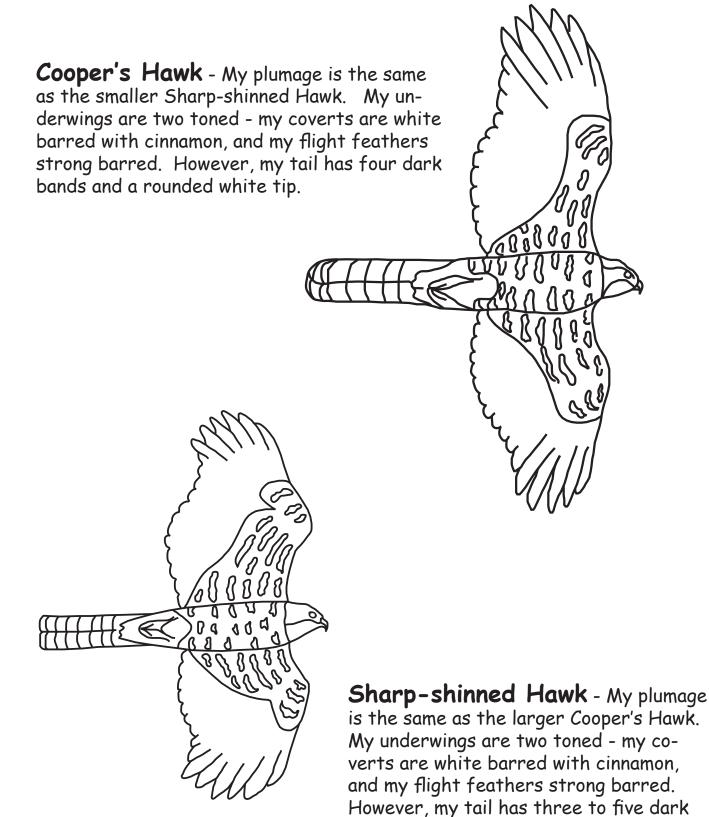
I am dark grey above with dark malar (mustache) patches on my white cheeks. Below I'm pale with heavy dark bars and spots. My eyes are dark. My cere and eye ring are yellow. My beak is blue-gray with a dark tip. My legs and feet are yellow; my talons black.

Accipiters

These forest-dwelling hawks have short broad wings and long tails for quick flight between trees and through shrubs.

All of us usually glide briefly after several rapid wingbeats. We are highly agile when chasing prey. Our short powerful wings allow for rapid acceleration and our long tails allows for quick maneuverability in trees.





bands and a squared white tip.

I am an adult Northern Goshawk.

My scientific name is Accipiter gentilis.

Field Marks

I am a large forest hawk with short rounded wings and a long tail. My back and wings are dark gray, and my underparts are light gray streaked with darker grays. The top of my head is dark gray and I have white eyebrows. My eyes are red. I have a gray tail with black bands. When I was younger, I was browner and my eyes were yellow.

Habitat

I am found throughout the Northern Hemisphere - North America, Europe, Asia, and nothern Africa. I prefer forest edges and open woodlands. I nest in forests but I hunt in a variety of habitats from open shrub deserts to dense forests.

Food

I like to eat a variety of animals though my main food is birds and mammals. I take squirrels, rabbits, grouse, woodpeckers, jays and songbirds.

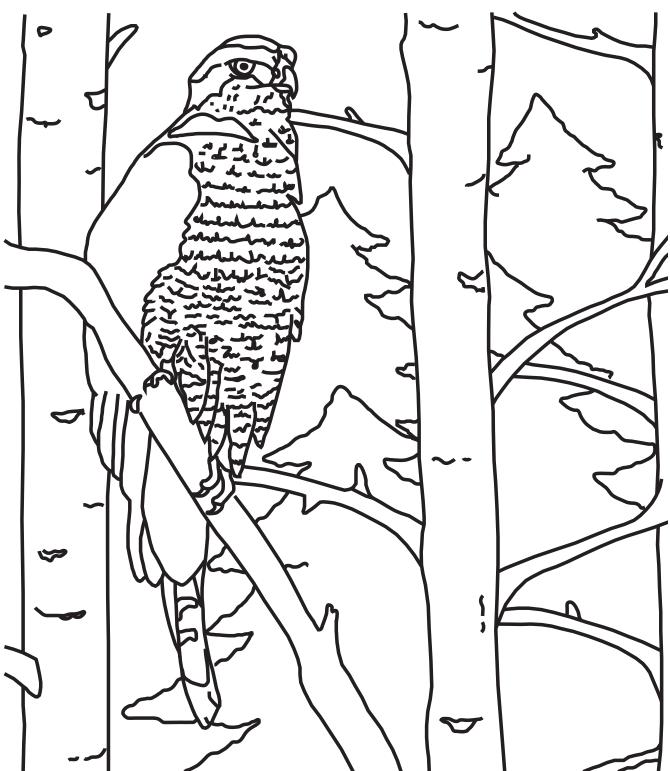
When you'll see me in the NCA.

I migrate through the NCA from August through October and again from February through May. Some of us stay for short periods during the winter (Nov. - Feb). I am usually found in thick vegetation waiting for prey.

Conservation Status

My population appears to be stable in eastern North America but it is declining in parts of the western U.S. The BLM considers me to be an Imperiled Species in Idaho meaning I am experiencing declines in population or habitat and I am in danger of regional or local extinctions in Idaho in the foreseeable future. Urbanization is contributing to declines in my population. I'm vulnerable to human disturbance of my nesting sites. Starvation and illegal shooting are the leading causes of death.

Northern Goshawk



I'm dark gray above and light gray below with heavy dark streaks. My feet, cere, toes, and legs are yellow. I have white eyebrows and my eyes are red. My bill is gray with a black tip.

I am an adult Cooper's Hawk.

My scientific name is Accipiter cooperii.

Field Marks

I am a medium sized forest hawk with short rounded wings and a long tail. My back and wings are dark gray, and my underparts are white barred with cinnamon. The top of my head is dark gray. My eyes are red. My tail has four dark bands and a white tip. When I was younger, I was browner and my eyes were yellow.

Habitat

I am found throughout North and Central America in forests and in riparian areas. I live in a variety of habitats including rural and urban areas. In the winter, you might see me catching birds that come to your backyard bird feeder in the Treasure Valley. I nest in trees in the mountains of Idaho.

Food

I like to eat small to medium sized birds and mammals. I take jays, robins, woodpeckers, small owls, rabbits, squirrels, chipmunks and other rodents. I also eat reptiles, amphibians and fish.

When you'll see me in the NCA.

I winter in the NCA from November through February, and I migrate through from February through May and again from August through October. You won't see me there in the summer. I am usually found in thickets of shrubs and trees. During migration I may be seen flying across the desert with three or four flaps and a glide.

Conservation Status

My population in the West appears to be stable but in the east, my population declined significantly in the mid 1900s. While I'm a Species of Special Concern, Threatened or Endangered in numerous eastern states, recent evidence suggests that my population has recovered in many areas. Habitat change/loss is my greatest threat.

Cooper's Hawk



I'm dark gray above and white below barred with cinnamon. My tail has four dark bands and a white tip. My feet, cere, and legs are yellow. My talons are black. My eyes are red. My bill is bluish gray with a black tip.

I am an adult Sharp-shinned Hawk.

My scientific name is Accipiter striatus.

Field Marks

I am a small forest hawk with short rounded wings and a long tail. My back and wings are dark gray, and my underparts are white barred with cinnamon. The top of my head is dark gray. My eyes are red. My tail has three to five dark bands and a white tip. When I was younger, I was browner and my eyes were yellow.

Habitat

I am found throughout North and Central America in forests and open woodlands. I live in a variety of habitats including rural and urban areas. In the winter, you might see me catching birds that come to your backyard bird feeder in the Treasure Valley. I nest in trees in the mountains of Idaho.

Food

I like to eat small birds. I take sparrows, warblers, finches, swallows, thrushes, blackbirds, quail, flycatchers and vireos. I also take small mammals such as squirrels, mice, rabbits and bats. Occasionally I'll eat large insects.

When you'll see me in the NCA.

I winter in the NCA from November through February, and I migrate through from February through May and again from August through October. You won't see me there in the summer. I am often seen by thick cover where I can ambush small birds. During migration you may see me flying across the desert with three or four flaps and a glide.

Conservation Status

My population in the West appears to be stable but in the East, my population declined in the 1970s primarily due to DDT. While my population has increased in recent years, I'm still a species of special concern in several eastern states. Threats include collisions and predation by other accipiters.

Sharp-shinned Hawk



I'm dark gray above and white below barred with cinnamon. My tail has three to five dark bands and a white tip. My cere, feet, and legs are yellow. My talons are black. My eyes are red. My bill is gray with a black tip.

*		

Osprey

This large raptor often holds its long, slender wings in a crooked "M" shape.

I am the only member of my family.



I am an adult Osprey.

My scientific name is *Pandion haliaetus*.

Field Marks

I am a large raptor with a six foot wingspan. I have a dark brown back and wings, mostly white breast and belly, a white crown and forehead, and a dark brown stripe through each eye extending down to the shoulder. I obtain my adult plumage when I'm about eighteen months old. Until that time I look similar to adults but my eyes are orange-red instead of yellow.

Habitat

I am one of the most widely distributed birds of prey in the world. I am found on every continent except Antarctica. I am usually found near open water with a plentiful supply of fish. Most osprey in North America migrate south and winter in Mexico, Central America, and northern South America.

Food

I feed almost exclusively on fish and sometimes take amphibians and reptiles. I have spiky scales on the bottom of my feet for holding onto these slippery prey. I can reach up to three feet underwater to catch a fish. I also have nose flaps which I close so I can go completely under the water, plus strong chest muscles to lift myself and the fish out of the water. I often "pack a lunch" (carry a fish) when I migrate.

When you'll see me in the NCA.

I migrate along the Snake River in the NCA in March and September. I sometimes nest along the Snake River in the NCA. I also nest at Lake Lowell, south of Nampa, and along other stretches of the Snake River in SW Idaho. I like to sit on utility poles or in trees near water so I can look for fish.

Conservation Status

I am listed as endangered/threatened/species of special concern in a number of states. I'm vulnerable to changes in water quality.

Osprey

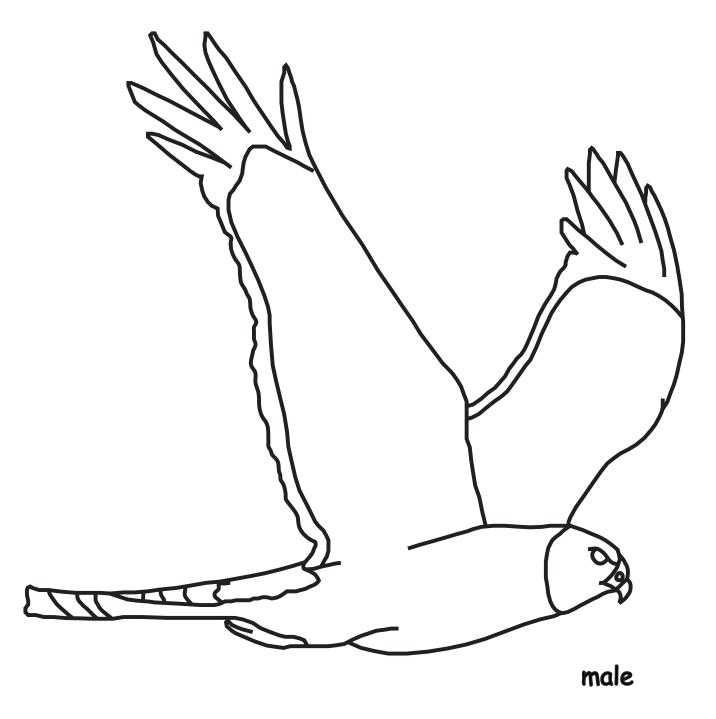
I am a large raptor with a dark brown back and wings, mostly white underneath, a white head, and a dark stripe through each eye extending down to the shoulder. My eyes are yellow. My cere is bluish gray and my beak is dull black. My legs and feet are pale bluish gray. My talons are black.

*		

Northern Harrier

This is a hawk-like raptor with long wings, long tail, and a white rump patch. Wings are often held in a "V" when flying.

I am the only Harrier in North America.



We are adult Northern Harriers.

Our scientific name is Circus cyaneus.

Field Marks

We are a medium sized slender raptor with long wings, long tail and a white rump patch. We also have a facial disk similar to that found on most owls. Male and female harriers do not look alike. Males are light gray above and whitish below with black wing tips. Females are brown above and buffy with brown streaks below. Young harriers look similar to the adult female but are darker above and reddish-brown below.

Habitat

We are found primarily in the Northern Hemisphere - North America, Central America, Europe, and Asia. We are also found in northern Africa and northern South America. We prefer open wetlands such as marshy meadows, and wet pastures; also dry uplands such as prairies, grasslands, and shrub steppe deserts. We nest on the ground.

Food

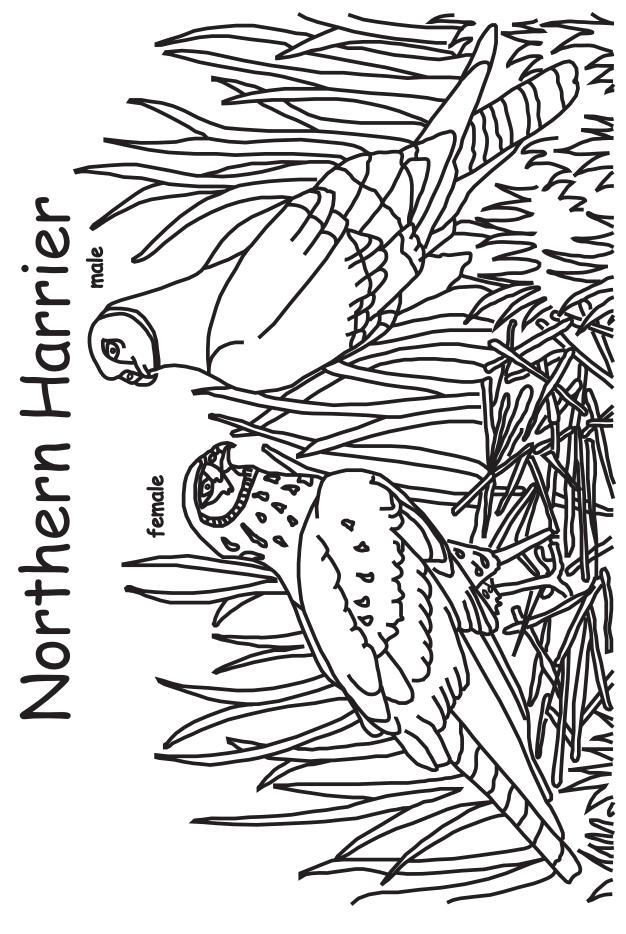
We take whatever is abundant, though we prefer small birds and mammals. We also eat reptiles, amphibians and insects. We hunt on the wing, flying low over the ground. We use both hearing and sight to find our prey.

When you'll see us in the NCA.

We are seen in the NCA year-round. Look for us flying low over the ground, our wings held in a slight "V". We nest in thick vegetation like hay fields, marshes, or large piles of tumbleweeds in draws in the desert. During the spring you may see a spectacular courtship flight of rolls, flips, and undulations.

Conservation Status

Our population is declining throughout our range. Though not on the U.S. Endangered Species list, a number of states list us as endangered, threatened, or a species of special concern. Loss of habitat is our greatest threat.

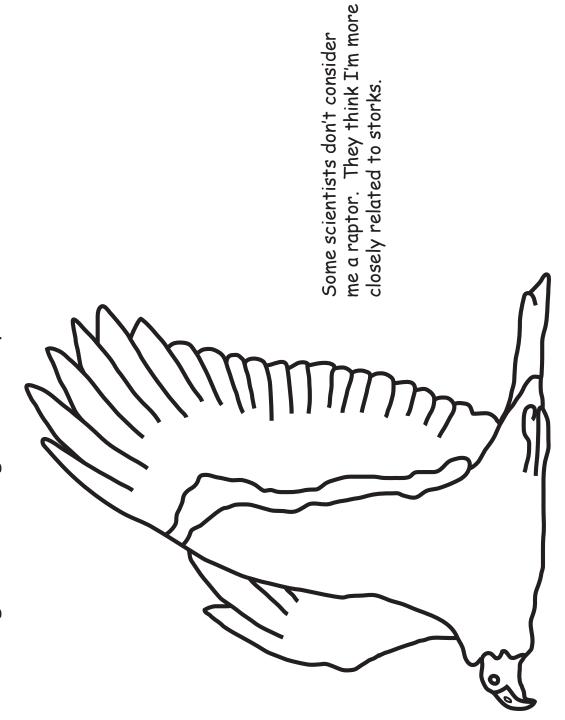


would be light gray above and whitish below with black wing tips. If a female I would be brown above Our cere, and eyes are yellow. Our beak is dark. Our legs and feet are orange-yellow. If a male I and buffy with brown streaks below.

*		

Turkey Vulture

This large, almost eagle-sized raptor has a featherless head.



I am an adult Turkey Vulture.

My scientific name is Cathartes aura.

Field Marks

I am a large raptor with a six foot wingspan. I am dark brown overall; the feathers on my neck and upper back are iridescent. My head and part of my neck are bare - reddish with black bristles. My head appears very small and neckless compared to the rest of my body. The skin of my nape and crown is loose allowing my neck to extend and the feathered "collar" to retract during feeding. When I was young I had a gray head. I gained my adult appearance by my second fall or winter.

Habitat

I am found in the Western Hemisphere from southern Canada to southern South America. I prefer open habitat with adundant carrion close to undisturbed areas for roosting and nesting.

Food

I am opportunistic - feeding on a range of wild and domestic carrion. I prefer one-day old carcasses to older ones. I use sight and my keen sense of smell to locate my food. My feet and beak are very weak so I can not kill prey effeciently, and I must wait for other animals to open a large carcass before I can feed. In the nest, my parents feed me regurgitated food.

When you'll see me in the NCA.

I am seen in the NCA from March through August. Look for me soaring along the canyon rim, over the desert, or nesting in the cliffs along the Snake River. I roost in the tall trees at Swan Falls Dam and in the delta where the Bruneau River enters C. J. Strike Reservoir.

Conservation Status

My population appears to be stable overall; however I am a species of concern in some regions. I have few predators. Threats include: collisions with vehicles and aircraft, and ingesting lead from animals that have been shot.

Turkey Vulture



I am dark brown overall; the feathers on my neck and upper back are iridescent. My head and part of my neck are bare - reddish in color with black bristles. The color of my eyes varies from buff to dark brown. My bill is ivory colored with large nostrils. My legs and feet are pink but my legs are generally stained white from excreta.

Glossary

<u>Accipiter</u> - a hawk that has short, rounded wings, and a long tail. Accipiters are forest-dwelling raptors that use their long tails like rudders as they dart about the forest. There are three species of accipiters in North America and all three can be seen in the NCA: Sharp-shinned Hawk, Cooper's Hawk, and Northern Goshawk.

<u>Bald Eagle Act</u> - This law provides for the protection of the bald eagle (the national emblem) and the golden eagle by prohibiting, except under certain specified conditions, the taking, possession and commerce of such birds.

<u>Binocular Vision</u> - Binocular vision is vision in which both eyes are used together. Each eye has its own image of an object due to the eyes' different positions on the head. The brain takes the input from each eye and creates one image. Binocular vision gives precise depth perception and visual measurement of distance. Predatory animals, like raptors, can estimate distances when hunting.

<u>Bureau of Land Management (BLM)</u> - an agency of the United Stated Department of Interior. The BLM manages public lands for a variety of uses such as energy development, livestock grazing, recreation, and wildlife habitat, while protecting a wide array of natural, cultural, and historical resources.

<u>Buteo</u> - a hawk that has a chunky body and broad wings. Buteos often soar when hunting. There are nine buteos in North America. Four can be seen in the NCA: Red-tailed Hawk, Swainson's Hawk, Ferruginous Hawk, and Roughlegged Hawk.

<u>Carnivore</u> - an animal that eats mostly meat.

<u>Carpal</u> - the wrist of a bird. Carpal patches are about halfway between the base and the tip of the wing.

<u>Carrion</u> - meat from the body of a dead animal.

<u>Cere</u> - the thick skin at the base of the upper beak of some birds such as raptors, which contains the bird's nostrils.

<u>Coverts</u> - the smaller feathers that partly overlie the flight feathers of the wing and tail at their bases.

<u>Crown</u> - top of the head.

<u>DDT</u> - dichlorodiphenyltrichloroethane - an insecticide developed in the 1940s. It was used to combat malaria and other insect-borne human diseases, and for insect control in crop and livestock production, homes, and gardens. DDT proved to be toxic to a wide range of living things and caused eggshell thinning in multiple bird of prey species resulting in severe population declines. DDT was banned in the U.S. in 1972.

<u>Diurnal</u> - describes animals including birds that are active during the day.

<u>Eagle</u> - a very large raptor with long, broad wings. Only two species are found in North America: Bald Eagle and Golden Eagle. Both these species are seen in the NCA.

<u>Endangered Species Act</u> - The purpose of this Act is to protect and recover imperiled species and the ecosystems upon which they depend. Under the Act, species may be listed as either endangered or threatened. "<u>Endangered</u>" means a species is in danger of extinction throughout all or a significant portion of its range. "<u>Threatened</u>" means a species is likely to become endangered within the foreseeable future.

Excreta - any waste matter discharged from the body, e.g. feces or urine

<u>Facial Disk</u> - a collection of relatively flat, forward facing feathers on the face of some birds - most notably owls - that helps direct sound to the bird's ears for exceptional hearing. The ears are located at the sides of the head, behind the eyes, and are covered by the feathers of the facial disc. The bird can control these feathers to focus sound, allowing them to finetune the location of prey.

<u>Falcon</u> - a raptor that has long, pointed wings and a long tail. Falcons are built for speed. There are six species of falcons found in North America. Four are seen in the NCA: Merlin, American Kestrel, Prairie Falcon, and Peregrine Falcon.

Flight Feathers - the long feathers of the wing and tail.

<u>Harrier</u> - a thin-bodied raptor that has long wings and a long tail. Harriers are usually seen flying low over fields or marshes. There is only one species in North America: Northern Harrier. It is seen in the NCA.

<u>Imperiled Species</u> - a BLM designation for a species that is experiencing significant declines in population or habitat and is in danger of regional or local extinctions in the foreseeable future if factors contributing to its decline continue.

<u>Malar Stripe</u> - a distinctively colored stripe on the cheek. Often referred to as a "mustache."

<u>Migratory Bird Treaty Act</u> - This law makes it illegal for anyone to take (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct), possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued according to Federal regulations.

This Act includes most species native to the United States. It does not apply to nonnative species introduced into the U.S. or to species that are native but not covered by the Act. Native species not covered by the Act are managed by the states within which they reside - primarily for hunting. For example: ducks and geese.

Nape - the back of the neck.

<u>National Conservation Area</u> - National Conservation Areas (NCAs) are designated by Congress to protect areas which feature exceptional scientific, cultural, ecological, historical, and recreational values. These areas are managed by The Bureau of Land Management.

Nocturnal - describes animals including birds that are active at night.

Osprey - a raptor that has long, slender wings that they often hold in an "M" shape. There is only one species in the world. It is found in North and South America, including the NCA.

<u>Owl</u> - a raptor with excellent eye sight, extraordinary hearing, and silent flight that hunts other animals at night.

<u>Patagium</u> - the area on the leading edge of the wing between the body and wrist. Red-tailed hawks have dark patagial markings.

<u>Pesticide</u> - substances meant for controlling and killing pests. Pesticides are generally chemicals and can be specific to the pest being controlled.

Plumage - a bird's feathers.

<u>Raptor</u> - a bird of prey with strong, powerful feet and short talons, and a sharp hooked beak.

Resident - a animal who lives in the same area the whole year.

Riparian Areas - the dense trees and shrubs that grow along rivers/streams.

<u>Sensitive Species</u> - native species whose population numbers are in decline putting the continued viability of the species at risk across its range.

<u>Shrub Steppe Desert</u> - a type of grassland which has sufficient rainfall/snow to support a cover of perennial grasses and/or shrubs. The habitat of the NCA is this type of desert.

<u>Species of Special Concern</u> - a native species that is either low in number, limited in distribution, or has suffered significant habitat loss.

<u>Subspecies</u> - a subdivision of a species consisting of an interbreeding, usually geographically isolated population of organisms.

<u>The Peregrine Fund</u> - a non-profit organization dedicated to saving birds of prey from extinction. Since 1984, The Peregrine Fund has been headquartered at the World Center for Birds of Prey in Boise, Idaho. Visit their website - www.peregrinefund.org - to learn more about birds of prey and to plan a visit to their Velma Morrison Interpretive Center.

<u>Tundra</u> - a tundra is an ecosystem where the tree growth is hindered by low temperatures and short growing seasons. Tundra exists in the arctic, antarctic and above treeline in mountainous areas. In a tundra, the vegetation is composed of dwarf shrubs, sedges and grasses, mosses, and lichens. Scattered trees grow in some tundras.

<u>Watch List Species</u> - a BLM designation for a species whose current population or habitat information suggests that it may warrant sensitive species status in the future

Raptor Websites

Here are some websites to help you explore raptors in more detail.

www.blm.gov/id/st/en/prog/NLCS/MNSRBP_NM.html

The website for the Morley Nelson Snake River Birds of Prey National Conservation Area. Learn more about raptors and the best time of year to visit the area.

www.peregrinefund.org/

The Peregrine Fund is a non-profit organization based in Boise, Idaho which is dedicated to saving birds of prey from extinction. View their "Explore Raptors" section to learn more about birds of prey or visit the Velma Morrison Interpretive Center in Boise.

http://ibo.boisestate.edu/

Intermountain Bird Observatory is an non-profit academic research and community out-reach program of Boise State University focused on migratory birds. Songbird and owl banding, and raptor watching occur at their Lucky Peak research site (approximately 20 miles from downtown Boise) from mid-July to late October. Visitors are welcome. A new research site was established in 2015 along the Boise River just east of Boise. Check with IBO for information on visits to that site.

www.allaboutbirds.org/

This website by The Cornell Lab of Ornithology covers all types of birds.