

AMERICAN KESTREL

updated March 2017



Range	North America and South America
Habitat	Open areas like grasslands, moorlands, rain forests, and mountains
Diet (wild)	Large insects, small mammals, birds, reptiles, amphibians
Diet (captivity)	Bird of prey diet
Description	Length: 8–12 inches; wingspan: 20–24 inches; weight: 4 ounces. Roughly the size and shape of a mourning dove, although it has a larger head; longer, narrow wings; and long, square-tipped tail. Kestrels are sexually dimorphic. Males have blue-gray covert wings and are smaller than females. Females are barred on the back and tail with rusty colored wings. Both males and females have white cheeks, a short hooked beak, a gray crown, and two dark mustache marks. They both have dark spots (ocelli) on the back of their heads, thought to look like eyes.
Lifespan	Wild: 8–10 years. Captivity: 12–14 years
Reproduction	Female will lay 4–6 eggs over a 2–3 day period. The female does most of the 29–30 day incubation. Males will hunt and the female will feed the young. Young fledge around 28–31 days and reach sexual maturity around a year. A nest is most often in a cavity made by a woodpecker, but they will also nest on a cliff or in a man-made nesting box. The nest is far removed from other kestrels. Mating season depends on which region the bird is in: kestrels in the United States breed around April–June.
Behavior	Kestrels are diurnal. When searching for prey, kestrels will either watch for it from a tall tree or hover over the ground. They will rarely chase their prey; instead, they swoop down and pin it to the ground. When communicating to each other they make a “klee klee klee” sound. Kestrels are mostly solitary birds except during mating season. They adapt very well to different types of habitats and can be found in the suburbs and cities nesting on building ledges.
Our animals	1 male. Arrived at PPZ in 2005. Wild born; injured and rehabilitated at MSU, but not releasable
Cool stuff	<ul style="list-style-type: none"> • Kestrels are the smallest and most common falcons in North America. They are also one of the most colorful. • Unlike larger falcons, the “sparrow hawk” has adapted to humans and nests even in our largest cities where it preys chiefly on house sparrows. • Despite their fierce lifestyle, American kestrels end up as prey for larger birds such as northern goshawks, red-tailed hawks, barn owls, American crows, and sharp-shinned and Cooper’s hawks, as well as rat snakes, corn snakes, and even fire ants. • Unlike humans, many birds can see ultraviolet light. This enables kestrels to make out the trails of urine that voles, a common prey animal, leave as they run along the ground. Like neon diner signs, these bright paths may highlight the way to a meal—as has been observed in the Eurasian kestrel, a close relative. • Kestrels hide surplus kills in grass clumps, tree roots, bushes, fence posts, tree limbs, and cavities, to save the food for lean times or to hide it from other animals. • According to research, only four out of 10 kestrels reach their first birthday.

Phylum
Chordata

Class
Aves

Order
Falconiformes

Family
Falconidae

Genus
Falco

species
F. sparverius,

BALD EAGLE

updated March 2017



Range	Throughout much of the continental United States and Canada to northwestern Alaska; winters from southern Canada southward along major river systems of the interior
Habitat	Lakes, rivers, marshes and sea coasts
Diet (wild)	Primarily a fish eater; occasionally mice, rats, small mammals, game birds, waterfowl, and carrion
Diet (captivity)	Prey-based, including dead mice, rats, rabbits, occasional birds and fish
Description	Length: 28–38 inches; wingspan: 6–6½ feet; weight: 9–12 pounds. Females are larger than males. Large eagle with blackish body feathers, a white head and tail, and heavy yellow bill. Young birds lack the white head and tail and resemble adult golden eagles; their brown wings and bodies are mottled with white in varying amounts. The distinct white head and tail of the mature bird is developed between 4–6 years of age.
Lifespan	Wild: 10–30 years. Captivity: 20–40 years
Reproduction	The female lays 1–4 eggs that are incubated for 34–35 days. The male predominately provides food while the female stays near the nest to incubate. Males may spend some time incubating during nighttime hours. Young fledge between 12–16 weeks and reach maturity in 4–5 years. Elaborate courtship displays include cartwheels in the air and free falling while joined at the feet, letting go and flying away separately only moments before they would otherwise crash to the ground. They build large aeries (4–9 feet [1–3 meters] in diameter) and a pair will use the same nest year after year with additional sticks added to the original structure.
Behavior	When flying, eagles can reach speeds of up to 30 mph and can dive at speeds of up to 100 mph. The migratory behavior of bald eagles varies across their geographic ranges. Some populations only migrate locally for increased foraging opportunities and many southern populations do not migrate at all. Migratory birds from Canadian populations typically travel south to the United States during the winter; populations nesting in the Great Lakes region may move toward the Atlantic coast. Eagles follow seasonal food supplies; as lakes and streams freeze over, they must go south to find open fresh water or head to the coast, unless sufficient supplies of carrion are present. Bald eagles are often solitary, although they pair bond during the nesting season. However, groups of bald eagles may be seen in areas with ample prey and they may roost communally in large groups of up to 400 individuals. Bald eagles have relatively weak, high pitched, thin vocalizations, composed of chirps, whistles and harsh chatters. Although these birds do not have an adept sense of smell, they do avoid food items that taste spoiled.
Our animals	1 female, 2 males. Born (estimated): 01/1998 (female); 02/2005 and 01/2006 (males). Wild born in Michigan; injured and rehabilitated, but extent of injuries makes them unable to be released.
Cool stuff	<ul style="list-style-type: none"> • The term “bald” may be from the Old English word “balde,” which meant white. • An eagle’s eye is almost as large as a human’s, but its sharpness is at least four times that of a person with perfect vision. What a human can see at 20 feet (6 meters), an eagle can see at 180 feet (55 meters). Eagles’ keen eyesight allows them to spot fish from a mile high in the sky. • It is estimated that in the early 18th century the U.S. bald eagle population was 300,000–500,000, but by the 1950s there were only 412 nesting pairs in the 48 contiguous states. • The bald eagle was listed as threatened on the U.S. Endangered Species list in every state except Alaska until June 28, 2007 (it was removed from the U.S. government’s list of endangered species in 1995.) Its recovering populations allowing it to be removed from the list are one of the major success stories of the conservation movement and the Endangered Species Act. Habitat destruction combined with chemical pesticides (principally DDT) was the main danger to these birds. The pesticides accumulated in the fat of the fish the eagles ate, causing thinning of eggshells. The banning of DDT in 1972 was likely the single greatest cause of increasing their numbers. • Bald eagles continue to be protected by the Bald and Golden Eagle Protection Act (originally passed in 1940). The act prohibits the taking, possession, sale, purchase, barter, offering to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit.

Phylum
Chordata

Class
Aves

Order
Falconiformes

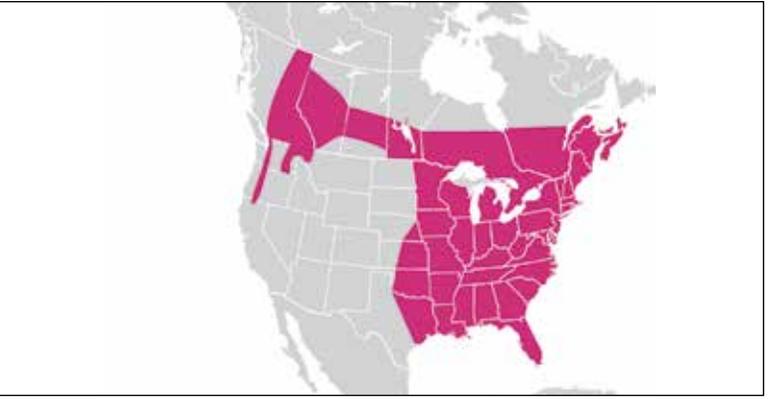
Family
Accipitridae

Genus
Haliaeetus

species
H. leucocephalus

BARRED OWL

updated March 2017



Range	Throughout southwestern Canada, Washington, Oregon and northern California. Its range extends throughout the eastern United States including Florida and Texas.
Habitat	Deciduous and coniferous forests near water across Canada, the eastern U.S. and Mexico. They require dense foliage for daytime roosting, and large trees with cavities for nesting.
Diet (wild)	Small animals including squirrels, chipmunks, mice, meadow voles, rabbits, and birds
Diet (captivity)	Prey-based diet including mice, rats, and rabbits
Description	Length: 16–25 inches; wingspan: 38–49 inches; weight: 1–2.3 pounds. A pale face with dark rings around the eyes, a yellow beak and dark brown eyes. The under parts are light with markings, the chest is barred horizontally while the belly is streaked vertically. The legs and feet are covered in feathers up to the talons.
Lifespan	Wild: 10 years. Captivity: up to 23 years
Reproduction	Female incubates a clutch of 1–5 eggs for 28–33 days. Young do not all hatch at the same time since egg laying occurs over a period of days and incubation begins immediately. While the female incubates eggs, the male will hunt for her. At four to five weeks old, the young begin to leave the nest and venture to adjacent branches. At six weeks old, the young will learn to fly. Parental care is exhibited for up to six months. Barred owls form mated pairs that stay together for life. Although barred owls prefer to nest in tree cavities, this species is known to use empty hawk nests, crows nests, or squirrel nests. Barred owls are capable of breeding at about two years of age.
Behavior	Barred owls are non-migratory and nocturnal. They are territorial year-round. Barred owls hunt by waiting on high perches at night or flying through the woods and swooping down on prey. The most common mnemonic device for remembering their call is “Who cooks for you, who cooks for you all.”
Our animals	1 male. Arrived at PPZ in 2012. Wild born; rehabilitated but unable to be released into the wild
Cool stuff	<ul style="list-style-type: none"> • The barred owl is the only typical owl of the eastern United States which has brown eyes; all others have yellow eyes. • Without exception, barred owls hunt prey that can be swallowed whole. • The great horned owl is the most serious predatory threat to the barred owl. Although the two species often live in the same areas, a barred owl will move to another part of its territory when a great horned owl is nearby. • Barred owls don't migrate, and they don't even move around very much. Of 158 birds that were banded and then found later, none had moved farther than 6 miles away.

Phylum
Chordata

Class
Aves

Order
Strigiformes

Family
Strigidae

Genus
Strix

species
S. varia

BLUE JAY

updated March 2017



Range	Eastern and central United States and southern Canada
Habitat	Forest edges. A favorite food is acorns, and they are often found near oaks in forests, woodlots, towns, cities, parks
Diet (wild)	Mainly nuts and seeds, soft fruits, arthropods, and occasionally small vertebrates
Diet (captivity)	Mazuri softball, Zupreem parakeet fruit blend, produce and insects
Description	Length: 12 inches; wingspan: 13–17 inches; weight: 2½–3½ ounces. Smaller than crows, larger than robins. Bright blue above with much white and black in the wings and tail; dingy white below; black facial markings; prominent crest. Males are usually a little larger than females.
Lifespan	Wild: 7 years. Captivity: 20 years
Reproduction	The female lays 3–6 eggs which are incubated for 16–18 days. Blue jays typically form lifetime monogamous pair bonds and both will care for the young. Young fledge between 17–21 days after hatching. Sexual maturity is reached at one year. Mating season begins in mid-March and extends into July. Any suitable tree or large bush may be used for nesting though an evergreen is preferred. The cup-shaped nest is built 9–32 feet (3–10 meters) off the ground and is made of twigs, moss, paper, cloth, and plant material.
Behavior	Blue jays are noisy, bold, and sometimes aggressive birds. Blue jays migrate during the daytime in loose flocks of 5–250 birds, although much about their migratory behavior is unknown. They will sound an alarm when predators are near, which is their most recognized call. Blue jays are very territorial and intelligent. They can copy the calls of hawks and sometimes even human voices. When caching food, if a blue jay thinks it's being watched, the bird will pretend to hide the food and then hide it somewhere else when it's safe.
Our animals	1 male. Born: 2012. Wild born but hand-reared and imprinted on humans (cannot be released)
Cool stuff	<ul style="list-style-type: none"> • Blue jays are known for their intelligence and complex social systems with tight family bonds. The black bridle across the face, nape, and throat varies extensively and may help blue jays recognize one another. • Their fondness for acorns is credited with helping spread oak trees after the last glacial period. Blue jays may carry 2–3 acorns in their throat pouch, another one in their mouth, and one more in the tip of the bill. In this way they can carry off five acorns at a time to store for later feeding. Six birds with radio transmitters each cached 3,000–5,000 acorns in one autumn. • The pigment in blue jay feathers isn't actually blue. The blue color is caused by scattering light through modified cells on the surface of the feather barbs. When viewed in different light, the feathers are brown. • Despite being common, conspicuous birds, much about blue jays remains a mystery. This is the only New World jay that migrates north and south, and large flocks are observed flying over many spots along shorelines and at other migration overlooks, but their migration is poorly understood. • Blue jays have a wide variety of vocalizations with an immense vocabulary. Blue jays are also excellent mimics. Captive birds sometimes learn to imitate human speech and meowing cats. Blue jays often mimic hawks when approaching feeders. This may deceive other birds into scattering, allowing the blue jay to take over the feeder (but most birds quickly return after the jays starts feeding.)

Phylum
ChordataClass
AvesOrder
PasseriformesFamily
CorvidaeGenus
Cyanocittaspecies
C. cristata

BLUE-BELLIED ROLLER

updated March 2017



Range	Western and central Africa, from Senegal to southern Sudan
Habitat	Wooded savanna, tree plantations, forest edges, recently burned land, and forests near marshes
Diet (wild)	Large insects
Diet (captivity)	Bird of prey diet
Description	Length: 11–12 inches; weight: 3–5 ½ ounces. Sexes are similar. Cream colored heads and chests, dark wings and vibrant royal-blue chests and a bright aqua blue tail. The wings also have a bright aqua blue stripe that can be seen during flight.
Lifespan	Unknown; may live to up to 20 years
Reproduction	The females lays 2–3 eggs; at higher latitudes, up to six eggs will be laid. Both parents incubate for about three weeks. Young take about four weeks to fledge. Adults feed regurgitated food to hatchlings. Juveniles from previous broods will assist with feeding. The nest is built about 30 feet (10 meters) up in a tree or in a tree cavity. Courtship includes the male and female blue-bellied rollers chasing each other in flight, rolling through the sky, and calling loudly to each other. This is why these birds are called “rollers.”
Behavior	These social birds typically gather in small groups of 3–7, sometimes more. Rollers exhibit social behaviors such as calling to each other, chasing each other, flying together, and defending territory together. When hunting, they perch in trees up to 30 feet high (10 meters) and dive bomb prey on the ground. They also flock to the scene of forest and brush fires to feed on insects fleeing flames.
Our animals	1 female, 1 male. Born: 04/2010 (male); 08/2013 (female) in captivity
Cool stuff	<ul style="list-style-type: none"> • Blue-bellied rollers and other “true” rollers are so named because of their spectacular, tumbling courtship flights. • The call of blue-bellied roller is a harsh clicking ga-ga-ga sound. • Blue-bellied rollers are well-adapted to living in regions dominated by agriculture. They probably play a key role in pest control for farmers in these areas by eating insects which may otherwise feed on crops. • The order Coraciiformes is a group of usually colorful birds that includes kingfishers and bee-eaters.

BLUE-CROWNED HANGING PARROT

updated March 2017



Range	Southern Myanmar and Thailand, Malaya, Singapore, Sumatra, Java and Borneo
Habitat	Forested lowlands and mangroves
Diet (wild)	Nectar, fruit, buds, flowers, and seeds
Diet (captivity)	Commercial or home-made nectar, fruit and vegetables daily
Description	Length: 5 inches. Mostly green with black beaks. Adult males have a blue crown, red throat, red rump, and a yellow lower back. Adult females are duller than males and lack the yellow lower back, usually lack the red throat, and the blue crown is much less noticeable. The juvenile is duller than the female and has a gray forehead and horn-colored beak.
Lifespan	Captivity: 28+ years
Reproduction	The female lays 2–4 eggs in a clutch, laid at two-day intervals. The female incubates the eggs for 20 days and the chicks leave the nest about 33 days after hatching. Nests are made in trees cavities.
Behavior	In their natural habitat, blue-crowned hanging parrots occur singly, in pairs and small family groups outside breeding season. They are not known to be noisy; their calls are sharp and shrill. Flocks of blue-crowned hanging parrots emit rapidly repeated or ringing calls. While foraging, their calls are occasionally shrill and with two syllables.
Our animals	5 females. Born: 2010–2014
Cool stuff	<ul style="list-style-type: none"> • These parrots are one of 13 species that are known to sleep hanging upside down. • Touch receptors along the inner edges of the bill aid in parrots' highly dexterous manipulation. • Studies show that parrots exhibit "handedness," with regards to which foot they prefer. • Parrots are extremely intelligent, social birds. Many of them are very long-lived and need good memories to remember nesting places, different food sources, mates, and even how to best cope with droughts and/or floods that they may experience several times over a lifetime. • A variety of parrot species have shown the ability understand abstract concepts like bigger, smaller, more fewer, and even zero. Many researchers believe they even have a sense of humor. • Almost all parrots live in flocks and need to know how to maneuver the social complexities dealing with the particularities of each flock member. In some species, a mated pair will create a certain song that they sing as a duet, each filling in special notes. Parrots also have different call dialects that change depending on the social setting. They may use one dialect when interacting with a familiar flock member, another when dealing with their mate, and yet another with a member of an unknown flock. • Several parrot species are known to use tools. • The philosopher Aristotle had a pet parrot, although the exact species is unknown. However, her name lives on: It was Psittace, from which scientists derive the name for the scientific order of parrots, Psittaciformes.

Phylum
Chordata

Class
Aves

Order
Psittaciformes

Family
Psittaculidae

Genus
Loriculus

species
L. galgulus

BLUE-NAPED MOUSEBIRD

updated March 2017



Range	Found in the drier parts of central Africa
Habitat	Dry country in woodland, scrub bush and cultivated areas
Diet (wild)	Mainly fruit; also eats buds, leaves, and flowers
Diet (captivity)	
Description	Length: 13–14 inches. Crested head, turquoise-blue nape patch, grayish body, and a black and red bill. The tail is slender. The young lack the blue on the nape but have pink facial skin and greenish bills.
Lifespan	16 years
Reproduction	During breeding season, groups break up into couples, with each pair building their own nest. A platform of twigs forms the nest's foundation.
Behavior	Like a parrot, mousebirds use their beak to help it climb trees. They can hang upside down and eat in any position. Mousebirds travel in groups of five or six individuals. As a group, they move between one bush and another. Mousebirds are so named because they scurry along branches with their long, thin tail trailing behind them, resembling a mouse.
Our animals	2 females, 3 males. Born: 2009 (females) and 2008 (males) at St. Louis Zoological Park
Cool stuff	<ul style="list-style-type: none"> • The order Coliiformes is confined to sub-Saharan Africa and is the only bird order confined entirely to that continent. • Mousebirds can swallow food as big as their heads. Their jaws are hinged similar to snakes. • Mousebirds are pamprodactylous. This means the two outer toes are reversible. All four toes can be directed forward at will. • When mousebirds sleep, they hang in clusters, abdomen to abdomen, with heads upright between their legs, and tails pointing straight down.

Phylum
Chordata

Class
Aves

Order
Coliiformes

Family
Coliidae

Genus
Urocolius

species
U. macrourus

BUDGERIGAR

updated March 2017



Range	Original distribution: Australia, except for coastal areas in the far east and far southwest. Have been introduced to environments around the world, including South Africa, Japan, U.S., Puerto Rico, Switzerland, and New Zealand; however, they have only been successfully established in southwest Florida.
Habitat	Semi-arid, sub-humid habitats
Diet (wild)	Ground-feeders; prefer seeds of grasses and crop plants, particularly spinifex and tall tussock grasses
Diet (captivity)	Seeds
Description	Length: 7 to 8 inches; weight: 1 ounce. Wild birds are green and yellow with black, scalloped markings on the nape, back, and wings, but have been bred in captivity with coloring in blues, whites, yellows, grays, and even with small crests. There is slight sexual dimorphism: breeding females have a light brown cere (the skin at the base of the bill, covering the nostrils); in non-breeding females and males, it is typically light blue.
Lifespan	Wild: 8–10 years. Captivity: possibly reaching 21 years
Reproduction	Mating can occur during any time of the year, but most frequently when there is an abundance of seed. This results in breeding after heavy rains (grass growth is dependent upon water.) In fact, any good rain will set off breeding, even when they are in the costly process of molting. The females lays an average of 5 eggs per season that take about 18 days to hatch. The female chooses the nest site (a pre-existing cavities in fence posts, logs, and Eucalyptus trees) and incubates the eggs while the male feeds the chicks. Breeding pairs can have several broods per season. The young reach sexual maturity at about 9 months. Budgerigars are monogamous and breed in large colonies throughout their range. Several nests can be found on the same tree branch.
Behavior	Budgerigars aggregate into large flocks and are strongly social. Their grouping allows for greater success in feeding and also helps in protection from predators. There does not seem to be any hierarchy in groups, but females are generally more aggressive than males. Their activity, like most birds, begins just before sunrise with preening, singing, and movement within trees. After sunrise, the birds fly to the forest and feed throughout the day. They do not forage during midday or in extremely hot weather; instead, they take shelter under shade and remain motionless. At the end of the day, they congregate by calling loudly and flying at high speeds around the trees, and return to their roosting site.
Our animals	A variety is exhibited in Wild Birds Down Under
Cool stuff	<ul style="list-style-type: none"> • Budgerigars, or parakeets, are the most widely known pet bird in the world. Their worldwide population of about 5 million has allowed scientists ample opportunity to study them. In fact, more is known of their biology than of any other parrot. • These birds can consume large number of seeds when in groups and this is concern to farmers. • The species was first recorded in 1805, and today is the third most popular pet in the world, after the dog and cat. • The first budgerigar was brought to Europe by English ornithologist John Gould in 1840, and the first captive breeding began just a decade later during the 1850s. • Budgerigars are the only bird known to use their feet for scratching the sides of the crissum (under tail coverts). • The scattered colors of their plumage are accentuated in ultraviolet light (budgerigar can see in the ultraviolet range), especially the sides of their cheeks, which may play a part in sexual dimorphism. • A possible origin of the name “budgerigar” is the word “budgery,” or “boojery,” an Australian English slang meaning “good.”

Phylum
Chordata

Class
Aves

Order
Psittaciformes

Family
Psittacidae

Genus
Melopsittacus,

Species
M. undulatus

CANADA GOOSE (WILD)

updated March 2017



Range	Arctic and temperate regions of North America and northern Europe
Habitat	Just about anywhere near lakes, rivers, ponds, or other small or large bodies of water, and in yards, park lawns, and farm fields.
Diet (wild)	Primarily herbivores, though they sometimes eat small insects and fish; feed on silt at the bottom of a body of water, seaweeds, beans, and grains
Diet (captivity)	
Description	Length: 30–43 inches; wingspan: 4–5½ feet; weight: 7–15 pounds. Black heads and necks with white patches on their face. They have brown bodies with lighter undersides with black webbed feet. Male and female identical.
Lifespan	Wild: 10–12 years
Reproduction	The female lays 2–9 eggs (average of five) in a nest near a body of water. Both parents stay near the nest to protect and incubate the eggs for 24–28 days. Fledging takes place 6–9 weeks after hatching. Goslings will remain with their parents until the spring migration when they return to their birth place. During the second year of their life, a Canada goose will find a mate that they usually stay with for the rest of their lives.
Behavior	Canada geese are migratory birds that travel in V-shape formation. Some populations are non-migratory due to adequate winter food supply and lack of predators. Parents are often seen walking with their young in a straight line with one parent in front and the other at the back of the line. They have few natural predators once they reach adulthood.
Our animals	Wild on zoo grounds
Cool stuff	<ul style="list-style-type: none"> • Male geese are referred to as “ganders” and females are simply known as “geese.” • Canada geese are monogamous, often remaining paired for life. If one mate dies however, the remaining partner will find another mate. • In captivity, the longest lived Canada goose was 80 years old. • The V-formation used by Canada geese in flight is very energy efficient. This arrangement during flight is called a wedge or skein. The lead position in the wedge is rotated because it is the most taxing flight position in terms of energy usage. This technique allows Canada geese to cover up to 1,500 miles (2,400 kilometers) in a single day of flight. • By the early 20th century, over-hunting and loss of habitat had resulted in a serious decline in the numbers of Canada geese in their native range. In 1918, the U.S. Migratory Bird Act took effect, making it illegal to hunt, capture, or kill birds in migration across the United States. As a result, Canada geese are game birds that can only be hunted during hunting season or with a special permit. Despite this law, Canada geese are often killed without permits because they are seen as pests in urban areas.

Phylum
Chordata

Class
Aves

Order
Anseriformes

Family
Anatidae

Genus
Branta

species
B. canadensis

COCKATIEL

updated March 2017



Range	Australia; also found in Tasmania but are considered to have been introduced accidentally
Habitat	Prefer inland areas to coastlines; open woodland areas encompassed by waterways in addition to savannas bordering waterholes
Diet (wild)	Prefer Acacia seeds to other foods and densely populate areas with Acacia shrubs
Diet (captivity)	
Description	Length: 9½ to 14 inches, including tail; wingspan: 12–14 inches; weight: 2–3 ounces. Cockatiels are the only type of crested parrot that has a tail which comes to a point, and this tail is so long it makes up half their total length. Males exhibit dark brown to gray plumage with patches of white bordering areas such as the upper wing when folded. Their cheeks have bright orange circular patterns, bordered by white. Females are mainly gray, with cheek patches of a drab, burnt-orange shade, which lack a white border.
Lifespan	Wild: 10–14 years. Captivity: up to 25 years; oldest recorded was 36 years old
Reproduction	Cockatiel breeding is tied to seasonal changes, the most important being rainfall. Large spring rainfalls assure plentiful food supplies and usually trigger mating events. Females lay 4–7 eggs, which are laid every other day. Cockatiels are indeterminate egg-layers, having the ability to replace lost or broken eggs with more. Hence, if nutritional demands are sustained, females can continue to lay eggs until a clutch of appropriate size is established. Eggs are incubated for 17 to 23 days and chicks are independent and leave the nest by five weeks, though sexual maturity is not reached until 13 months in males and 18 months in females. Nest sites are usually near water. Cockatiels are secondary cavity nesters, preferring large tree hollows when building nests.
Behavior	Cockatiels are exceptionally social birds, establishing pair bonds early on and usually feeding and moving together in groups of several birds to larger flocks of up to several thousand. Migratory patterns are region-specific; northern Australia's wetter climates have more nomadic cockatiel populations, continually relocating to fresh water and food, while the weather patterns of southern Australia offer more predictability, thus southern cockatiels seasonally migrate in groups.
Our animals	20 individuals: 3 females, 1 male, 16 undetermined
Cool stuff	<ul style="list-style-type: none"> • Cockatiels are almost exclusively ground foragers. While cockatiels can feed on a variety of plant and animal matter, their sharp curved beaks are adapted to maximize efficiency in shucking and consuming seeds, their food of choice. • Cockatiels are agricultural pests in Australia, where flocks of several thousand have been known to raid crop fields, particularly fields of sorghum, millet, wheat, and sunflowers. There have been open seasons on cockatiels in Queensland, although they are generally protected by law. • The tall crests, composed of several dozen feathers, which adorn the top of the head, are used in communication: the angle at which the crest is held is indicative of a bird's mood. • Cockatiels are mostly preyed upon by raptors, from above while feeding. They are camouflaged to blend in with the ground. Other than their coloration, cockatiels have no natural defenses to predators other than their high-speed flight.

Phylum
Chordata

Class
Aves

Order
Psittaciformes

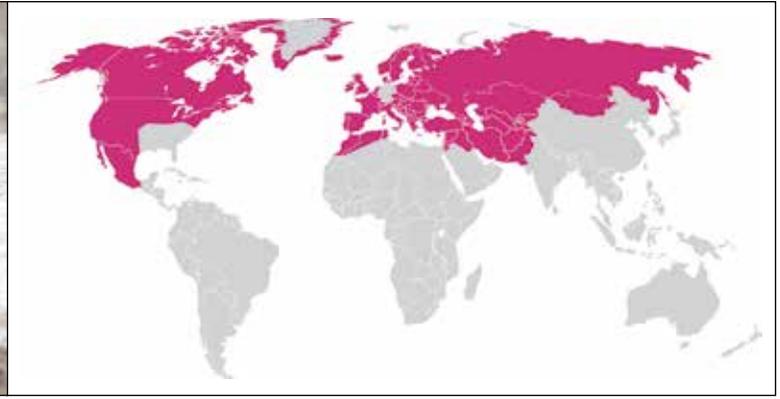
Family
Psittacidae

Genus
Nymphicus

species
N. hollandicus

COMMON RAVEN

updated March 2017



Range	Northern hemisphere (one of the most widespread, naturally occurring birds worldwide)
Habitat	Forests, tundra, seacoast, grasslands, and rural cities
Diet (wild)	Active scavengers that can rip through the hide of even the largest carcasses. Also feed on small mammals, eggs, fish, grain, insects, almost anything else they find.
Diet (captivity)	Bird of prey diet
Description	Length: 22–27 inches; wingspan: 4 feet; weight: 1½–3½ pounds. Completely black feathers. Eyes are dark brown. Feathers on the throat are shaggy and their beaks are large and slightly curved. They have a wedged shape tail and their plumage has an iridescent shine to it.
Lifespan	Wild: 10–15 years. Captivity: up to 40 years
Reproduction	The female incubates 3–7 eggs for 18–20 days. After 35–42 days, the young fledge, but stay with their parents for six months or so. Before the nest is built, a mating pair will establish a territory and aggressively defend it. The nest is built in a tree or on a platform like a cliff's ledge and are often reused by the same couple or other birds such as hawks. Males will court females for a few years before deciding on a partner. Ravens usually mate for life.
Behavior	When it comes to intelligence, ravens rate up there with chimpanzees and dolphins, able to solve ever more complicated problems invented by ever more creative scientists. Ravens are usually solitary birds, but can be found in pairs or, as youngsters, gathering in flocks. They are very vocal and researchers have recorded 15–30 categories of vocalization. Ravens are also adept mimics and can learn to talk better than some parrots.
Our animals	1 female, 1 male. Arrived at PPZ in 2009 (male) and 2015 (female)
Cool stuff	<ul style="list-style-type: none"> • Ravens are the largest song birds (passerines). • A flock of ravens is called an “unkindness.” • Ravens are acrobatic fliers, often doing rolls and somersaults in the air. One bird was seen flying upside down for more than a half-mile. Young birds are fond of playing games with sticks, repeatedly dropping them, then diving to catch them in midair. • Ravens are clever and dangerous predators. They will work in pairs to raid seabird colonies, with one bird distracting an incubating adult and the other waiting to grab an egg or chick as soon as it's unguarded. They've also been seen waiting as ewes give birth, then attacking the newborn lambs. • If a raven thinks another raven is watching, it will pretend to hide food in one place while really hiding it somewhere else. Since other ravens are just as smart, this ruse doesn't always work. • Ravens use their beaks and wings to gesture and point to objects, much like humans use their hands. This is the first time researchers have observed naturally occurring gestures in any animal other than primates. Ravens also demonstrate the ability to follow another's gaze, e.g., if you glance at a cookie with interest, a raven will turn to see what you're looking at. • Ravens have been known to imitate the vocalizations of wolves to attract them to carcasses that the ravens aren't strong enough to open. When the wolves are done eating, the ravens get the leftovers. • Ravens are very playful. They will use snow-covered roofs as slides, roll down snowy hills and even play keep-away with animals like wolves, otters and dogs. Ravens also make toys by using sticks, pine cones, golf balls and rocks to play with each other. • Ravens are tool users. They poke sticks into bug holes and bend wires into hooks to retrieve food from between cracks. They will club small prey with rocks or sticks and will snatch up snakes and drop them from the sky. • Ravens can pick out and recognize individual human beings (often humans that have harassed or banded the birds), knowing them by facial features. Ravens will even pass this information to their offspring. • The captive ravens at the Tower of London are beloved and perhaps a little feared; legend has it that, “If the Tower of London ravens are lost or fly away, the Crown will fall and Britain with it.”

Phylum
Chordata

Class
Aves

Order
Passeriformes

Family
Corvidae

Genus
Corvus

species
C. corax

DOMESTIC CHICKEN

updated March 2017



Range	Various species of chicken are kept all over the world by humans, who consume their meat and eggs
Habitat	Domesticated
Diet (wild)	N/A
Diet (captivity)	Omnivorous, feasting on seeds, and other substances called “scratch” and “layer feed.” Layer feed is a food that generally comes in pellet or crumble form. Scratch consists of a mix of different grains and seeds, which gives the chickens an assortment of vitamins and minerals.
Description	Roosters can be differentiated from hens by their plumage, long flowing tails and shiny, pointed feathers on their necks (hackles) and backs (saddles), which are typically brighter in color than those of females of the same species. Adult chickens have a fleshy crest on their heads called a comb, or cockscomb, and hanging flaps of skin either side under their beaks called wattles. Both adult males and females have wattles and combs, but in most breeds these are more prominent in males. Domestic chickens are not capable of long distance flight, although lighter birds are generally capable of flying for short distances.
Lifespan	5–10 years
Reproduction	Hens will try to lay in nests that already contain eggs and have been known to move eggs from neighboring nests into their own. Some farmers use fake eggs made from plastic or stone (or golf balls) to encourage hens to lay in a particular location. The result of this behavior is that a flock will use only a few preferred locations, rather than having a different nest for every bird. To initiate courting, some roosters may dance in a circle around or near a hen (“a circle dance”), often lowering his wing which is closest to the hen. When the hen responds to his “call,” the rooster may mount the hen and proceed with the fertilization.
Behavior	Chickens live together in flocks. They have a communal approach to the incubation of eggs and raising of young. Individual chickens in a flock will dominate over others, establishing a “pecking order,” with dominant individuals having priority for food access and nesting locations. Removing hens or roosters from a flock causes a temporary disruption to this social order until a new pecking order is established. Roosters crow as a territorial signal to other roosters. Chickens also give a low “warning call” when a predator is approaching.
Our animals	Several of various ages, all female
Cool stuff	<ul style="list-style-type: none"> • Chickens were first domesticated from the red junglefowl (<i>Gallus gallus</i>) in southeast Asia 10,000 years ago. • There are more chickens in the world than any other species of bird. More than 50 billion chickens are reared annually as a source of food, for both meat and eggs. • Ancient Romans also used chickens to foretell the future. For example, a flying chicken approaching from the left was considered good luck. • An average chicken can recognize and remember more than 100 other chickens. • Roosters are very solicitous of their hens. When he finds food, a rooster will stand aside while his hens enjoy their treat and only after they’ve enjoyed their fill will the rooster sample the food.

Phylum
Chordata

Class
Aves

Order
Galliformes

Family
Phasianidae

Genus
Gallus

species
G. gallus domesticus

EASTERN SCREECH-OWL

updated March 2017



Range	Found throughout much of eastern North America, from the Rocky Mountains in the west to the Atlantic coast and from Florida and southern Texas in the south as far north as southern Canada
Habitat	Have the broadest ecological niche of any North American owl. They are found in virtually all kinds of habitats below about 5,000 feet (1,500 meters) elevation, from urbanized surroundings to boreal forests. Generally found in wooded areas, they do well in urban and suburban areas and acclimatize readily to human presence, often using bird boxes for nesting.
Diet (wild)	Insects, like moths and katydids; crayfish, earthworms, amphibians, reptiles, and small mammals like mice and bats, and small birds
Diet (captivity)	Bird of prey diet, dead mice
Description	Length: 8–10 inches; wingspan: 20–22 inches; weight: 4–9 ounces. Small mottled owl with prominent ear tufts; yellow eyes. Can be either mostly gray or mostly reddish-brown (rufous). Females are larger than males.
Lifespan	6–10 years
Reproduction	Usually 3–4 eggs are laid in a large nest cavity and incubated for 26–34 days. The female lays the eggs over a period of days and only begins incubation when the last egg is laid. As a result, eggs laid first also develop and hatch first. The young develop flight and hunting skills slowly; they depends on their parents for 8–10 weeks after fledging. Average age of sexual maturity is one year. Most Eastern screech-owls form pair bonds for life with individuals of the same age. Both males and females crouch and trill when their mate approaches.
Behavior	Eastern screech-owls are not migratory and a breeding pair will often keep the same nest in winter and summer. Like most owls, Eastern screech-owls are solitary except during the mating season and during winters when mates share a nest. Males defend territories in which they maintain nesting site.
Our animals	1 female, 1 male. Born: 2004 (female); 2000 (male)
Cool stuff	<ul style="list-style-type: none"> • Despite their name, Eastern screech-owls have a tremulous, descending trill. • Eastern screech-owls deliberately bring live animals, such as blind snakes, into their nests. These animals feed on the ants, flies, and other insects that infest the nest cavity. Acrobat ants may inhabit the nest cavity of these owls and will repel intruders by spraying irritating secretions and biting. • Eastern screech-owls cache prey in their nests for later consumption by adults or nestlings. • Eastern screech-owls are fearless in their defense of their nests and will often strike unsuspecting humans on the head as they pass nearby at night, During the day, they will freeze in an upright position, relying on cryptic coloration to escape detection. • Eastern screech-owls are known to eat a variety of songbirds, including European starlings. Despite this fact, starlings regularly displace owls from nesting sites.

Phylum
Chordata

Class
Aves

Order
Strigiformes

Family
Strigidae

Genus
Otus

species
O. asio

GREEN ARACARI (TOUCAN)

updated March 2017



Range	South America: Brazil, Venezuela, and Guianas
Habitat	Rain forests, woody lowland forests
Diet (wild)	Primarily fruit, but also insects, an occasional lizard, and eggs/nestlings of smaller birds
Diet (captivity)	Whole wheat bread, apples, carrot and red seedless grapes with greens every three days. They are given distilled water with tea added.
Description	Length: 10 inches; weight: 8 ounces. One of the few species of toucans that is sexually dimorphic. The male has a black head, dark green feathers coloring their back, and a yellow chest. The female's head is reddish-brown and they have dark green on the back. They have an enormous beak with serrated edges. The pattern of the bill varies according to species and this distinction may help birds recognize each other.
Lifespan	20–25 years
Reproduction	Parents take turns sitting on 2–4 eggs and caring for the young. Incubation typically lasts 16 days. The young fly from the nest at 43–50 days and are sexually mature at 1½ years, although they may remain and help out with the next clutch. Toucans nest in natural tree cavities, hollowing them out together.
Behavior	Aracaris are extremely active birds often found in small flocks. Their exaggerated beak allows them to reach berries or seeds from twigs too thin to bear their weight. Aracaris prefer the ripest fruits and eat it by snipping off the fruit with the tip of their large bill then tossing the fruit backward into their throats, gulping it down whole. Aracaris also use their bills to fence with each other and bills may be used during courtship. Because they eat the fruit whole, aracaris are important seed dispersers in the rain forest. They prefer to remain high in the trees and hop from branch to branch. When sleeping, they turn their head over their back and bring the tail forward to cover it.
Our animals	1 female. Born: 2005. Hatched in captivity
Cool stuff	<ul style="list-style-type: none"> • The serrated edges of aracaris large bills help the birds grip and gather fruit • In captivity, this species the most frequently bred member of the toucan family and is the most popular as a tame hand-fed pet. It requires a large cage and toys to prevent boredom due to its active nature, and a high-fruit diet. When all these requirements are met, it can be an affectionate companion for many years. • Green aracaris are the smallest of the toucans • Aracaris are members of the order Piciformes, which includes woodpeckers. Piciformes do not have down feathers at any age and have parrot-like zygodactyl feet (two toes forward and two back), an arrangement that has obvious advantages for birds that spend much of their time on tree trunks.

Phylum
Chordata

Class
Aves

Order
Piciformes

Family
Ramphastidae

Genus
Pteroglossus

species
P. viridis

GREEN HERON

updated March 2017



Range	Eastern United States to northern tip of South America. Migratory: eastern breeders migrate via Florida, the Gulf Coast, and the Caribbean; while western breeders head through Mexico.
Habitat	Wooded ponds, marshes, rivers, reservoirs, and estuaries
Diet (wild)	Carnivorous, mainly eating fish and invertebrates
Diet (captivity)	
Description	Length: 16–18 inches; wingspan: 24 inches; weight: 8½ ounces. Adults have a glossy, greenish-black cap, a greenish back and wings that are gray-black grading into green or blue, a chestnut neck with a white line down the front, gray underparts and short yellow legs. The bill is dark with a long, sharp point. The neck is often pulled in tight against the body. Female adults tend to be smaller than males, and have duller and lighter plumage, particularly in the breeding season.
Lifespan	About 6 years
Reproduction	Incubation of 3–5 eggs lasts 19–21 days; nestlings fledge at about 17 days. Both the male and female brood and feed the chicks, which may stay with their parents for more than a month after leaving the nest as they learn to forage. The male begins building the nest before pairing up to breed, but afterward passes off most of the construction to his mate. The nest is nest 8–12 inches across, with a shallow depression averaging less than 2 inches deep, usually in a large fork of a tree or bush.
Behavior	Each breeding season, green herons pair up, performing courtship displays that include stretching their necks, snapping their bills, flying with exaggerated flaps, and calling loudly. They defend breeding areas from each other and from birds like crows and grackles that prey on their nests.
Our animals	1 male. Born: 2010
Cool stuff	<ul style="list-style-type: none"> • Green herons are distinctive in flight, with slow beats of their rounded wings making them look a bit like a tailless crow. • Green herons are one of the world's few tool-using bird species. They create fishing lures with bread crusts, insects, earthworms, twigs, feathers, and other objects, dropping them on the surface of the water to entice small fish. • Green herons usually hunt by wading in shallow water, but occasionally they dive for deep-water prey and need to swim back to shore—probably with help from the webs between their middle and outer toes.

Phylum
Chordata

Class
Aves

Order
Pelecaniformes

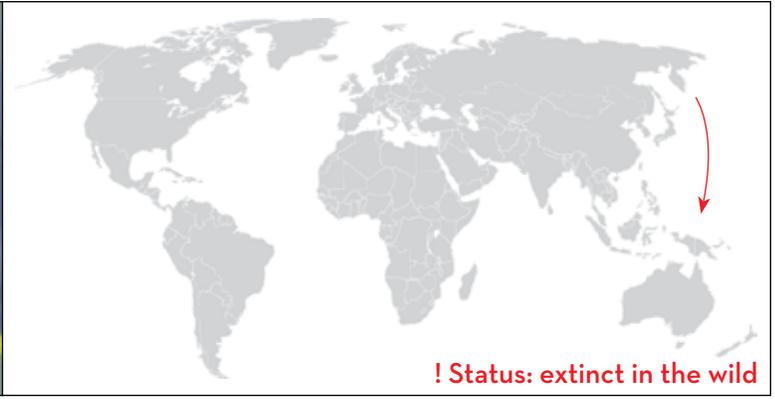
Family
Ardeidae

Genus
Butorides

species
B. virescens

GUAM MICRONESIAN KINGFISHER

updated March 2017



Range	Extinct in the wild; found only in captivity. Former range: Guam
Habitat	Forests and woodlands
Diet (wild)	Feed primarily on grasshoppers, small lizards, worms, insects, hermit crabs, other small crustaceans, and occasionally small mammals and young birds
Diet (captivity)	
Description	Length: 9 inches. Sexually dimorphic. Both sexes have a greenish-blue back and wings, but the male has a rich cinnamon head and chest, while the female has a paler head and white chest.
Lifespan	Unknown
Reproduction	Both sexes care for the eggs and young. The Guam Micronesian kingfisher uses its large beak to drill holes into trees and rotting wood for nesting. Male and female birds work together to excavate the nest, an activity that may help the pair bond.
Behavior	Guam Micronesian kingfishers are often seen alone or in pairs; pairs often perch alongside one another on the same perch. They are very territorial. These kingfishers have a loud, raspy, distinct call that generally consists of three to five harsh, loud notes, followed by several similar but much softer notes. The calls are regularly heard at first light of dawn, though the birds will sometimes call at night. Calls are voiced with such regularity that, according to local belief, they can be used to tell time.
Our animals	1 male. Born: 2012
Cool stuff	<ul style="list-style-type: none"> • After World War II, brown tree snakes were accidentally introduced to Guam. By 1984, the Guam Micronesian kingfisher had become almost extinct. • This species is restricted to a captive breeding program following its extinction in the wild due to the introduction of the brown tree snake. There are fewer than 100 individuals (as of 2006) in U.S. mainland and Guam breeding facilities. Captive breeding programs are working hard to repopulate the island of Guam. • Micronesian kingfishers are ambush hunters, sitting on a tree branch and waiting for small prey animals to pass by. This behavior makes them easy prey for snakes. • The order Coraciiformes is a group of usually colorful birds that includes kingfishers and bee-eaters.

Phylum
Chordata

Class
Aves

Order
Coraciiformes

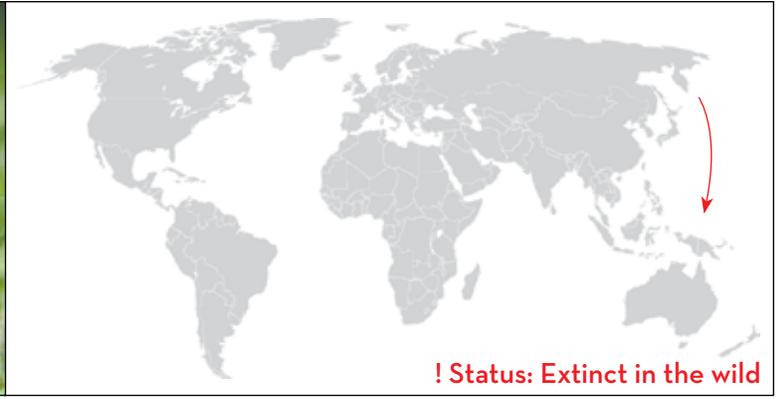
Family
Alcedinidae

Genus
Halcyon

species
H. cinnamomina cinnamomina

GUAM RAIL

updated March 2017



Range	Guam; they are extinct in the wild
Habitat	Forests, grassland, mixed woodland and scrub, and fern thickets
Diet (wild)	Omnivores but appear to prefer animals over vegetable foods. They will eat gastropods, skinks, geckos, insects, seeds and palm leaves.
Diet (captivity)	
Description	Length: 11 inches. The body is elongated and laterally compressed, particularly in the neck and breast regions, allowing the birds to move rapidly through dense vegetation. The head and back are brown with a gray eye stripe and throat; the breast has black and white barring. The legs and beak are dark brown. Males can often be distinguished by their larger size.
Lifespan	Females: 5½ years; males: 9 years
Reproduction	Females lay 1–4 eggs that hatch within 24 hours. Guam rails nest year-round. Since they are essentially flightless, Guam rails nest on the ground. Both parents help to build a shallow nest of grass and leaves, making sure that it is well-hidden in the dense grass.
Behavior	Not much is known about the Guam rail because they are extinct in the wild. They are a flightless species of bird that is secretive and territorial. They are very good at walking, and evening running, without making any noise, no matter what the terrain. Guam rails seldom vocalize, but will produce a loud, piercing whistle in response to other rails, loud noises and other disturbances.
Our animals	1 female, 1 male. Born: 07/19/2004 (female); 08/18/2006 (male)
Cool stuff	<ul style="list-style-type: none"> • There were an estimated 70,000 Guam rails on the island before 1960; however, their population drastically declined with the introduction of the brown tree snake (it's believed that the brown tree snake was transported from its native home, probably as a stowaway in military ship cargo.) The rail was seen in the wild in 1987. • In their native Guam, they are called ko'ko'. • Guam rails can fly only about 3 to 10 feet (1 to 3 meters) at a time. • Rails (Family Rallidae) are a large family of small- to medium-sized ground-living birds. The family exhibits considerable diversity and includes the crakes, coots, and gallinules. Many species are associated with wetlands, although the family is found in every terrestrial habitat except dry deserts, polar regions, and alpine areas above the snow line. Members of the Rallidae occur on every continent except Antarctica. There are numerous island species. The most common rail habitats are marshland or dense forest and they are especially fond of dense vegetation.

Phylum
Chordata

Class
Aves

Order
Gruiformes

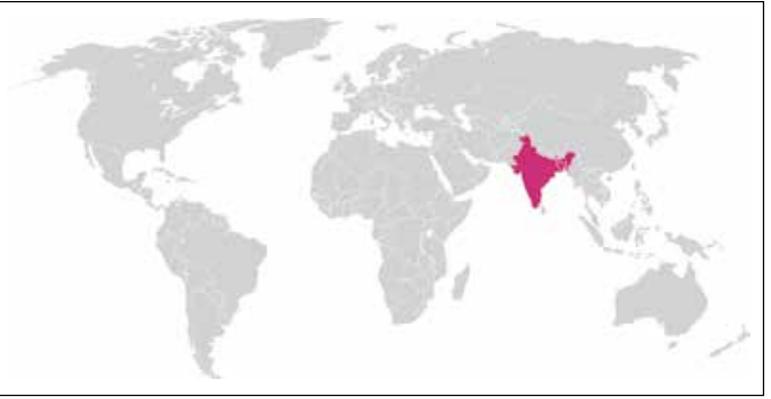
Family
Rallidae

Genus
Gallirallus

species
G. owstoni

INDIAN BLUE PEAFOWL

updated March 2017



Range	India
Habitat	Forest undergrowth
Diet (wild)	Insects, worms, lizards, frogs, snakes, seeds, grains, berries
Diet (captivity)	Greens mixture, scratch, whole corn
Description	Length: 6½–7½ feet, including train; wingspan: 4½–5¼ feet; weight: 6–13 pounds. The male has a brilliant blue head and neck. A small crown of bare shafted feathers tops the head. He has an elongated train, which can be straightened behind the bird in an elaborate fan of blue-green “eyes.” The female is a mottled brown with buff underparts; the neck is metallic green but less splendid than the male. She also lacks the male’s long train but does have a crown. Peafowl have strong legs and feet and a thick bill that curves downward.
Lifespan	20 years
Reproduction	The female makes a nest in the undergrowth where 4–8 eggs are laid and she incubates the eggs for about 28 days. Only the female tends the precocial young. During courtship, the male spreads his train, struts, and whirls his feathers, turning to face the female with the upper ornamental side of the train showing.
Behavior	Non-migratory birds, peafowl will generally run to escape danger but can fly for short distances. They have been domesticated for centuries and are commonly given free rein in zoos. They usually roost in trees at night. Males are peacocks, females are peahens, and young are peachicks. They have a harsh cry which supposedly keeps rodents and other pests at bay.
Our animals	Approximately 25, males and females of varying ages. The peafowl at PPZ are free-ranging.
Cool stuff	<ul style="list-style-type: none"> • This species name in Sanskrit means “killer of snakes.” • Peafowl are in the same order as chickens, turkeys, quails, and pheasants • The white feathered peafowl have completely white feathers from the top of its head to the end of its train, with the “eyes” barely visible. They are not albinos because they are true breeders (when bred with another white feathered peafowl, all their offspring will be white feathered peafowl as well) and have brown eyes. • There is a significant positive correlation between a peafowl’s train and its mating success. Males spend a great deal of energy to produce and maintain good tail conditions, resulting in a trade-off between a longer train and avoiding predators or searching for food. Mating success is usually more successful for the males with the highest number of eye spots (called ocelli) on their train. • Indian blue peafowl are diurnal, seeking protection high up in trees when they sleep. They only fly to the lowest branch, and then work their way up branch by branch until they reach a safe height. • Peacock feather extract in the form of water or ash can be used to treat the venomous bites of Russell vipers, common cobras and Malabar pit vipers. The extract is high in iron, protein and steroids, and acts as an inhibitor to harmful enzymes in the venom that cause tissue damage. This is a traditional treatment in India for those who live far away from hospitals and doctors.

Phylum
Chordata

Class
Aves

Order
Galliformes

Family
Phasianidae

Genus
Pavo

species
P. cristatus

KING VULTURE

updated March 2017



Range	Mexico, south to northern Argentina
Habitat	Lowland tropics usually associated with undisturbed forest, but also in open savannas
Diet (wild)	Carrion
Diet (captivity)	Bird of prey diet, dead mice
Description	Length: 28–32 inches; wingspan: 6–6½ feet; weight: 8–9 pounds. Plumage is white shading to buff on the back and shoulders. Flight feathers, wings, and neck ruff around the shoulders are gray-black. The skin of the head and neck is bare; the neck is bright orange, shading to yellow on the throat; the head shows a variety of shades of purple, with a red crown. A large, bright orange wattle hangs from the cere (the skin located above the beak where the nostrils are).
Lifespan	40 years in captivity
Reproduction	One egg is laid with incubation shared between the sexes in some pairs, while in others the incubation is entirely done by the female. Hatching occurs after 53–58 days. Fledging occurs at about three months but the parents continue to attend the chick well after fledging. Chicks are covered in pure white down; the adult plumage develops over about four years. Nothing is known of the courtship rituals of this bird in the wild. In captivity, they will display by bending their head down to the crop, filling it with air, and bowing down with a couple of grunts. Then they will rise up, move back and forth, and tremble their wings to make a ruffling sound while breathing fast and heavily.
Behavior	Vultures have well-developed massive wings and a large body size that provides them with a perfect frame adapted for soaring. They can travel for miles without ever flapping their wings, expending very little energy. They fly high above the ground, providing them with an excellent view over a large area. King vultures do not appear to have a well-developed sense of smell as do other vultures. They rely on other vultures to find prey and then descend to take part in feeding. Little is known about the population status of any of the South American vultures. It is thought that the king vulture is one species rapidly finding it difficult to survive in areas of disturbed forest, presumably because the declining food supply.
Our animals	2 males. Born: 07/23/1967 (wild born in South America); 04/23/2006
Cool stuff	<ul style="list-style-type: none"> • The bare skin on the head and the neck of vultures is an adaptation to prevent their feathers from becoming soiled with gore when they poke their heads into carcasses. Vultures have adaptations like deep grooves and backward-facing barbs on their tongues for quickly gulping hefty portions of carrion. • King vultures, as well as all vultures in the family Cathartidae, lack a voice box. They are not completely silent though; they do make very low croaking sounds. • King vultures have more powerful beaks than other South American vultures and are able to break through the tough hides of the carrion. It is often necessary for king vultures to make the initial tear through the hide so that other vultures, with less powerful beaks, can feed. • Vultures help limit the spread of bacteria and diseases such as anthrax and rabies because they can quickly devour large amounts of flesh and their stomach acids neutralize pathogens. As the only land-based vertebrates that can thrive solely on scavenging, vultures are crucial to ecosystem balance. • Vultures can consume more than two pounds of meat in a minute; a large flock of vultures can strip a 600-pound zebra, nose to tail, in 30 minutes. • Vultures can vomit their entire stomach contents when threatened, making it easier to take quick flight. • Excluding the two species of condors (Andean and California), the king vulture is the largest of the New World vultures.

Phylum
Chordata

Class
Aves

Order
Falconiformes

Family
Cathartidae

Genus
Sarcorampus

species
S. papa

MAGELLANIC PENGUIN

updated March 2017



Range	Southern coasts of South America and Falkland Islands
Habitat	Sandy beach to wooded slopes, usually within 1/3 mile of the sea
Diet (wild)	Small fish, squid, and crustaceans
Diet (captivity)	Herring, capelin, smelt
Description	Length: 23–27 inches; weight: 7–10 pounds. White with a broad black band under their chin and another black band that runs in an inverted horseshoe shape around their front. Chest is dotted with a few black spots in a random pattern. Chicks and younger penguins have gray-blue backs with a more faded gray-blue color on their chest.
Lifespan	Wild: not available. Captivity: 12–14 years
Reproduction	Two eggs are laid and incubation takes 39–42 days. Chicks are raised and guarded for 29 days after hatching. Both parents take turns sitting on the nest. The male goes foraging for two weeks, returns, and the female goes foraging for about the same amount of time. Once the chicks hatch, parents alternate, one day foraging, one day guarding the nest. Chicks leave the nest after 60–70 days. Magellanic penguins are a monogamous species that uphold their pair bonds for many seasons. After spending about six months at sea, they return each spring to the rookery where they were born.
Behavior	Flippers are modified wings used in a “flying” motion underwater. They can porpoise (jump out of the water) at about 9 mph (14 kph). Magellanic penguins often roam north into the tropics and have learned to relax on long journeys by lying on their sides and raising one foot high in the air while swimming. They make a braying sound at night with a melancholy sound like “hull-oo.” Their chief predators are sea lions, Dominican gulls, and giant petrels.
Our animals	4 females, 5 males. Born: 1999–2015
Cool stuff	<ul style="list-style-type: none"> • Magellanic penguins are named after Portuguese explorer Ferdinand Magellan, who spotted the birds in 1520. • Magellanic penguins have about 70 feathers per square inch. Penguins have more feathers per square inch than any other bird (emperor penguins have 100 feather per square inch). The feathers are small and fit together very tightly making them look like smooth fur. Penguins spread natural oil over the feathers (preening) that acts as insulation and reduces friction, helping them glide smoothly through the water. • Unlike flighted birds, penguins have solid bones which are heavier and help with buoyancy. • The species is listed as Near Threatened by the IUCN primarily due to the vulnerability of large breeding colonies to oil spills, which kill 20,000 adults and 22,000 juveniles every year off the coast of Argentina. • Climate change has displaced fish populations, so Magellanic penguins must swim an extra 25 miles (40 km) further from the nest for fish. While the penguins are swimming that extra 50 miles (80 km), their mates are sitting on the nest and starving. • Magellanic penguins have been recorded diving to depths of up to 250 feet (76 meters).

Phylum
Chordata

Class
Aves

Order
Sphenisciformes

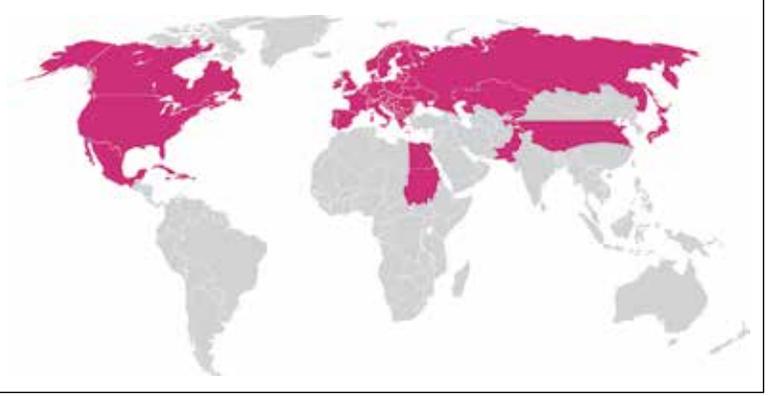
Family
Spheniscidae

Genus
Spheniscus

species
S. magellanicus

MALLARD DUCK (WILD)

updated March 2017



Range	Northern hemisphere below the Arctic
Habitat	Can live in almost any wetland habitat, natural or artificial: lakes, ponds, marshes, rivers, and coastal habitats, as well as city and suburban parks and residential backyards
Diet (wild)	Water plants and small arthropods
Diet (captivity)	
Description	Length: 20–26 inches; wingspan: 32–39 inches; weight: 1 ½–3 ½ pounds. Sexually dimorphic. Male ducks (drakes) have a glossy green head with a white collar and are gray on wings and belly and have a yellow bill. Females have a mainly brown-speckled plumage. Both male and female mallards have iridescent purple blue speculum feathers (on the wings) edged with white, prominent in flight or at rest and are shed in the summer molt.
Lifespan	Wild: 5–10 years
Reproduction	A female will lay half her body weight in eggs (about 8–13 eggs) and requires a lot of rest afterward. Eggs are incubated for 27–28 days; hatchlings are out of the nest and following their mother within a day. Fledging occurs 50–60 days after hatching. Hatchlings will imprint on their mother immediately after birth and some have even been known to imprint on humans or dogs if the mother is not present. Mallards form pair bonds in October and November and stay together until the female lays the eggs. The male then joins a male group during the molting period. Males will mate with other females, forcefully if the female is isolated.
Behavior	Mallards will migrate south in the winter months from their northern breeding grounds. They are “dabbling ducks” which means that they feed by tipping their head into the water to grab food.
Our animals	Wild on zoo grounds
Cool stuff	<ul style="list-style-type: none"> • Mallards are the ancestor of nearly all domestic duck breeds. • The standard duck’s quack is the sound of a female mallard. Mallard males don’t quack; they make a quieter, rasping sound. • Migrating flocks of mallards have been estimated traveling at 55 miles per hour. • Mallards, like other ducks, shed all their flight feathers at the end of the breeding season and are flightless for 3–4 weeks. They are secretive during this vulnerable time and their body feathers molt into a concealing “eclipse” plumage that can make them hard to identify. • Mallards are big consumers of mosquito larvae and pupae that live on the top of shallow water.

Phylum
Chordata

Class
Aves

Order
Anseriformes

Family
Anatidae

Genus
Anas

species
A. platyrhynchos

RED-TAILED HAWK

updated March 2017



Range	North America and Central America and the West Indies
Habitat	Open country, grasslands, scrub lands, rain forests
Diet (wild)	Mostly small mammals, including voles, mice, wood rats, rabbits, snowshoe hares, jack rabbits, and ground squirrels; birds, snakes, carrion. Individual prey items can weigh anywhere from less than an ounce to more than 5 pounds.
Diet (captivity)	Prey-based including dead mice, rats, and rabbits, occasionally small birds
Description	Length: 18–26 inches; wingspan: 3 ½–4 ½ feet; weight: 2–3 ¼ pounds. Like most raptors, females are larger than males. Most are rich brown above and pale below, with a streaked belly and, on the wing underside, a dark bar between shoulder and wrist. The tail is usually pale below and cinnamon-red above, though in young birds it's brown and banded. There are many different morphs from light to dark; some don't even have the distinctive red tail.
Lifespan	About 20 years
Reproduction	1–5 eggs are incubated for 28–35 days. Nestlings fledge at 42–46 days. The male courts the female by circling at great heights and then diving and climbing. They will clasp talons, plummet to the earth, release, and fly away. The pair build the nest together and they will reuse their old nest if it was a successful site. The nest is made of sticks with bark and dried vegetation on the inside usually located in the crowns of tall trees or cliff ledges. Mated pairs typically stay together for life.
Behavior	Red-tailed hawks use their sharp talons to catch and kill their prey by soaring above fields and attacking in a slow controlled dive with legs out stretched. They are aggressive when defending territory; females are more aggressive around nests and males are more aggressive around boundary lines. Red-tailed hawks are diurnal and “niche-switch” with great horned owls.
Our animals	1 female. Born: 2008. Wild born in Michigan; injured and rehabilitated; unable to be released due to injuries to eye
Cool stuff	<ul style="list-style-type: none"> • Whenever a hawk or eagle appears on film or TV, no matter what species, the long raspy scream on the soundtrack is almost always that of a red-tailed hawk. • They frequently chase off other hawks, eagles, and great horned owls. • Red-tailed hawks are the second-largest hawk in North America, after ferruginous hawks. • Red-tailed hawks are often seen soaring in the sky, slowly turning circles on broad, rounded wings. • Red-tailed hawks have been seen hunting as a pair, guarding opposite sides of the same tree to catch squirrels. • The vision of hawks is estimated to be eight times as sharp as a humans. They have two foveas to our one. The fovea is responsible for sharp central vision in vertebrate eyes. Their foveas are so deep that they act as magnifiers. A hawk can see an object on the ground before we can even see the bird in the air. • You're unlikely to see this bird in your backyard. Red-tailed hawks eat mostly mammals so they're less likely to visit a backyard bird feeder than is a Cooper's or sharp-shinned hawk. It's very rare for a red-tailed hawk to go after dogs or cats.

Phylum
Chordata

Class
Aves

Order
Falconiformes

Family
Accipitridae

Genus
Buteo

species
B. jamaicensis

SILKIE BANTAM CHICKEN

updated March 2017



Range	Domestic; found worldwide
Habitat	Domestic
Diet (wild)	
Diet (captivity)	Manufactured chicken feed and vegetable supplements
Description	Weight: 3–4 pounds. A small chicken. Males are generally larger than females. Body is covered with puffy feathers that feel similar to silk. Appears in two distinct varieties: bearded and non-bearded. Bearded silkies have an extra muff of feathers under the beak area. Colors include black, blue, bugs, gray, partridge, splash, and white. All silkies have a small walnut-type comb, dark wattles, and turquoise-blue earlobes, and five toes on each foot.
Lifespan	9 years
Reproduction	Silkies lay up to three eggs per week, but they are often used to raise the offspring of other birds.
Behavior	Silkie bantam chickens are universally known as good mothers and known for their calm and friendly dispositions. They do well in confinement and interact well with children. Silkie bantam chickens are often bullied by other aggressive birds when kept in mixed flocks.
Our animals	1 female. Arrived at PPZ in 2009
Cool stuff	<ul style="list-style-type: none"> • The earliest surviving written account of silkies comes from Marco Polo, who wrote of a furry chicken in the 13th century during his travels in Asia. In 1598, Ulisse Aldrovandi, a writer and naturalist at the University of Bologna, Italy, published a comprehensive treatise on chickens which is still read and admired today. In it, he spoke on “wool-bearing chickens” and ones “clothed with hair like that of a black cat.” • Silkies have black skin, bones, and grayish-black meat. • Silkies are commonly used to incubate and raise the offspring of other chickens and waterfowl like ducks and geese and game birds such as quail and pheasants.

SOUTHERN GROUND HORNBILL

updated March 2017



Range	Sub-Saharan Africa, most densely populated in Zimbabwe and Botswana
Habitat	Mostly savannas with large mature trees and grasslands. Short and dense grasslands for feeding. Also feed in agricultural fields.
Diet (wild)	Mainly insects; will also eat a range of terrestrial animals, including amphibians, small mammals, and some reptiles. Occasionally scavenge dead animals and forage for fruits and seeds.
Diet (captivity)	
Description	Length: 35–50 inches; wingspan: 4–6 feet; weight: 4–14 pounds. Males are larger than females. They have a large curved shape on top of their bill called a casque, which is larger on males. The casque is thought to help with the deep loud calls both sexes make. They have thick black legs with black feathers, a red face and white primary feathers. Males have entirely red throat sac while females have red throat sacs with a violet-blue patch. Juveniles are dull and brown. They have pale yellow eyes protected from the dust and sun by feathers that look like eye lashes. Their large downward curving beak has a forceps like grip that's great for picking up grubs and insects.
Lifespan	Wild: unknown; estimated 50–60 years. Captivity: up to 70 years
Reproduction	The female lays 1–2 eggs that hatch after 40 days. Only one nestling survives (often the second chick dies from malnutrition.) The chick leaves the nest after three months and may remain with the family group for up to nine years. There is only one mating pair per flock. The nesting area is usually surrounded by leaves and protected in a tree or rock cavity. The male protects the female while she is nesting, watching for small predators that may steal their eggs. Southern hornbills show cooperative breeding: The male and other hornbills in the flock provide food for the incubating female. Once the chicks hatch, the offspring receive care from both parents and flock members.
Behavior	Southern ground hornbills roost in trees at night and spend most of the day walking on the ground. They give a deep reverberating call before leaving their tree to hunt and will patrol with other hornbills in small groups of around a dozen.
Our animals	2 females. Born: 01/2006 and 12/2006
Cool stuff	<ul style="list-style-type: none"> • Southern ground hornbills ride on the backs of warthogs to eat parasitic insects. • Southern ground hornbills reach sexual maturity at about three years of age. At this time, the facial skin of males becomes entirely red and that of females becomes violet-blue below the bill, indicating sexual maturity.

Phylum
Chordata

Class
Aves

Order
Coraciiformes

Family
Bucorvidae

Genus
Bucorvus

species
B. leadbeateri