

# AMERICAN COOT - FULICA AMERICANA

**Taxonomy:** Kingdom: Animalia Phylum: Chordata Class: Aves Order: Gruiformes Family: Rallidae Genus: Fulica Species: F. americana

## **Habitat:**

**Biomes:** The American Coot inhabits a wide variety of freshwater wetlands from prairie potholes to swamps and marshes to suburban park and sewage ponds to the edges of large lakes. Two features generally characterize all bodies of water where coots breed: (1) heavy stands of emergent aquatic vegetation along at least some portion of the shoreline and (2) at least some depth of standing water within those stands of vegetation. Seasonal wetlands used during years of high water, while drought years cause breeding to be limited to permanent wetlands.

## **Distribution:**

**In US:** The American coot is a migratory bird that occupies most of North America. It lives in the Pacific and southwestern United States and Mexico year-round and occupies more northeastern regions during the summer breeding season. In the winter they can be found as far south as Panama.

**In Other Countries:** ^^^^^

**Holistic Description:** The waterborne American Coot is one good reminder that not everything that floats is a duck. A close look at a coot—that small head, those scrawny legs—reveals a different kind of bird entirely. Their dark bodies and white faces are common sights in nearly any open water across the continent, and they often mix with ducks. But they're closer relatives of the gangly Sandhill Crane and the nearly invisible rails than of Mallards or teal.

**Species Richness:** 2 SUBSPECIES

**Population Dynamic:** The American coot is listed under "least concern" by the IUCN Red List of Endangered Species. They are common and widespread, and are sometimes even considered a pest. They are rarely the targets of hunters since their meat is not considered to be as good as that of ducks; although some are shot for sport, particularly in the southeastern United States. Because they are found in wetlands, scientists use them to monitor toxin levels and pollution problems in these environments. Although population has stabilized during last 3 decades, annual totals may still fluctuate dramatically in response to moisture levels on main breeding grounds.

## **Evolution and Systematics:**

**Evolution:** Like many other rallids, Fulica well represented in the fossil record, with numerous records of occurrence throughout North America, particularly those of the late Cenozoic, from 1.0 to 2.5 million years before present. Brodkorb lists 5 extinct species of Fulica from this period, 3 of which were from continental North America.

**Systematics:** This account follows the classification presented by the Am. Ornithol. Union, treating North American and central Colombian populations as American Coot, and resident breeders in Hawaiian Is. as Hawaiian Coot; but including within American Coot the white-shielded populations from the Caribbean and northwestern Venezuela that formerly were recognized as a separate species, Caribbean Coot F. "caribaea"

**Number of Species:** 2 SUBSPECIES

**Number of Genera:** 2 SUBSPECIES

## **Physical Characteristics:**

**Size and Length:** Length: 15.5-16.9 in (39.4-42.9 cm) Weight: 21.2-24.7 oz (600-700 g)

**Wingspan:** 23.0-25.0 in (58.4-63.5 cm)

**Coloration:** Coots are dark-gray to black birds with a bright-white bill and forehead. The legs are yellow-green. At close range you may see a small patch of red on the forehead.

**General Body Features:** The American Coot is a plump, chickenlike bird with a rounded head and a sloping bill. Their tiny tail, short wings, and large feet are visible on the rare occasions they take flight.

**Special Features of the Body:** NONE

**Special Features of the Head and Sensory Organs:** A filter type beak mixed with a catching insects type beak is what the American Coot has. This type of beak is good for filtering plant material as food from the mud and water. The beak is flatter and is good for the Coot because when it comes to feeding the young the parents can easily filter the food that is acceptable for their young. Also, because they spend almost all of their time in the water it's a good thing to not be taking up excessive amounts of water and mud with every bite of food. The catching insect type beak mixed in is not that noticeable but the American Coot does spend a good amount of time on land as well as the water and searches the ground to find suitable nutritious items.

**Dentition:** BEAK/LAMELLAE/GIZZARD

*Special Features of the Limbs and Digits:* The American Coot does have wings and are classified as short and wide wings. Even though wings are present it does not mean that they fly all the time. In fact, the American Coot spends as little time flying as possible. The short and wide wings are perfect for lifting off to fly. To start flying the Coot runs across the water and flaps its wings to grab the air and lift off. Even though taking off is a more graceful process flying long distances is not so much. The short and wide wings are not built to glide through the air very far because they are not that strong. When these birds do fly they are usually flying in groups called flocks, covers, or rafts.

*Any Special Internal Anatomy:* **The infamous feet of the American Coot.** As you can see by the picture the toes are lobed. This is the major difference between the American Coot and the common duck because the duck has webbed feet. There are a total of four toes on the foot of the American Coot, three larger toes facing forward and a smaller toe facing backwards. The main purpose of the lobed toes is to help the bird run. These feet are good for the American Coot for walking on top of vegetation in marshes and also on dry land when they're looking for food items on the ground. In the water the American Coot uses their big feet to propel themselves through the water. Although not as effective as webbed feet like the duck, the toes of the American Coot are perfect for the environment they are normally found in. Recall in the previous paragraph that Coots also run across the water surface to take off in flight. If their feet were webbed the Coots would most certainly get nowhere trying to run across the surface of the water. Another plus for the giant toes is the American Coot can withstand higher temperatures because of the hardy outside layer and the dissipation of excess body heat through the feet.

### **INCREASED SURFACE AREA.**

*Sexual Dimorphisms:* Sexes similar in plumage; male averages slightly larger than female.

*Differences Between Juvenile Stage and Adult:* Juvenile dark, ashy brown on upperparts and much paler on underparts; head dark above, contrasting with whitish throat that blends with gray breast and belly; lateral undertail coverts white; legs and feet grayish green. Downy young distinctive: uniformly black with flame-scarlet to chrome-orange on forehead, chin, and lores; dark-gray underparts; reddish bare crown with blue over eyes; scarlet bill with black tip.

### **Behavior:**

*Diurnal, Nocturnal, or Crepuscular:* Diurnal

*Activity:* A slow and meticulous forager, the American Coot plucks at plants while walking, swimming, dabbling with its head just underwater, or in full dives. In flight coots are clumsy and labored (though less so than Common Moorhens). To get airborne, coots typically have to beat their wings while running across the water for many yards. Coots sometimes gather in winter flocks of several thousand, sometimes mixing with other waterfowl. They sometimes steal food from others including ducks. Coots sometimes lay their eggs in the nests of other coots as well as Franklin's Gulls, Cinnamon Teal, and Redheads.

*Locomotion:* Adept at walking and running rapidly either on land, or across water by Splattering, in which water's surface is beat noisily by flailing wings and feet—often resulting in becoming airborne. On land, head is nodded in step with foot movements; active walking/running often undertaken in a hunched-back posture, presenting a profile similar to a guineafowl. Strong and direct, much more vigorous and swift than flight of moorhens. An extended period of Splattering along water's surface required to become airborne; sometimes abort attempt to fly and dive in midst of takeoff run to avoid capture. As with walking, coot's head nods in step with foot movements while swimming. Accentuated head and body movements while swimming may be associated with swimming as a form of display along territorial boundaries. Although lobed webbing of toes not as effective at propulsion as full interdigital webbing, coot is still a strong swimmer.

*Communication and Perception:* Although none of the vocalizations of American Coot can properly be considered a "song," this is a highly vocal species that calls with a variety of grunting, croaking, and squawking noises. The most common call is a short single-noted krrp or prik.

*Home Range:* Highly territorial; year-round resident coots in California even defend winter territories centered about previous season's nesting sites—a so-called core area that is only abandoned under adverse climatic conditions. Winter migrants in same area less territorial, and observations in other parts of wintering range.

*Degree of Sociality:* Breeders may aggregate in areas of particularly suitable breeding habitat, but individual pairs always strictly isolated from neighboring conspecifics by virtue of their strong territoriality. Even very young coots are distinctly nonsocial; in captivity, begin attacking chicks of other species at ages as early as 5 d. On wintering grounds, may gather in large, densely packed rafts of >1,000 individuals in open water and when sleeping in emergent macrophyte cover. Coordinated swimming movements of birds within these densely packed aggregations suggest they may function in obtaining food.

*Level of Aggression:* Universally described as a quarrelsome and belligerent bird, more than ready, willing, and able to engage in either ritualized or outright physical conflict with its own or other avian species. Conspecific physical conflicts most common between males during prelaying period; usually involving efforts to expand or defend territory against a neighbor or invader. Opposing birds drive toward each other with elevated wing-tips and heads extended along water. First

contact usually made by striking with bill, after which combatants begin to lie back in water, propped on their wings and tails, and strike with their feet, attempting to rake each other's breasts with their claws. At same time, attempt to defend by grasping opponent's feet. This often results in birds becoming locked together with their feet, while continuing to strike with their bills. Females may also become involved in these fights, along with other males from nearby territories.

**Migration:** Resident or medium-distance migrant. Populations in the northern half of North America migrate to the southern U.S. or Central America. Populations in the West and Florida are year-round residents.

#### **Predators:**

**Predators:** American Crow, Black-billed Magpie, Pied-billed Grebes, Forster's Terns, Northern Harrier, Great Horned Owl, Bald Eagles, Great Black-backed Gull, California Gull, Coyote, Red Fox, Skunks, Raccoons, Muskrats.

**Anti-Predator Defenses:** Aggressive behaviors used by coots in defense of nests and young. Also Warning, in which an alarmed coot lifts tail, exhibiting white undertail coverts but not expanding them. This appears to be the only general alarm signal for this species and is given in response to both aerial and ground predators. Coots feeding in a tightly packed flock on a lake splash vigorously to create a confusion of water spray in response to overhead flights of Bald Eagles. May dive when alarmed, often throwing a spray of water into air. By nesting near Yellow-headed Blackbirds and colonies of aggressive Forster's Terns, coots may gain added degree of protection from predators.

#### **Diet and Nutrition:**

**Adult Diet:** Eats mainly aquatic plants including algae, duckweed, eelgrass, wild rice, sedges, hydrilla, wild celery, waterlilies, cattails, water milfoil; when on land they also pick at terrestrial plants and sometimes eat grains or leaves of oak, elm, and cypress trees. They're not exclusively vegetarian. You may also see them eating insects (beetles, dragonflies, and others), crustaceans, snails, and small vertebrates such as tadpoles and salamanders.

**Juvenile Diet:** Although animal matter generally less common in diet, may become an important component during breeding season, particularly for growing young.

**Special Adaptations for Getting Prey:** CHECK FEATURES

#### **Reproduction:**

**Mode of Reproduction:**

**Mating System:** Social monogamy the rule. In contrast to all other studies indicating universal monogamy in the species, Lyon, working in central British Columbia, described floater females without nests or territories of their own; a quarter of all conspecific parasitic eggs produced in this population were attributed to these apparently unmated females.

**Mating Season:** May to August

**Courtship:** Of 14 displays described by Gullion for American Coot, the following are involved with courtship and establishment of a pair bond: Billing, Bowing, and Nibbling; these 3 displays all closely related and often follow each other sequentially; apparently occur between potential mates and help establish mutual recognition during pair formation

**Territoriality:** HOME RANGE

**Mating:** Male mounts squarely on female's back, using his wings for balance and then rears back as she raises her head, hanging onto her back with his claws. Actual intromission takes no longer than 2 s, and total time from pair joining until male's resuming of normal feeding is about 3 min. One or both birds may fluff their feathers or preen after copulation.

**Nesting:** Nests are almost always built over water on floating platforms and almost always associated with dense stands of living or dead vegetation such as reeds, cattails, bulrushes, sedges, and grasses. Occasionally, the nest may be built on the edge of a stand of vegetation, where it is clearly visible. The nest material is woven into a shallow basket with a hollowed interior lined with finer smooth material to hold the eggs. The entire nest is generally a floating structure anchored to upright stalks. Average diameter is 12 inches, with a 12 to 15-inch ramp and an egg cup of about 1 inch in depth and 6 inches in diameter.

**Egg-Laying:** Clutch Size: 8-12 eggs Number of Broods: 1-2 broods Egg Length: 1.7-2.2 in (4.3-5.5 cm) Egg Width: 0.8-1.5 in (2-3.7 cm) Incubation Period: 23-25 days Egg Description: Buff, pinkish buff or buff-gray speckled with dark brown, purplish brown, or black.

**Hatching and Incubation/Gestation:** Covered in down, alert, ready to leave the nest within 6 hours of hatching. Precocial. After drying out and losing 1-2 g from an initial hatching mass of 19-22 g, a 6-h-old coot is quite buoyant and capable of climbing out of its nest and swimming to cover. As soon as dry, hatchling coots peck at food items dropped in nest; also beg vigorously to adults, with wings outstretched and moving in a vertical plane while heads move from side to side.

**Development:** NONE

**Parental Care:** Brood platforms built almost exclusively by males. Platforms then used by females for nightly brooding of older and more active chicks. Female may also brood chicks at night on reconditioned original nest or on an old muskrat house or mat of emergent vegetation. Parent coots find and present food to their younger chicks. By their pecking and other

foraging activities, they also stimulate and guide older chicks to obtain their own food. For first few days after hatching, female will also frequently return to nest with food; 2- and 3-d-old young observed swimming about 1 m from egg nest to intercept incoming hen and be fed by her, subsequently returning to be brooded by still-incubating male.

Lifespan: Up to 22 years and 4 months.

**Conservation:**

Official Federal Status: Least Concern

Special Statuses in Individual States: NONE

Threats: American Coot are common and widespread, and populations appear to be stable, according to the North American Breeding Bird Survey. They are not on the 2014 State of the Birds Watch List. Coot aren't hunted nearly as much as ducks since many hunters consider them inedible. Some hunters shoot them for sport, particularly in Louisiana, California, Florida, Wisconsin, and Minnesota. In 1999 the annual harvest of coots in the U.S. was about 720,000. Because they live in wetlands, coots can accumulate toxins from pollution sources including agricultural runoff, industrial waste, and nuclear facilities. Because coots are so common and widespread, scientists sometimes monitor them as a way of monitoring these problems in the environment at large.

Conservation Efforts: ^^^^^

**Extra Facts:**

1. Although it swims like a duck, the American Coot does not have webbed feet like a duck. Instead, each one of the coot's long toes has broad lobes of skin that help it kick through the water. The broad lobes fold back each time the bird lifts its foot, so it doesn't impede walking on dry land, though it supports the bird's weight on mucky ground.
2. American Coots in the winter can be found in rafts of mixed waterfowl and in groups numbering up to several thousand individuals.
3. The ecological impact of common animals, like this ubiquitous waterbird, can be impressive when you add it all up. One estimate from Back Bay, Virginia, suggested that the local coot population ate 216 tons (in dry weight) of vegetation per winter.
4. The oldest known American Coot lived to be at least 22 years 4 months old.

**Notable Species:**

1. F. a. Americana. Breeds North America south to Costa Rica and Greater Antilles. Smaller than F. a. Columbiana; white tips to inner secondaries broader. Includes F. a. Grenadensis.
2. F. a. Columbiana. Resident of Andes of central Colombia. Larger than F. a. Americana with longer tarsi, toes, and frontal shield; white tips to inner secondaries narrower and largely restricted to inner webs; often shows a strong yellow tinge at the base of the bill.