

These birds belong to the genus, buteo and therefore have wide, short, fan-like tails and broad rounded wing. They will likely use thermals to migrate over long distances. Thermals are warm pockets of air that

originate from the sun heating the surface of the Earth. The warm air rises in a circular motion in a column and allows raptors to ascend quickly to

thousands of fee with little effort.

Raptors will migrate based on their ability to handle temperature changes, on food availability, and on nesting grounds. In the fall, raptors will start their migrations at different times depending on the way that they migrate and seasonal changes. In the springtime, raptors will return to their mating grounds to start raising a family. Let's explore how Montana's raptors migrate!

Starting with Hawks:

#### The Red-tailed Hawk

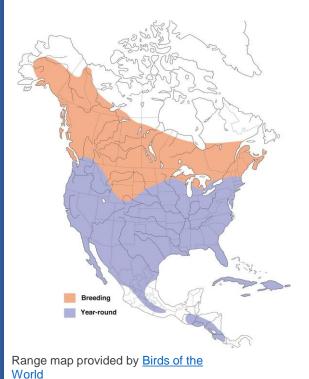
Migrant type: Resident or short-distance migrant

This is the most common hawk found in North America and one of the most well known. These raptors can be seen soaring over open fields and perching on top of telephone poles and fence posts. In most of Montana, Red-tailed hawks can be found year-round but based on food availability and temperatures, the Red-tails seen in the summer are most likely different individuals from those seen in the winter.



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The Red-tailed hawks breeding in Alaska and Canada in the summer will fly south for a few months in the winter. The Red-tails throughout the rest of the continent will often stay in their breeding grounds and share their space with the northern migrators.



It can be tricky to ID Red-tailed hawks sometimes due to them having 13 different sub species with various light and dark morphs.



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#### The Rough-legged Hawk

Migrant type: Medium-distance migrant

These birds breed in the Arctic and are typically seen in Montana in the winter. Often found over open fields, prairies, or marsh lands with trees or tall utility poles to perch on. They are buteo hawks and utilize thermals like Red-tail hawks while they migrate.

Migrators typically arrive in late fall and leave early spring, depending on the season changes. Numbers that appear are guite variable every winter. Their populations seem tied to their main food source, lemmings, in the breeding season.



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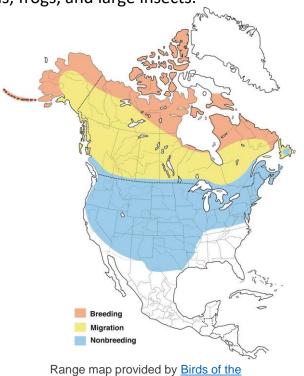
This beautiful bird's entire population shifts from the arctic breeding grounds to wintering grounds in the U.S. and Southern Canada. Only few will move farther south than central U.S.



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It can be tricky to ID these birds when they are in flight. The black patches at their wing's wrists can be very helpful when spotting the light morphs. It gets harder since they also have dark morphs, like the Redtailed hawks. The Rough-legged hawks have a very dark color throughout and a large, dark bar at the tip of their tail and a white tail base.

These birds can be seen feeding on carrion in the wintertime, especially on the side of the road. They will also feed on small mammals and occasionally birds, frogs, and large insects.



World



#### The Swainson's Hawk Migrant type: Long-distance migrant

These birds have an amazing migration that takes them from mid-west, far western region of the U.S., and Canada all the way to the southern region of Argentina every fall. That is an over 6,000-mile trip if they are migrating from Montana. They will typically leave the end of August and throughout September and return in the spring starting the beginning of April. Their path of migration narrows as the birds fly through Mexico, Texas, and Central America and causes some amazing hawk watching points in these areas.



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Swainson's hawks can be found over plains, dry grassland, farmland, and ranch areas. They are buteo hawks that highly rely on thermals for their long migration. Some birds will fast for a few days at a time to utilize days with large amounts of thermals.

apart from Range map provided by Birds of the World

They will the rest on the days with rain and lower number of thermals. While in Montana and their other breeding grounds, Swainson's hawks feed on rodents to raise their young. When they are migrating, one of their main food sources is insects. These birds will perch on the ground, on top of hay bales, or even on a farmer's tractor and hunt as many as 100 grasshoppers in one sitting. They are so good at hunting insects that they are even known as the grasshopper hawk.

They also have light and dark morphs in this species so watch for the tail color to tell them

Red-tail Hawks.



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#### The Ferruginous Hawk Migrant type: Short to medium-distance migrant

In Montana, these birds typically can just be found in breeding months and on into mid to late fall. Migrants generally take routes that do not cross the Rockies and follow grasslands. Some southern breeders stay yearround and most birds of this species do not stray east of their range.

They can be found nesting near open fields on top of trees, on a cliff, or even on the ground. Their prey is typically medium-sized mammals like jackrabbits, ground squirrels, rats, and other animals like snakes and birds.



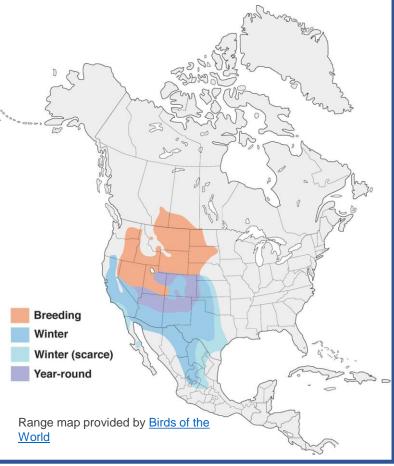
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They can be seen perched on utility poles, fence posts, or on the ground waiting near an active animal burrow. These buteos will use thermals to migrate and air currents called updrafts. Updrafts are caused by air pushing up and over hills and mountains and allow the birds to "slope soar" by riding these winds. These tactics can allow hawks, eagles, and vultures to cover 250 to 300 miles in a day.

Ferruginous Hawks are so named from their iron-colored or "ferrus" legs and underwing pattern. They also have a dark morph that is a similar color to Red-tailed hawks but typically more chestnut colored belly and inner wing leading edge. They also can be quite a bit larger than Red-tailed hawks and other hawks in Montana.



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#### The Broad-winged Hawk Migrant type: Long distance migrant

In Montana, these birds typically can be found in the northeastern section of the state during migration. They will migrate in large flocks that may contain thousands of individual birds. These large groups of raptors are called a "kettle" and, with most groups of raptors, happen only in migration seasons. This is because many raptors are more solitary birds that have their own hunting and breeding territories. During migration, however, birds will often take the same routes due to topography. Especially with birds migrating from North America down to South America.

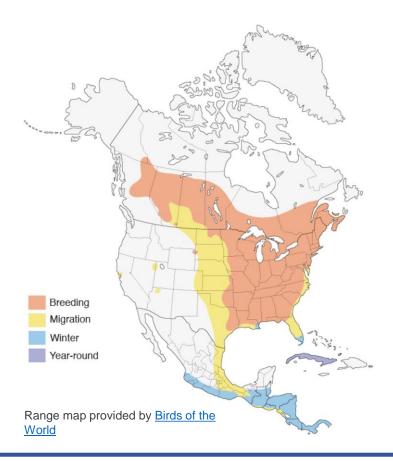


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Broad-winged hawks typically live in forests and spend most of their time underneath the canopy. They sometimes soar above the canopy or across gaps. When they migrate, they utilize thermals but also fly along coastlines and mountain ridges to use the updrafts coming off them.

They, like many other hawk species, have light morph and dark morph colorations. Their horizontal black and white striping across their tails helps to tell them apart from other hawk species in Montana. They are also quite a bit smaller than most buteo hawks, broad wings with short fan-like tail, and are about half the weight of Red-tailed hawks.







#### The Northern Goshawk

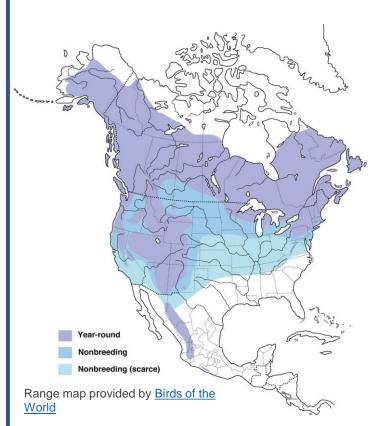
Migrant type: Resident to short distance migrant

This species can be found in Montana year-round. In some regions, younger birds are pushed from northern breeding grounds and older birds remain behind. Some populations will do short migrations in the winter to lower elevations. Larger group migrations will typically be done once every ten years when the populations of some of their main food sources up north (snowshoe hare and grouse) drop. This bird if found across northern America and also Eurasia.



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The Goshawk is an extremely powerful and agile bird that will watch for prey from a high perch and attack with quick and stealthy flights. They can do this even through dense trees or planted underlying layer of vegetation in a forest. This is largely due to their body shape, which is quite different from buteo hawks. These birds are called accipiter hawks and have rounded wings and a long rudder-like tail that helps them navigate quickly through forests and highly wooded areas.



They are typically hard to find and often live in large tracts of forest. They can occasionally be seen hunting birds near bird feeders if there is not a high population of people nearby. Most often, juveniles are found in Montana and are more likely to live near people than the adults are.



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The Cooper's Hawk
Migrant type: Short to medium-distance migrant

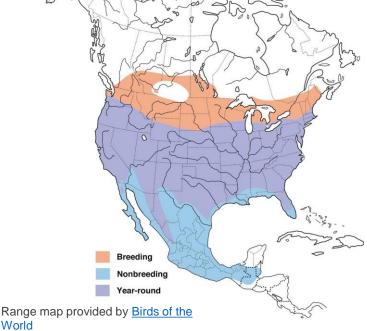
Cooper's hawks can be found over most of the continental US but some of the birds will migrate as far south as Mexico and Honduras. They are common in urban and suburban areas and some studies show that their numbers are higher in neighborhoods than in their natural habitat, forests. During migration, these birds can be seen on mountain ridgetops in the East and West. Since these birds mostly eat other birds, they might be

seen perching by songbird feeders, but they also dive between tree canopies in hot pursuit of their prey.



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These birds look very similar to the Sharp-shinned hawk, which can be found in similar areas and both reside in Montana year-round. The Cooper's hawk is smaller than a Goshawk but bigger than the Sharp-shinned hawk. The Cooper's hawk also has a more rounded shape to the end of its tail while the Sharp-shinned hawk's tail is more squared off. They have the accipiter-style flight but a flap-flap-glide pattern.





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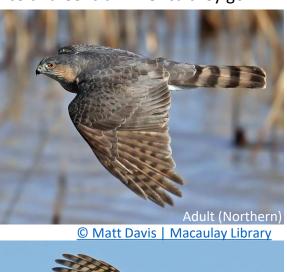
#### The Sharp-shinned Hawk Migrant type: Resident to long-distance migrant

Sharp-shinned Hawks of the Appalachians and Western mountains may remain there year-round, while birds that breed in the northern U.S. and Canada migrate and may winter in the rest of the U.S. or migrate as far as southern Central America. During migration, they can be found in open habitats or high in the sky, flying along ridgelines. They do not stoop on prey and instead speed through dense woods to surprise their prey, typically other birds. They will breed in deep forests and during nonbreeding season, they hunt small birds and some mammals along forest edges and backyard bird feeders.

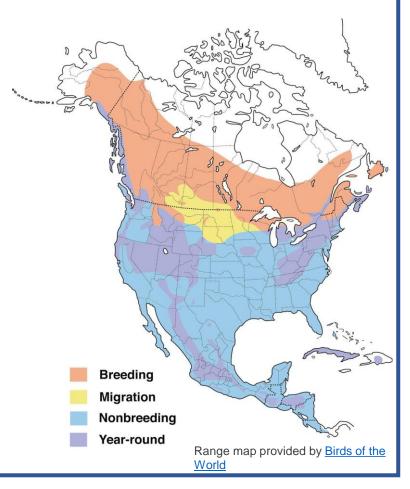


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These birds look very similar to the Cooper's hawk but are smaller and have a squared tip to their tail rather than a rounded tip like the Cooper's hawk. They will fly in a similar accipiter style but with a single flap-glide pattern. They have different colorations the farther into Mexico and Central America they go.









The Turkey Vulture
Migrant type: Resident to long-distance migrant

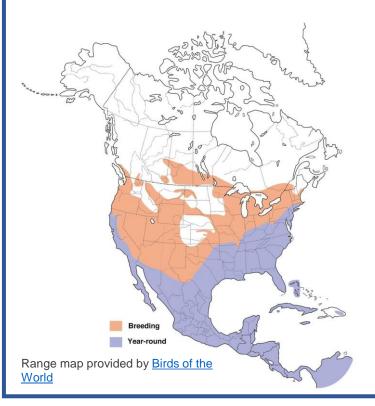
Some Turkey vultures in the southern U.S. are year-round residents. The vultures in the northeast migrate short distances south to North Carolina and Louisiana. Western birds migrate much farther south with more than a million vultures moving through Central America and some into Venezuela, Colombia, and Ecuador.

In Montana, these birds are some of the last to arrive in the spring and some of the first to leave in early September, late August. Their bald heads and legs/feet make it very difficult for them to handle the cold Montana winters.



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Turkey vultures are not commonly spotted in northern Montana, even in the spring and summer time they can be sparse. They have a large, 6-foot, wingspan that can look very similar to juvenile Bald eagles and Golden eagles. Vultures typically have their wings pushed up in a dihedral angle ("v" shape) while soaring and have a teetering flight with very few wingbeats. Under their wings, Turkey vultures have a grey coloring on their primary and secondary feathers. They also have a very small red head that can help to determine them from eagles.



They are commonly found around open areas like farm fields, country sides, roadsides, and suburbs. Due to their large size, they rely on warm pockets of air called "thermals" to help them soar without using lots of energy. They will wait for the ground to heat up and the heat to rise in the morning and then follow these circling pockets of air high into the sky. This will cause that circling behavior that is commonly seen from these and other soaring birds and can allow them to fly for up to 6 hours with out having to flap their wings.

They can be seen in small groups while flying and roost in large numbers at night, which is uncommon for most raptor species.



The Osprey
Migrant type: Resident to long-distance migrant

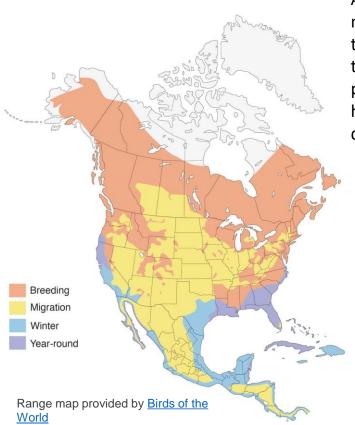


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Most Osprey that breed in North American will migrate to Central and South America for the winter. These birds will typically migrate through broad areas in the west and interior eastern U.S. A few Osprey will winter in the southern states of the U.S. like Florida, California, and Texas.

They are commonly seen soaring over shorelines, patrolling lakes and rivers, and sitting on their large nests typically found near water. Many lakes or ponds will have platforms set up to attract a breeding pair and will help keep these birds from nesting on top of electrical poles.

They are slightly smaller than eagles and larger and longer than hawks. The black streak across their head and the wing shape, more like a gull than like an eagle, will help to identify them. They will characteristically hold a fish with one foot in front of the other as they fly, helping them to grip the fish more easily and making them slightly more aero dynamic.



An Osprey may fly more than 160,000 migration miles during its 15-to-20-year lifetime. Scientists track Ospreys by strapping lightweight satellite transmitters to the birds' backs. The devices pinpoint an Osprey's location to within a few hundred yards and last for 2-3 years. During 13 days in 2008, one Osprey flew 2,700 miles.



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#### The Bald Eagle

Migrant type: Resident to long-distance migrant



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These well known and easily recognized birds have complex migration patterns that will vary with age, breeding location, and food availability. Northern adults will typically begin migrating in the fall when lakes and rivers freeze over and will shift to coasts or open water. They will return to breeding grounds depending on the weather and food. That time period can range from January to March. In Montana, they will be found year-round and often are seen scavenging on roadkill during the wintertime when hunting for fish is not available. They will mostly stay in North America and rarely venture south into Central America.

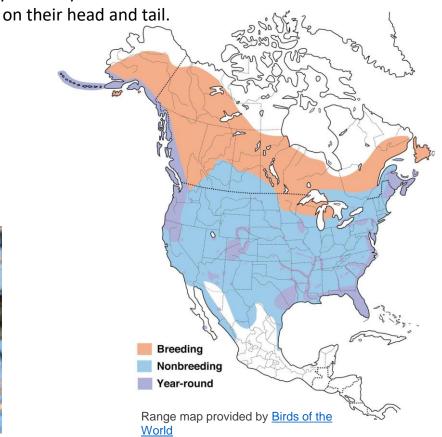
These birds are commonly known for their white head and tail with a dark brown body, but they do not get these features until they are 5 years old. In the first five years they will be mostly brown with white spotting and will even have a brown/black beak in the first 3 years. Slowly throughout their 2<sup>nd</sup> and third years they will molt in more and more white feathers



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The Golden Eagle
Migrant type: Short to medium-distance migrant



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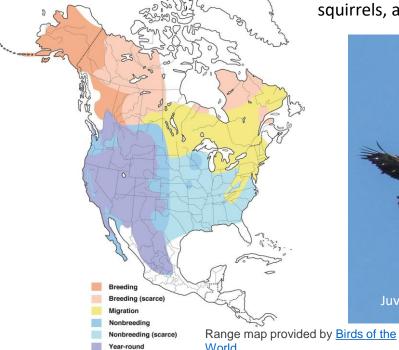
Golden eagles that breed in Alaska and Canada will migrate up to thousands of miles to wintering grounds. Southern pairs tend to be year-round residents. Leaving northern breeding grounds will coincide with the first lasting snowfall, north winds, and decreasing prey availability. They are rarely seen in the eastern states. In Montana, they can be found year-round near open country around hills, mountains, and cliffs. This bird often uses updrafts from mountains while

they are migrating and hundreds of them are counted flying over the Bridger mountain range each fall migration season. Their numbers in that count have dropped significantly over the last 20 years.

Golden eagles are typically larger than most Bald eagles but can be tricky to spot the differences while in flight. Golden eagles have a characteristic light golden color on the nape of their neck. The juveniles typically have a white patch at the base of their tail and two white patches at their wrists under their wings.

They can be seen sitting on top of tall trees and electrical poles scoping out their prey. Golden eagles are capable of hunting large animals like cranes, mountain goats, and big horn sheep

but their diet consists primarily on rabbits, ground squirrels, and prairie dogs.



Juvenile Bald Eagle Juvenile Golden Eagle © John Reynolds | Macaulay Library