

# Mountsberg Bird of Prey Assignment

## (Resource Package)

Name: \_\_\_\_\_

### Mountsberg

Meet the gang. Think all raptors are alike? Wrong. From the size of soda cans to eagles with wingspans wider than the height of most adults, Mountsberg Raptor Centre has over two dozen birds of prey; each with a unique story.



Eagles



Falcons



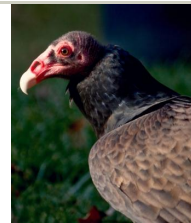
Hawks



Owls



Shrike Recovery Project



Vultures

While the extensive wetlands area supports various natural habitats for a wide diversity of plants and animals, the Mountsberg Conservation Area is truly a birdwatcher's paradise. During spring and fall migration, thousands of birds, particularly waterfowl, flock to the lake, while hundreds of songbirds flit through the forest and meadows. In addition, visitors can learn a little more about local birds of prey at the Douglas G Cockburn Raptor Centre. Tucked away in the woods of Mounstberg, the Raptor Centre has been providing educational and entertaining displays since 1994. It is currently home to 15 different species of native birds of prey, many of whom have permanent injuries which have left them incapable of surviving on their own in the wild. Often, these injuries are caused by human activity, but with the help of these feathered ambassadors, the community can learn about how to share our environment with native birds of prey, and how to reduce the negative impact we might have on them.

## 1. Red Tailed Hawk

The Red-tailed Hawk is a bird of prey, one of three species colloquially known in the United States as the "chickenhawk," though it rarely preys on standard sized chickens.[2] It breeds throughout most of North America, from western Alaska and northern Canada to as far south as Panama and the West Indies, and is one of the most

common in North America. Red-tailed Hawks can acclimate to all the biomes within their range. There are fourteen recognized subspecies, which vary in appearance and range. It is one of the largest members of the genus in North America, typically weighing from 150 to 250 g (5.3 to 8.8 oz). The Red-tailed Hawk displays sexual dimorphism in size, with females averaging about 25% heavier than males.

The Red-tailed Hawk occupies a wide range of habitats and altitudes, including deserts, grasslands, coniferous and deciduous forests, tropical rainforests, agricultural fields and urban areas. It lives throughout the North American continent, except in areas of unbroken forest or the high arctic. It is a legally protected bird in Canada, Mexico and the United States by the Migratory Bird Treaty Act.

### **Diet**

The Red-tailed Hawk is carnivorous, and an opportunistic feeder. Its diet is mainly small mammals, but it also includes birds and reptiles. Prey varies with regional and seasonal availability, but usually centers on rodents, comprising up to 85% of a hawk's diet. Most commonly reported prey types include mice, gophers, voles, chipmunks, ground squirrels and tree squirrels. Additional prey (listed by descending likelihood of predation) include lagomorphs, shrews, bats, pigeons, quail, waterfowl, other raptors, reptiles, fish, crustaceans, insects and earthworms. Where found in Caribbean islands, Red-tailed Hawks prey mostly on reptiles such as snakes and lizards, since these are perhaps the most predominant native land animals of that region. Prey specimens can range to as small a size as beetles and worms. However, they can also prey on marmots, White-tailed Jackrabbits, small domestic dogs, domestic cats, or female Wild Turkey, all of which are easily double the weight of most Red-tails. Although they prefer to feed on fresh prey they've killed themselves, these hawks are not above occasionally consuming carrion. During winter in captivity, an average Red-tail will eat about 135 g (4.8 oz) daily.

The Red-tailed Hawk commonly employ one of two hunting technique. Often, they scan for prey activity from an elevated perch site, swooping down from the perch to seize the prey. They also watch for prey while flying, either capturing a bird in flight or pursuing prey on the ground until they can pin them down in their talons. Red-tailed Hawks, like some other raptors, have been observed to hunt in pairs. This may consist of stalking opposites sides of a tree, in order to surround a tree squirrel and almost inevitably drive the rodent to be captured by one after being flushed by the other hawk.[ They are opportunistically attracted to conspicuous meals, such as displaying male Red-winged Blackbirds.

### **Flight**

In flight, this hawk soars with wings often in a slight dihedral, flapping as little as possible to conserve energy. Active flight is slow and deliberate, with deep wing beats. In wind, it occasionally hovers on beating wings and remains stationary above the ground.[9] When soaring or flapping its wings, it typically travels from 32 to 64 km/h (40 mph), but when diving may exceed 190 km/h (120 mph).

## 2. Great Horn Owl

### Description

The Great Horned Owl also known as the Tiger Owl, is a large owl native to the Americas. The Great Horned Owl is the heaviest extant owl in Central and South America and is the second heaviest owl in North America, after the closely related but very different looking Snowy Owl. There is considerable variation in plumage coloration but not in body shape. This is a heavily built, barrel-shaped species that has a large head and broad wings. Adults have large ear tufts and it is the only very large owl in its range to have them. The facial disc is reddish, brown or gray in color and there is a variable sized white patch on the throat. There are individual and regional variations in color; birds from the subarctic are a washed-out, light-buff color, while those from Central America can be a dark chocolate brown.

Its call is normally a low-pitched but loud *ho-ho-hoo hoo hoo* but it can occasionally be reduced to four syllables instead of five. The female's call is higher and rises in pitch at the end of the call. Young owls still in the care of their parents make loud, persistent hissing or screeching sounds that are often confused with the calls of the Barn Owl.

The combination of the species' bulk, prominent ear-tufts and barred plumage distinguishes it through much of the range. However, the Great Horned Owl can be easily confused with the Lesser or Magellanic Horned Owl with which it may have limited overlap in southernmost South America. The Magellanic was once considered a subspecies of the Great Horned, but it is markedly smaller with smaller feet and a smaller head and is generally more lightly barred on the underside. Other eagle-owls may superficially be somewhat similar, but the species is allopatric with the exception of the Magellanic species.

Like most owls, the Great Horned Owl makes great use of secrecy and stealth. Due to its natural-colored plumage, it is well camouflaged both while active at night and while roosting during the day. Despite this, it can still sometimes be spotted on its daytime roosts, which are usually in large trees but may occasionally be on rocks. This regularly leads to their being mobbed by other birds, especially American Crows. Since owls are, next to Red-tailed Hawks, perhaps the main predator of crows and their young, crows sometimes congregate from considerable distances to mob owls and caw angrily at them for hours on end.

Owls have spectacular binocular vision, allowing them to pinpoint prey and see in low light. The eyes of a Great Horned Owl are nearly as large as those of a human being and are immobile within their circular bone sockets. As a result, instead of turning its eyes, an owl must turn its whole head, the neck capable of rotating a full 270 degrees, in order to see in various directions without moving its entire body.

An owl's hearing is as good as, if not better than, its vision. Owls have better depth perception and better perception of sound elevation (up-down direction) than human beings. This is due to the asymmetrical positions of owl ears on either side of the head. The right ear is typically set higher in the skull and at a slightly different angle. By tilting or turning its head until the sound is the same in both ears, an owl can pinpoint both the horizontal and vertical direction of the sound's source.

Owls also have approximately 300 pounds per square inch (PSI) of crushing power in their talons, a PSI greater than the human hand is capable of exerting. In some cases

the gripping power of the Great Horned Owl may be comparable to much larger raptor species such as the Golden Eagle.

Owls hunt mainly by watching from a snag, pole or other high perch, sometimes completely concealed by the dusky night and/or partially hidden by foliage. From such vantage points, owls dive down to the ground, often with wings folded, to ambush their prey.[6] They also hunt by flying low over openings on the ground, scanning below for prey activity. On occasion owls may actually walk on the ground in pursuit of small prey or, rarely, inside a chicken coop to prey on the fowl within. They have even been known to wade into shallow water for aquatic prey, although this has been only rarely reported.<sup>[citation needed]</sup> Owls can snatch birds and some arboreal mammals directly from tree branches as well. The stiff feathering of their wings allows owls to produce minimal sound in flight while hunting.

Almost all prey is killed with the owl's talons, often instantly, though some may be bitten about the face as well. Prey is swallowed whole when possible. However an owl will also fly with prey to a perch and tear off pieces with its bill. Very large prey, any that is notably heavier than the owl, must be eaten where it is killed for it is too heavy to fly with. In northern regions where such large prey is prevalent, an owl may let uneaten food freeze and then thaw it out later using its own body heat. When prey is swallowed whole, owls regurgitate pellets of bone and other non-digestible bits about 6 to 10 hours later, usually in the same location where the prey was consumed.[ Great Horned Owls kill Snowshoe Hares more often in open than in closed forest types, and they avoid or have less hunting success in habitat with dense shrub cover.

## **Prey**

Prey can vary greatly based on opportunity. According to one author, "Almost any living creature that walks, crawls, The predominant prey group are small to medium-sized mammals such as hares and rabbits, which are statistically the most regular prey, as well as any small to moderately sized rodent such as rats, squirrels, flying squirrels, mice, lemmings and voles. Other mammals eaten regularly can include shrews, bats, armadillos, muskrats, martens and weasels. Studies have unsurprisingly indicated that mammals that are primarily nocturnal in activity, such as rabbits, shrews or rodents, are generally preferred. Red-tailed Hawks sometimes considered a potential competitor to the Great Horned due to their overlapping range (in North America), habitat preferences and broadly similar (and similarly broad) prey selection, often focus their diet largely on the diurnally active squirrels.

The Great Horned is also a natural predator of prey two to three times heavier than itself, such as porcupines, marmots and skunks. According to the Cornell Lab of Ornithology, the Great Horned Owl is the only regular avian predator of skunks.[2] In one case, the remains Water birds, especially coots and ducks, are hunted fairly often; even raptors, up to the size of Red-tailed Hawks and Snowy Owls, are sometimes taken. Other birds, being primarily diurnal, are often snatched from their nocturnal perches as they sleep. The Great Horned Owl is a potential predator of any other owl species found in the Americas, of which there are several dozen. Birds of prey are often plucked before eaten and the legs and much of the wings are torn off and discarded.

Reptiles (to the size of young American alligators amphibians, fish, crustaceans and even insects, centipedes, scorpions and earthworms are occasional supplemental prey. It is common for people to deal with troublesome wildlife by placing plastic replicas of Great Horned Owls on their property since many small animals will actively avoid areas

inhabited by them, but it is necessary to move them regularly so animals do not realize that the owls are not real

### **3. American Kestrel Falcon**

The American Kestrel (*Falco sparverius*), sometimes colloquially known as the Sparrow Hawk, is a small falcon, and the only kestrel found in the Americas. It is the most common falcon in North America, and is found in a wide variety of habitats. At 19–21 cm (7–8 in) long, it is also the smallest falcon in North America. It exhibits sexual dimorphism in size and plumage, although both sexes have a rufous back with noticeable barring. Juveniles are similar in plumage to adults.

The American Kestrel hunts by hovering in the air with rapid wing beats or perching and scanning the ground for prey. Its diet typically consists of grasshoppers, lizards, mice, and small birds. It nests in cavities in trees, cliffs, buildings, and other structures. The female lays three to seven eggs, which both sexes help to incubate. It is a common bird to be used in falconry, especially by beginners.

Its breeding range extends from central and western Alaska across northern Canada to Nova Scotia, and south throughout North America, into central Mexico and the Caribbean. It is a local breeder in Central America and is widely distributed throughout South America. Most birds breeding in Canada and the northern United States migrate south in the winter. It is an occasional vagrant to western Europe.

#### **Description**

The American Kestrel is the smallest falcon in North America and, under traditional classification, is the smallest raptor in America.] The American Kestrel is sexually dimorphic, although there is some overlap in plumage coloration between the sexes. The bird ranges from 12 to 27 cm (4.7 to 10.6 in) in length with a wingspan of 50–61 cm (20–24 in). The female kestrel is larger than the male. The male weighs 80–105 g (2.8–3.7 oz), as opposed to the female which weighs 100–120 g (3.5–4.2 oz). In standard measurements, the wing bone is 16–21 cm (6.3–8.3 in) long, the tail is 11–15 cm (4.3–5.9 in) and the tarsus is 3.2–4 cm (1.3–1.6 in).

In contrast to many other raptor species, the sexes differ more in plumage than in size. Males have blue-grey wings with black spots and white undersides with black barring. The back is rufous, with barring on the lower half. The belly and flanks are white with black spotting. The tail is also rufous, with a white or rufous tip and a black subterminal band. The back and wings of the female American Kestrel are rufous with dark brown barring. The undersides of the females are creamy to buff with heavy brown streaking. The tail is noticeably different from the male's, being rufous in color with numerous narrow dark black bars. Juveniles exhibit coloration patterns similar to the adults'. In both sexes, the head is white with a bluish-grey top. There are also two narrow, vertical black facial markings on each side of the head, while other falcons have one. Two black spots can be found on each side of the white or orangish nape on the back of the head. The function of these spots is debated, but the most commonly accepted theory is that they act as "false eyes", and help to protect the bird from potential attackers. The wings are moderately long, fairly narrow, and taper to a point.

#### **Ecology and behavior**

American Kestrels are found in a wide variety of habitats, including grasslands, meadows, deserts, and other open to semiopen regions. They can also be found in both urban and suburban areas. A kestrel's habitat must include perches, open space for hunting, and cavities for nesting (whether natural or man-made).[16] The American Kestrel is able to live in very diverse conditions, ranging from above the Arctic Circle,[17] to the tropics of Central America, to elevations of over 4,500 m (14,764 ft) in the Andes Mountains.[18] The bird is distributed from northern Canada and Alaska to the southernmost tip of South America, Tierra del Fuego. It is the only kestrel found in the Americas.[19] It has occurred as a vagrant in the UK, Denmark, Malta and the Azores.[20]

American Kestrels in Canada and the northern United States typically migrate south in the winter, sometimes going as far as Central America and the Caribbean. Birds that breed south of about 35° north latitude are usually year-round residents. Migration also depends on local weather conditions.[21] Wintering kestrels' choice of habitat varies by sex. Females are found in open areas more often than males during the non-breeding season. A common explanation for this behavior is that the larger females arrive at the preferred habitat first and exclude males from their territory.[22]

The American Kestrel is not long-lived, with a lifespan of <5 years for wild birds.[23] The oldest banded wild bird was 11 years and 7 months,[24] while captive kestrels can live up to 14–17 years.[23] In a study, humans accounted for 43.2% of 1,355 reported deaths, which included direct killing and road kills, while predation (including by larger birds of prey) accounted for 2.8%. This statistic is likely biased, however, as reported deaths are usually found near or in areas populated by humans.

## **Feeding**

American Kestrels feed largely on small animals such as grasshoppers, dragonflies, lizards, mice, and voles. They will occasionally eat small birds. The kestrel has also been reported to have killed snakes, bats, and squirrels.[25] The kestrel is able to maintain high population densities, at least in part because of the broad scope of its diet. The American Kestrel's primary mode of hunting is by perching and waiting for prey to come near. The bird is characteristically seen along roadsides or fields perched on objects such as trees, overhead power lines, or fence posts. It also hunts by kiting, hovering in the air with rapid wing beats and scanning the ground for prey. Other hunting techniques include low flight over fields, or chasing insects in the air.

Prey is almost always caught on the ground. Before striking, the kestrel characteristically bobs its head and tail, then makes a direct flight toward the prey to grab it in its talons. During the breeding season, the bird will carry large prey back to its mate or young.

# Mountsberg Bird of Prey Assignment

## (Short Answer and Crossword)

**Name:** \_\_\_\_\_

1. What are the 5 main types of raptors?
  - a.
  - b.
  - c.
  - d.
  - e.
2. Mountsberg is currently home to how many different species of native birds of prey?
3. What are three main reasons why these birds are now currently staying at the raptor center?
  - a.
  - b.
  - c.
4. What is another name for the red-tailed hawk is know as in the United States?
5. What is the difference in size, with females and males with respect to weight?

6. The Red-tailed Hawk is legally protected in what 3 countries?
  - a.
  - b.
  - c.
  
7. The Red-tailed Hawk is carnivorous, and an opportunistic feeder. What are the most common 5 reported prey types include?
  - a.
  - b.
  - c.
  - d.
  - e.
  
8. List 4 larger species of prey that are easily double the weight of most Red-tails?
  - a.
  - b.
  - c.
  - d.
  - e.
  
9. How fast does a hawk fly when soaring or flapping its wings and also when diving what speed may exceed?
  
10. What is the Great Horned Owl also known as?
  
11. What is the call is normally of a great horned owl and how does the pitch differ at the end of the call?



12. What three features distinguishes it from other owls except for the Magellanic Horned Owl?
  - a.
  - b.
  - c.
13. What two things does the Great Horned Owl makes great use?
  - a.
  - b.
14. What is the owls vision compared to in the paper ?
15. How far can they rotate their neck an to see in various directions without moving its entire body?
16. Owls also have approximately have how many pounds per square inch (PSI) of crushing power in their talons?
- 17.** What does an owl need to do when prey is swallowed whole?
- 18.** What are 3 examples of the Great Horned prey that is two to three times heavier than itself?
  - a.
  - b.
  - c.

- 19.** What large reptiles that might fall prey to an big horned owl surprises you?
20. What is the American Kestrel, sometimes colloquially known as?
21. How does the American Kestrel hunts its prey?
- 22.** What is the commonly accepted theory of the function of these black spots on the back of the head?
- 23.** What is the expected life of the American Kestrel in the wild and in captivity?
24. What are 5 species that the American Kestrels feed largely on?
- a.
  - b.
  - c.
  - d.
  - e.
25. Where does the American Kestrels, during the breeding season bring its prey?