

## FEATHER I.

### APART FROM FLYING, WHAT OTHER ROLE DO FEATHERS AND PLUMAGE PLAY?

#### Temperature regulation of the bird body

The bird can control how much heat it retains by the arrangement of its feathers. In cold weather, they ruffle their feathers, allowing more air to enter the feathers and retaining warm air. When it is cold, they stick their feet and head into the feathers.

#### Reproduction

The main difference between the sexes in most species is the different colouration of the feathers.



**Mallard (*Anas platyrhynchos*) pair**

Source: <https://pixabay.com/hu/photos/p%C3%A1r-kacs%C3%A1r-kacs%C3%A1k-t%C5%91k%C3%A9sp%C3%A1r-357809/>

## Protection

The colour of the feathers helps the bird to blend in with its surroundings and hide.

*It provides protection against wind and water.* The feather is water and abrasion resistant. The interlocking quills and the greasy coating protect the bird from water. Many species have a sebaceous gland, which produces the fat that the bird applies to its feathers when preening.



**Resting tawny owl (*Strix aluco*)**

Source: <https://pixabay.com/hu/photos/macskabagoly-fa-ragadoz%C3%B3-raptor-4770832/>

## Swimming

For ducks and other waterfowl, the air trapped in downy feathers helps the bird to float on the water, but this feature also protects them from cold water.

## Snowshoe

Some species, such as the black grouse (*Lyrurus tetrix*), have feathered feet, which, like a snowshoe, prevent the bird from sinking into the snow.

## Like a sledge

Species living in Antarctica can move on snow and ice by lowering themselves onto the smooth feathers of their bellies, using their fin-like wings and legs together like a sledge.

## Support

They can use their tail feathers as a support when resting. But the woodpeckers' strong tail feathers serve a similar purpose.

## Hearing assistance

The arrangement of the facial feathers in some species helps direct sounds to the ear. This is particularly important in nocturnal birds of prey such as owls.



**Barn owl (*Tyto alba*)**

Source: <https://pixabay.com/hu/photos/gy%C3%B6ngybagoly-bagoly-mad%C3%A1r-ragadoz%C3%B3-2550068/>

**Pollination**

Hummingbirds fly from flower to flower in search of nectar, while carrying pollen stuck to their feathers, they pollinate plants.

**Protection**

Some fish-eating species also consume their own feathers to line their digestive tract to protect it from sharp fish bones.

**Building material**

Several species use their own feathers for nest building. For example, ducks use their belly feathers to line their nests. The resulting soft nest cradle helps keep the eggs warm.

**Carrying water**

Some desert species, such as the spotted sandgrouse (*Pterocles senegallus*), have special belly feathers that store water.