

CLASS AVES: possess feathers; forelimbs modified into wings; hindlimbs adapted to walking, swimming, or perching; scales present on feet; mandibles with no teeth; light skeleton with much fusion; four-chambered heart; extensive airsacs throughout body; endothermic; no urinary bladder; oviparous.

Bird Orders at the San Francisco Zoo (There are a total of 40 Bird Orders)

- **Struthioniformes:** (ostrich) Flightless walking birds (a ratite bird order); flat sternum; heavy legs with two short toes; few feathers on head, neck or legs; small brain.
- **Rheiformes:** (rheas) Neotropical flightless walking birds (a ratite bird order); flat sternum; heavy legs with three toes; precocial young.
- **Casuariiformes:** (emu and cassowary) Flightless walking birds (a ratite bird order); flat sternum; stout legs with three toes; feathers with large aftershafts; precocial young.
- **Apterygiformes:** (kiwi – sculpture garden) Flightless, terrestrial hen-sized birds; four toes, long bill with nostrils at tip; degenerative wings; hair-like feathers; nocturnal.
- **Tinamiformes:** (tinamou) Functional wings; keeled sternum; poor fliers; precocial young.
- **Sphenisciformes:** (penguins) Web-footed marine swimmers; wing modified into a thin, powerful paddle; large keel; scale-like feathers.
- **Pelecaniformes:** (pelicans) four toes united in one web (totipalmate); long beak; nostrils rudimentary or absent; possess a throat pouch; fish-eating birds that often nest in large colonies.
- **Ciconiiformes:** (stork, hamerkop, ibis and spoonbill) long-necked and long-legged waders; toes not webbed; often nest in colonies along shores or in marshes.
- **Phoenicopteriformes:** (flamingos) long-necked and long-legged waders; toes webbed; precocial young; nest in colonies; pink-and-red plumage and downward-bent bill.
- **Anseriformes:** (waterfowl, ducks, and swans) Broadened bills containing many tactile nerve endings and filtering ridges or “teeth” at margins; short legs with webbed feet; body well supplied with down and oily feathers; unspotted egg; precocial young.
- **Falconiformes:** (falcons) Diurnal birds of prey; strong bill, fleshy cere (soft skin) at base, hooked at tip and sharp on edges; feet with sharp curved talons, opposable hind toe; keen vision; strong fliers.
- **Cathartiformes:** (New World vultures, California Condor- sculpture garden, turkey vulture) Birds of prey
- **Accipitriformes:** (eagles, hawks) Diurnal birds of prey.
- **Galliformes:** (fowl, helmeted guinea fowl, pheasants, chickens, turkey and currasow) Ground-feeding, vegetarian, hen-like birds with short, stout beaks, short rounded wings, and well developed tails; heavy-bodied ground-feeding birds
- **Opisthocomiformes:** (hoatzin – sculpture garden) Young have two clawed-fingers; semi-precocial young.
- **Gruiformes:** (cranes, crowned crane) Some birds with long-legged and long necked, strong fliers (cranes); rounded wings; prairie and marsh dwellers; precocial young; elaborate courtship rituals and form large flocks.
- **Charadriiformes:** (shore birds, gulls, terns, auks, puffins) Toes usually webbed; compact plumage; strong fliers; often colonial; precocial young in most species
- **Columbiformes:** (doves and pigeons) stout-bodied birds with short necks, and have short, slender bills with fleshy ceres
- **Psittaciformes:** (parrots and macaws) characterized by curved beaks with the lower one fitting inside the larger upper beak when they are closed and their bright plumage.
- **Cuculiformes:** (cuckoos, plantain-eater, and turacos) Birds in this order have bills that curve down and pointed wings and many are brood parasites

- **Strigiformes:** (owls) mostly nocturnal predatory birds
- **Piciformes:** (toucans & woodpeckers)
- **Coraciiformes:** (kingfishers, hornbill, and kookaburra) colorful near passerine birds
- **Passeriformes:** (passerines, perching birds, and starling) known as perching birds, includes more than half of all bird species