

## Pelcaniformes



Pelcaniformes are large fish eating aquatic birds that include cormorants, pelicans, and gannets.

Gannets capture fish by diving from heights greater than 20 metres. In order to avoid water rushing up their nostrils, evolution has done them the favour of removing their nostrils all together. Instead they breathe through a small opening towards the posterior of their beaks. All Pelcaniformes have gular pouches, but they are most prominent in members of the genus *Pelecanus*. They are also the only order with totipalmate webbed feet (webbing between all four digits).

## Anseriformes

This order includes ducks, geese, and mergansers. Like Pelcaniformes they have webbed feet, but only on the front three digits (palmate). They are aquatic



omnivores and have small tooth-like projections of the sides of their beaks used to strain water from their food. Mergansers have a nail at the end of their beaks which forms a distinct hook. Ducks and geese generally have flatter bills. To the right is a peking duck, it's hard to find a picture of one that isn't already cooked.

## Falconiformes



Hawks, eagles, and falcons make up the falconiformes; diurnal predatory birds with large, sharp claws which are used to kill prey. Their beaks are hooked with a small cere (soft skin covering) towards the base. They have great vision, and many species have thick eyebrows that enhance

this ability by shading their eyes from the sun. Females are generally larger than males.

## Galliformes

This is the order in which one finds the chicken and its kin.

Galliformes have strong feet with blunt claws and are most often ground-dwelling omnivores.

Males possess tarsal spurs on their legs which they use to spar with one another. The red jungle fowl (*Gallus gallus*) is the wild bird from which the common farm chicken was domesticated.



## Charadriiformes



This is a diverse order of small to medium-large gulls and relatives. It includes about 350 species and has members in all parts of the world. Most Charadriiformes live near water and eat invertebrates or other small animals; however, some are

pelagic (seabirds), some occupy deserts and a few are found in thick forest.

## Gaviiformes

Loons, loons, loons. Palmate feet, sharp pointed beaks and body built for diving define the gaviiformes. Their feet actually point in a posterior direction, which makes them extremely awkward on land, but incredible swimmers.



## Columbiformes



Lots of folks tend to see pigeons as some sort of avian rat. By the same token, doves are often seen as a beautiful

symbol of peace. I hate to break it you, but they are basically the same goddamned bird. Pigeons are simply rock doves that have taken to living in cities. To pigeons there is little difference between a skyscraper and a large rock - both are great places to build nests. Columbiformes are the only birds that produce milk, although it's not much like mammal milk. Instead it's a mix of regurgitated food and glandular secretions. Both males and females are able to produce milk for their young.

## Strigiformes

If you can imagine what it would be like to have eyeballs that are permanently fixed in your eye sockets than you are good at pretending to be an owl. This is why owls have to turn their entire head to see things. Lucky



for them they have excellent hearing which is assisted by large external ear flaps. Their feathers are very soft which makes them an extremely silent predator. In fact, there is probably an owl behind right now. Watch out!



## Piciformes



The best known family of piciformes, at least in North America, are the woodpeckers (Picidae). Woodpeckers have four digits with hooked claws - the

second and third toes are directed forward, while the other two toes point backwards. Along with a tail that is filled with stiff bristles, their zygodactyl feet give them an awesome ability to cling to trees and peck holes in search of insects.

Woodpeckers also have long tongues that actually wrap around their skull. Their tongue works to cushion the impact which results from the rapidly hammering their faces into hard objects at high speeds.

## Passeriformes

Currently there are over 6,500 different species of Passeriformes. This makes them the largest order of birds on the planet. They also represent the most recent avian adaptive radiation. They are generally small with high metabolic rates. Their hallux is enlarged, and their bill lacks a cere. A few examples of this diverse order are crows, thrushes, wrens, finches, sparrows, and blackbirds.

