

North American Ducks

Class: Aves **Order:** Anseriformes (ducks, geese, swans and relatives) **Family:** Anatidae (ducks, geese & swans)

Wood Duck

Aix sponsa

Other names: Carolina duck

Other subspecies:

Other Relatives: It shares its genus with the Asian Mandarin duck (*Aix galericulata*)

Zoo Wood Duck 3.2.0

Status not yet been assessed for the IUCN Red List

Geographic Region

East coast of North America from Nova Scotia in the north, to Florida and the Gulf of Mexico in the south, and west to the center of the United States.



Hooded Merganser Duck

Lophodytes cucullatus

Other names: none

Other subspecies:

Other Relatives: *cucullatus* is the only species listed in the genus *Lophodytes*

Zoo Hooded Merganser 0.1.0

Status not yet been assessed for the IUCN Red List

Geographic Region

Pacific Northwest of the United States, across southern Canada, and east of the Mississippi. It is largely concentrated in forested regions around the Great Lakes. Wintering ranges include an area along the Pacific Coast of California, and a second area of coastal habitats from Delaware through Texas.



Cinnamon Teal Duck

Anas cyanoptera septentrionalium

Other names: none

Other subspecies: five subspecies of the Cinnamon Teal, all native to the New World. The only subspecies native to North America is the Northern Cinnamon Teal (*Anas cyanoptera septentrionalium*). The remainder of the subspecies are native to South America.

Argentine Cinnamon Teal (*Anas cyanoptera cyanoptera*); the largest subspecies, the Andean Cinnamon Teal (*Anas cyanoptera orinomus*); the smallest subspecies is the Tropical Cinnamon Teal (*Anas cyanoptera tropica*); and the rarest subspecies is Borrero's Cinnamon Teal (*Anas cyanoptera borreroi*).

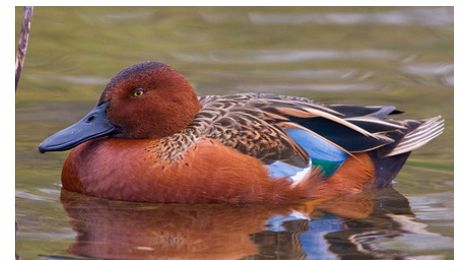
Other Relatives: There are around 40 species in the genus *Anas*

Zoo Cinnamon Teal 1.0.0

Status not yet been assessed for the IUCN Red List

Geographic Region

Western North America from British Columbia south to California and winters in the south-western States and Mexico



Green Winged Teal

Anas crecca carolinensis

Other names: none

Other subspecies:

Other Relatives: dabbling ducks

Zoo Green Winged Teal 1.0.0

Status Very common and widespread.



Geographic Region

Western North America from British Columbia south to California and winters in the south-western States and Mexico

Ringed Teal

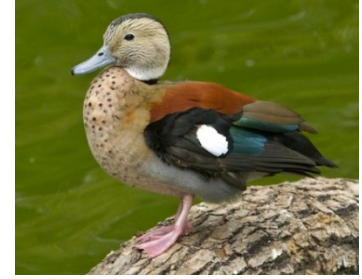
Callonetta leucophrys

Subfamily: Tadorninae (shelduck-sheldgoose)

Other names: none

Other subspecies:

Other Relatives: its closest relative is possibly the maned duck



Zoo Ringed Teal 0.2.0

Status not yet been assessed for the IUCN Red List

General Duck Facts

Geographic Region

Ducks have a cosmopolitan distribution, occurring across most of the world except for Antarctica.

Migration: Most waterfowl fly at speeds of 40 to 60 mph, with many species averaging roughly 50 mph. With a 50 mph tail wind, migrating mallards are capable of traveling 800 miles during an eight-hour flight. [1]

Habitat

Shallow ponds, marshes, and lakes with alkaline water, which are bordered by low herbaceous growth.

Ducks are mostly aquatic birds, mostly smaller than the swans and geese, and may be found in both fresh water and sea water.

Physical Description

- The overall body plan of ducks is elongated and broad, and the ducks are also relatively long-necked, albeit not as long-necked as the geese and swans.
- The body shape of diving ducks varies somewhat from this in being more rounded.
- The bill is usually broad and contains serrated **lamellae**, which are particularly well defined in the filter-feeding species.
- The scaled legs are strong and well developed, and generally set far back on the body, more so in the highly aquatic species.
- The wings are very strong and are generally short and pointed, and the flight of ducks requires fast continuous strokes, requiring in turn strong wing muscles.
- All ducks have highly waterproof feathers as a result of an intricate feather structure and a waxy coating that is spread on each feather while preening. A duck's feathers are so waterproof that even when the duck dives underwater, its downy underlayer of feathers will stay completely dry. [2]
- Waterfowl wings provide the two essential elements of flight. **Primary** feathers (those on the tips of the wings) provide thrust, while **secondary** feathers (those on the rear edge of the wings) provide lift. [1]

Dimorphism

Most of these species exhibit dimorphism between males and females. Typically, the males, called *drakes*, are much more colorful than the females, or *hens*, who incubate the nests.

Diet: Omnivore to Carnivore

Ducks exploit a variety of food sources such as grasses, aquatic plants, fish, insects, small amphibians, worms, and small molluscs.

- **Diet in the Wild:**
Vascular rooted plants and arthropods from the bottom-aquatic bed. Also, seeds, submergent plants, emergent plants, insects and mollusks. Some species will eat aquatic crustaceans and small fish.
- **Diet in the Zoo:** waterfowl pellets, greens, fruits, veggies, mealworms, chopped fish

Behavior

- *Activity Time*, descriptor
- These species are all highly aquatic, and move awkwardly when on land.
- Ducks take off by running on water, and they have a ceaseless and rapid wingbeat during flight. They land at high speeds and are often seen 'skiing' across the water to come to a stop.
- They dive well, holding their wings in close to their body and propelling themselves underwater with their feet.

Social Structure & Communication

- Ducks and geese lift or compress their plumage in various ways to help regulate body heat, dive underwater, and express emotions, such as aggression or amorousness. [1]

Feeding Behavior

- Diving ducks and sea ducks forage deep underwater. To be able to submerge more easily, the diving ducks are heavier than dabbling ducks, and therefore have more difficulty taking off to fly. [3]
- Dabbling ducks feed on the surface of water or on land, or as deep as they can reach by up-ending without completely submerging. Along the edge of the beak there is a comb-like structure called a **pecten**. This strains the water squirting from the side of the beak and traps any food. The pecten is also used to preen feathers and to hold slippery food items. [3]
- A few specialized species such as the mergansers are adapted to catch and swallow large fish. [3]
- Others have a characteristic wide flat beak adapted to dredging-type jobs such as pulling up waterweed, pulling worms and small molluscs out of mud, searching for insect larvae, and bulk jobs such as dredging out, holding, turning head first, and swallowing a squirming frog. [3]
- Waterfowl ingest small particles of stone, gravel, and sand, which are kept in their gizzard to help them grind up hard foods like grain, acorns, and clams. [1]

Home Life

- When constructing her nest, a hen will line it with soft down feathers she plucks from her own breast. This gives the eggs the best possible cushioning and insulation. [2]
- Depending upon the species, ducks will nest in cavities or on the ground. Some ducks, such as the wood duck, will successfully nest in man-made nest boxes.

Reproduction

- *Oviparous*
- Most duck species are monogamous for a breeding season but they do not mate for life [2].
- Incubation is typically 25-40 days. Ducklings are various degrees of **precocial** when hatching, and can typically leave the nest within 24 hours to follow their mother to forage and feed themselves.
- Males typically are not involved with rearing, some may help incubate the nests.
- A duckling is a young duck in downy plumage
- Wood ducks are the only North American waterfowl known to regularly raise two broods in one year. [1]

Conservation

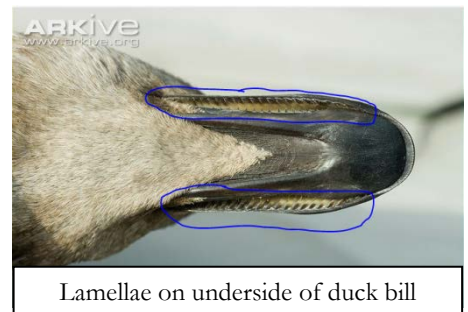
- **Use & Trade:** Ducks have many economic uses, being farmed for their meat, eggs, feathers, (particularly their down). They are also kept and bred by aviculturists and often displayed in zoos. Almost all the varieties of domestic ducks are descended from the mallard (*Anas platyrhynchos*), apart from the Muscovy duck (*Cairina moschata*). [3]
 - There are more than 40 breeds of domestic duck. The white Pekin duck (also called the Long Island duck) is the most common variety raised for eggs and meat. [2]
 - In many areas, wild ducks of various species (including ducks farmed and released into the wild) are hunted for food or sport [3]
- **Threats:** Waterfowl are protected under the US Migratory Bird Act.
- **Predators:** domestic cats (*Felis silvestris*); coyotes (*Canis latrans*); crows (*Corvus*); domestic dogs (*Canis lupus familiaris*); gulls (*Laridae*); magpies (*Pica*); American minks (*Neovison vison*); raccoons (*Procyon lotor*); common ravens (*Corvus corax*); skunks (*Mephitinae*); redheads (*Aythya americana*); ruddy ducks (*Oxyura jamaicensis*); large fish and other aquatic predators, herons and cranes, peregrine falcons

Did You Know?/Fun Facts

- Many ducks will parasitize each other's nests, called *brood parasitism*. This means they will lay their eggs in one another's nests, allowing other individuals of their species, or even other species, to raise their young.
- The word duck comes from Old English *dūce* "diver", a derivative of the verb **dūcan* "to duck, bend down low as if to get under something, or dive"
- A group of ducks can be called a raft, team or paddling.

Glossary: List of definitions of the most important recurrent technical terms used in the text.

Lamellae - These small, comb-like structures along the inside of the bill act like sieves and look like teeth, even though ducks and geese don't chew food. When ducks are searching for food, nonfood items such as mud and water can be expelled while seeds, bugs, or other food items are retained by the lamellae.



Lamellae on underside of duck bill

Pecten comb-like structures placed on the sides of the bill and serve both as food-strainer and as a comb for preening

Precocial - hatched or born in an advanced state and able to feed itself almost immediately.

Primaries - Primaries are connected to the *manus* (the bird's "hand", composed of carpometacarpus and phalanges); these are the longest and narrowest of the *remiges* (flight feathers, particularly those attached to the phalanges), and they can be individually rotated.

Secondaries - Secondaries are connected to the ulna. In some species, the ligaments that bind these *remiges* to the bone connect to small, rounded projections, known as quill knobs, on the ulna; in other species, no such knobs exist. Secondary feathers remain close together in flight (they cannot be individually separated like the primaries can) and help to provide lift by creating the airfoil shape of the bird's wing. Secondaries tend to be shorter and broader than primaries, with blunter ends

References

- [1] Ducks Unlimited, "Amazing Waterfowl Facts," Ducks.org, 2015. [Online]. Available: <http://www.ducks.org/conservation/waterfowl-biology/amazing-waterfowl-facts>. [Accessed February 2015].
- [2] M. Mayntz, "15 fun things about ducks," Birding.com, 2015. [Online]. Available: <http://birding.about.com/od/birdprofiles/a/15-Fun-Facts-About-Ducks.htm>. [Accessed February 2015].
- [3] Wikipedia, "Ducks," Wikipedia, 2015. [Online]. Available: <http://en.wikipedia.org/wiki/Duck>. [Accessed February 2015].



Pecten along duck's bill

