

THE SKELETAL SYSTEM OF BIRDS III.

Arrangement of the toes

Most species prefer to walk on their toes. The fifth, their little toe, is missing. Some species have only three toes, but the ostrich has only two.



Anisodactyl foot is the most common. The big toe points backwards, the other three point forwards. This is typical of all regularly perching birds.



Zygodactyl foot. The big toe and the fourth toe face forwards, the second and third toes face backwards. In woodpeckers, this toe arrangement helps them cling to the trunk of trees. Owls are able to point their fourth toe forwards to grasp and hold prey. Parrots often feed by holding their food in one leg and lifting it to their beak, like a human uses his hand to eat.



Heterodactyl foot: the third and fourth toes face forwards, while the first and second toes face backwards. This toe arrangement is unique to trogonids.



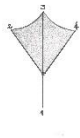
Syndactyl foot: the second and third toes are fused. For example, a kingfisher has such fingers.



Pamprodactyl foot: In the case of pamprodactyl foot, all four toes can be moved forward. The number one and number four can be rotated backwards. The swift has such toes. Tridactyl foot is lacking the thumb. For example, in the case of the olive-backed woodpecker (*Dinopium rafflesii*) Didactyl, only the ostrich has two-toed feet.

Swimming, walking in water, in silt, in mud

Not only in birds, but also in other vertebrates, you may find a membrane of skin or other connective tissue stretched between the toes. The webbed feet can take many shapes, the most common being triangular. This shape allows a high effort during swimming. In addition to the web, there are other formations or lobules that help them to move in swamps, mud and silt. The webbed feet can be classified into the following types:



Webbed feet: only the three anterior digits have webbing between them, with the thumb facing backwards. E.g. ducks



Fully webbed feet: there is a web between all four digits. E.g. cormorant



Partially webbed feet: the web between the front three digits is only small. E.g. night heron, black grouse



Lobular feet: the anterior digits are edged with lobes of skin. E.g. grebes, coot