

Liberty Wildlife Rehabilitation Foundation



Liberty Wildlife

Education Program's Natural History



**AMERICAN
KESTREL**

American Kestrel (*Falco sparverius*)

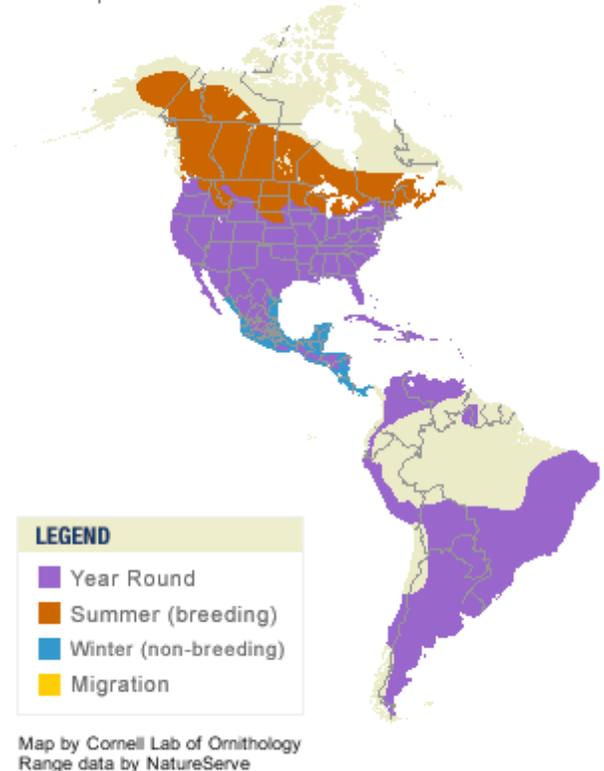
Range: The American kestrel is the smallest and most numerous and most widespread falcon found in North America. It can be found throughout the New World from Alaska to southern most South America and the West Indies, but is absent from heavily forested areas including the Amazon basin. It is found throughout Arizona.



Habitat: The American kestrel is very widely distributed, ranging from alpine zones to deserts. It favors a habitat where it has open space to hunt and wooded areas where it can perch to aid in hunting and cavities in which to nest. Highly adaptable, they can be found in urban areas, deserts, open fields, and forest edges. Northern populations will migrate south during the winters while southernmost populations completely resident.

Description: The American kestrel is one of the few raptors that the sexes can be distinguished accurately by the plumage (dichromatic). The male's wings are blue-gray with spots. Its chest and belly are light with dots or spots. The tail has a wide black band and white or rufous tip. The female has rufous wings with black bars across them. Her chest and belly are light with dark streaks. The back and tail have dark bars across them. Both sexes have a dark vertical line running through the eyes and a notched tooth on their beak (tomial tooth). They have feet that are highly adapted to grasping their prey and very long toes. The wings are long and pointed like other falcons and measure 20 to 24 inches. Typically this falcon weighs between 3 and 6 ounces, with the female weighing up to 1/3 more than the male. The American kestrel measures 9 to 12 inches in length and has a long tail. It is a very noisy bird. Its most common vocalization is a loud, distinctive series of "klee-klee-klee." Its other vocalizations are a whine, usually associated with food or mating; and a chitter generally uttered between the males and females indicating social and non aggressive tendencies. (Johnsgard)

American Kestrel
Falco sparverius



Hunting/Prey: The American kestrel hunts primarily from perches (over 95% of its attacks) such as trees or utility poles or telephone lines or similar small wires. (Johnsgard) The kestrel is one of the few birds that truly hovers in place. This allows it to hover then drop down on its prey. Most prey is captured on the ground, although flying insects and birds may be caught in the air. Prey is often but not always decapitated. In dives or stoops, the kestrel can reach speeds up to 60 m.p.h. Typical food prey includes primarily large insects (especially grasshoppers) and small rodents, but also includes small birds, reptiles and amphibians. In an Arizona study, the kestrel's diet weighed by prey mass consisted of 35% birds (particularly the horned lark and sparrows), 32% mammals (deer mice primarily), 32% reptiles (primarily lizards), and 5% insects (beetles, grasshoppers and cicadas). The average prey weight was 14.8 grams or .52 ounces. (Johnsgard)

Breeding/Nesting: American kestrels are cavity nesters, nesting in holes or crevices in cacti, trees, buildings or nest boxes. They do not make their own holes and must depend on natural cavities or holes built by other birds; as a result they have to compete with woodpeckers, owls, squirrels and non native love birds. They do not add any material to the nest hole. The female usually lays 4 to 5 eggs; laid at the rate of one every 24 to 72 hours. The eggs are white to yellowish with scattered small dark spots. Both sexes regularly incubate, with the male incubating 15 – 20 % of the total incubation which lasts between 28 and 30 days. The young grow quickly assuming adult weight in 16 to 17 days. (Johnsgard) They fledge in about 25 days and continue to rely on their parents for food for 2 or 3 weeks after fledging. Young American kestrels are capable of breeding as yearlings. (Cornell) Usually, the kestrel only has one brood each year, but may have two if the first fails.

Lifespan: The average life expectancy of the American kestrel has been estimated by some to be between two and five years while others report eight to 10 years in the wild. The oldest known lived to be 11 years. In captivity, the longest known kestrel lived to be 14 years.

Threats: Some of the main threats are: larger hawks or falcons, predation on the young by crows and ravens, illegal shooting and domestic cats and dogs.

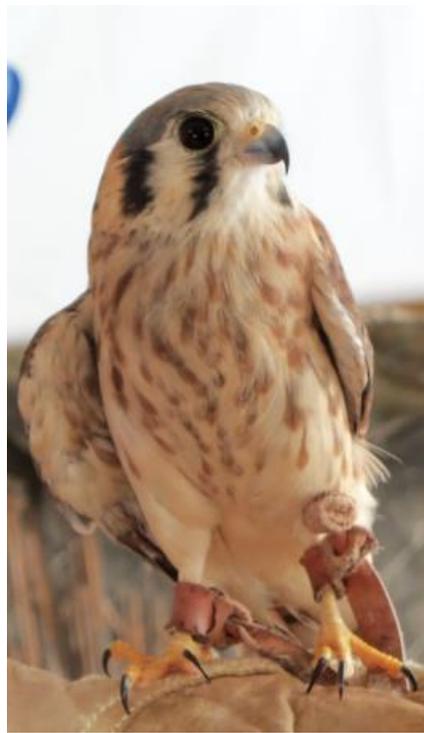
Other American kestrel Facts:

- The American kestrel is the smallest falcon found in North America and is second smallest only to the Seychelles Kestrel, the smallest falcon in the world.
- It is also the most numerous and widespread falcon found in North America.
- Of the 13 kestrel species found throughout the world, the American kestrel is the only one found in North America.
- There are 17 subspecies of the American kestrel; three of these are found only in North America.
- When the young are learning to hunt, kestrels will often hunt in family units.
- Although often overlooked as a dove, kestrels often can be identified by the bobbing head and/or tail.
- The American kestrel is a secondary cavity nester. They do not make their own holes. They rely upon woodpeckers to make the original hole in the cacti or trees.
- Kestrels are able to see ultraviolet light. This aids them in hunting because mice leave urine trails to mark their path. This urine trail reflects ultraviolet light which allows the kestrel to follow the mouse's trail and grab it from its hover.



- Its scientific name translates from Latin *Falco* meaning “hooked shape” referring to either its beak or talons and *sparverius* a Latinized French word meaning “sparrow hawk.”
- In addition to Sparrow Hawk, the American kestrel also has been called the Killy Hawk (for the sound it makes) and the Wind Hover (for its ability to hover).
- The American kestrel can hover in place, unlike most other raptors which only kite in the wind. Hovering provides them an advantage in hunting for their prey.
- The notch on the kestrel’s beak, characteristic of other falcons, is called a tomial tooth and is used to break its prey’s spine as soon as it is captured. This does not kill the prey, but helps in preventing the thrashing prey from injuring the falcons or escaping.
- Also characteristic of falcons, the kestrel’s nostril have a prominent central bony structure to aid in breathing at high speeds.
- The kestrel has two dark spots on its back thought to represent two eyes to help protect it from predators approaching from behind. These false eyes may create the impression that the kestrel is watching the predator and prepared for flight.
- Kestrels are among the first birds a falconer can begin to train. In Medieval times, certain birds were assigned to certain classes. Only kings were allowed to use the Peregrine falcon for hunting. The kestrel was permitted to the knave or servant for hunting.
- The dark lines under the kestrel’s eyes are thought to assist the falcon in hunting by deflecting the sun, similar to athletes who place black marks beneath their eyes.
- Nesting Kestrels back up, raise their tails, and squirt feces onto the walls of the nest cavity. The feces dries on the cavity walls and stay off the nestlings. The nest gets to be a very smelly place.
- The American kestrel is considered one of the most colorful raptors in the world.
- Because of the efficient parental defense, there is a high survival rate for fledglings 90 – 98%. (Johnsgard)
- Although considered the most abundant of the world’s kestrels, the American kestrel population in Florida is listed as threatened, probably due to habitat loss. (Johnsgard)
- Kestrels cache uneaten remains of prey and surplus kills. Insects are seldom cached.
- Mated pairs usually remain together from year to year as long as both live. They will find a new mate if the original mate disappears.
- The male locates potential nest cavities within his established territory, and then escorts the female to them; the female makes the selection.
- It is estimated that in North America, there are 1.2 million nesting pairs of American kestrels, with an equal number in Central and South America.
- Because of its diversity of prey (both insects and vertebrates), the kestrel differs from larger North American falcons in its ability to maintain fairly high population densities. (Johnsgard)
- In nest selection, the kestrel is dominant over other species of cavity-nesting birds and mammals such as chipmunks and squirrels. Competition with screech owls is severe. Sometimes the eggs or young of both screech owls and kestrels have been found in the same nest. (Johnsgard)
- Kestrels engage in highly aggressive behavior towards other raptors, especially larger species. (Wheeler)





Lexi

Lexi arrived at Liberty Wildlife on August 12, 2009 as a juvenile imprint with folding fractures (left wing fracture). She had been found in Phoenix and was kept illegally and fed an improper diet resulting in both the imprinting and folding fractures. She is not fully flighted and cannot be released.

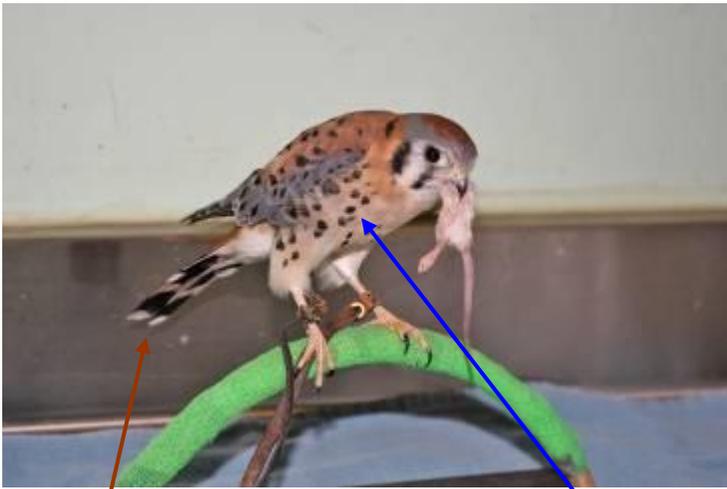




Veto

Veto arrived at Liberty Wildlife on July 29, 2008 as an imprinted juvenile. A well meaning rescuer had found him on the ground in Phoenix and hand fed him for three weeks before bringing him to Liberty. Consequently, Veto is non-releasable and part of our Education Team





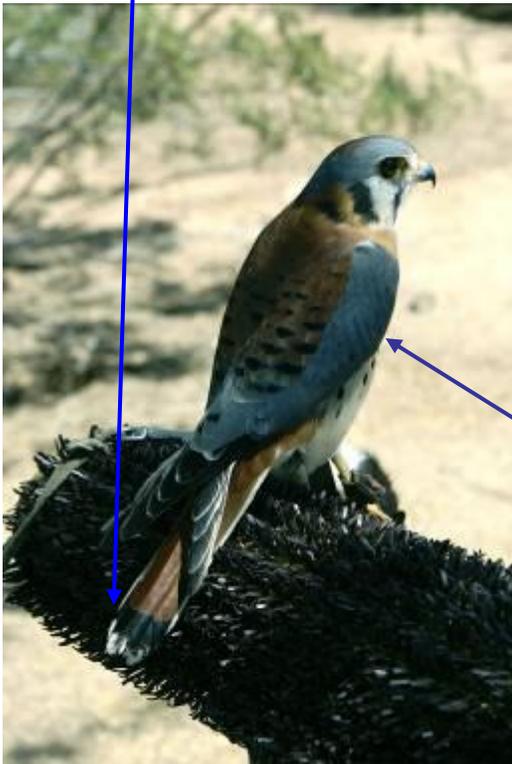
ELLIOT

Elliot

Elliot arrived at Liberty Wildlife as a young bird in 2003 after authorities had confiscated him from someone who possessed him illegally. As an imprint, Elliot is non-releasable. He demonstrated that he was suitable for Liberty's education program.

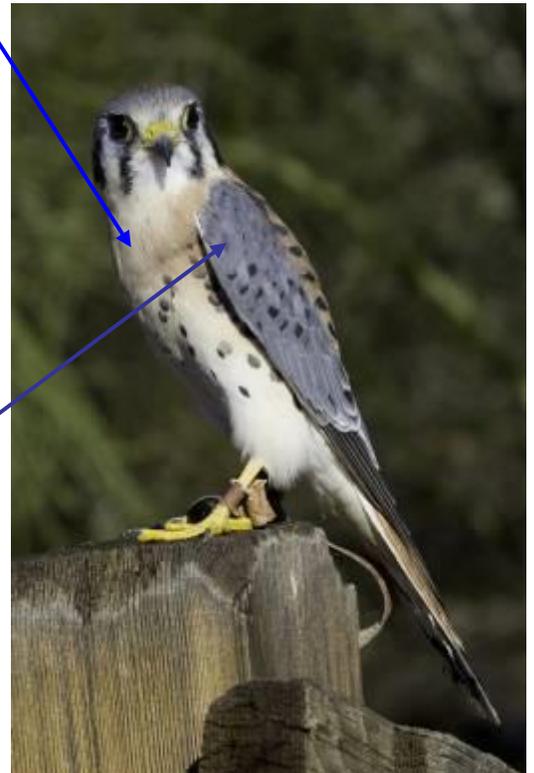
Barred tail & white tail tip

Spotted/Dotted chest



ELLIOT

Bluish-gray wings





Sansa

In June 2015, Sansa was brought to Liberty Wildlife by an Arizona Humane Society volunteer. She was found to have a healing fracture to her leg and indications that it was imprinted. She was placed with other kestrels while her leg was splinted. Once her leg healed, she was placed with live prey to prepare her for release. During this phase, Liberty staff discovered that the leg injury had compromised Sansa's full use of her foot; she was unable to secure her prey.





Tyrion

Tyrion was brought to Liberty Wildlife in June 2014 with old healed wing injuries. Following treatment, he was found to be unable to attain full flight and could not be released.

Compiled by Max Bessler

Photos courtesy of Barb Del'Ve

Sources: Cornell Lab of Ornithology, The Hawk Conservancy, Hawk Watch, The Peregrine Fund, University of Minnesota Raptor Center, Nature, Oregon State University Extension Service, [Raptors of Western North America](#) by Brian Wheeler, [Hawks, Eagles and Falcons of North America](#) by Paul Johnsgard

