

THE SKELETAL SYSTEM OF BIRDS II.

On birds' feet

The anatomy of the bird's feet, legs and digits is adapted to the lifestyle of the species. Only the hindlimbs are used for walking, the forelimbs have evolved into wings.

The fused metatarsals allow the length of the leg to be increased.

On many different feet - bird feet by function:

Locomotion:

running foot: walking, running eg. bustard

wading foot: eg. white stork,

hopping, climbing eg. woodpeckers

webbed foot: swimming eg. ducks

Perching, clinging:

clambering eg. swift

perching eg. kingfisher

climbing eg. woodpeckers

clinging eg. goatsucker

Catching prey: seizing, killing and carrying prey

Grasping foot: eg. birds of prey

Scratching foot:

- double scratching: a hop forward and then backward with both feet, e.g. sparrow
- single-foot scratching e.g. black grouse, quail

Reproduction related functions

- cradling and turning eggs during incubation.-Birds lacking a brood patch incubate the eggs with their feet. eg. some sea birds. They keep the eggs on the top surfaces of their feet like penguins.
- Courtship: eg. certain grouse species in North America

Preening and cleaning: some species use a claw to clean their feathers. eg. long-eared owls have a so-called "feather comb".

Heat loss regulation. The membranes between the toes significantly increase the surface area of the foot. eg. herons, gulls



White stork's membranous wading foot

Source: <https://pixabay.com/hu/photos/vadvil%C3%A1g-mad%C3%A1r-g%C3%B3lya-%C3%A1llatportr%C3%A9-4870701/>



Eagle's grasping foot

Source: <https://pixabay.com/hu/photos/sas-kopasz-sas-l%C3%A1b-karom-mad%C3%A1r-3334850/>



Black woodpecker's climbing foot

Source: <https://pixabay.com/hu/photos/mad%C3%A1r-halmazott-hark%C3%A1ly-mad%C3%A1rtan-7783144/>