

MODIFICATIONS/ TYPES OF FEET OR CLAWS IN BIRDS

The feet of birds are modified variously in accordance with the character of the environment and the manner of locomotion.

1. Cursorial or running feet

In running birds, the **legs are powerful** and the number of **toes is reduced**. The hind toe may be elevated, reduced or absent. In *Ratites* such as *emu* and *rhea* only 3 toes, directed forwards. *Ostrich* has only 2 toes, of which the outer one is smaller and without a nail.

2. Perching feet

The majority of birds belong to the category of perching birds. Three toes are **anterior and slender**, while one toe or **hallux is posterior**, strongly built and opposable, so that they can securely fasten the foot to a branch or a perch. Eg. *sparrows*, *crows*, *robins*, *mynahs* etc.

3. Scratching feet

The feet of *fowls*, *quails*, *pheasants* etc. are stout, with strongly-developed claws and well adapted for **running** as well as **scratching** the earth. The foot of **male bird** is usually provided with a **pointed bony spur** for **offence and defence**.

4. Raptorial feet

Predatory or carnivorous birds, such as *eagles*, *kites*, *vultures*, *owls*, etc. have strong feet for striking and grasping their prey. The toes have **strongly developed, sharp and curved claws**. In *osprey*, **horny spines** are present on the undersurface of the toes, which help in gripping **slippery preys** such as fish.

5. Wading feet

The legs and toes are exceptionally **long and slender** in wading or marshy birds such as *herons*, *snipes*, *jacana* etc. These serve to walk over aquatic vegetation or marshes. The web is absent or feebly developed.

6. Swimming feet

In swimming birds, the toes are **webbed**, partially or completely. In *coots*, the web is **lobate** and the toes are free. In swimming birds such as *ducks* and *teals*, only the anterior **three toes are united** in a web. In *pelican* and *cormorant*, all the **four toes are enclosed** in the web.

7. Climbing feet

In *parrots* and *woodpeckers* the feet are used as grasping organs and adapted for **climbing vertical surfaces**. The **second and third** toes are point **in front**, while the **first and the fourth** toes point **backwards**.

8. Clinging feet

In *swifts* and *humming birds*, all the **four toes** point **forwards** and serve to cling to steep faces of cliffs or under caves of houses.

9. Other modifications of feet

The **pectinate claw** (comb) on the middle toe of the *poorwill* serves to **scratch the feathers** of head, to straighten the **disarranged rectal bristles** and probably to comb out lice.

Fleshy fringes of skin develop on the sides of toes of the **snowshoe-like feet** of the *ruffed grouse*, during winter only, for **walking on the snow**.

