

## Features OF THE Peacock feathers Structure

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Pen-feather of the peacock is divided into primary, secondary and tertiary. There are 10 primary pen-feathers in the region of the hand, 16 secondary pen-feathers in the region of the forearm, 8 tertiary pen-feathers in the region of the upper arm. The wing is made of 4 feathers.

The rod of each pen-feather has double arched curve. The largest are pen-feathers which located in the middle of the hand, and the smallest are feathers which are located at the distal and proximal ends of the hand. The outer part of the pen-feather's fan can have wavy edge and in most cases is thinner than inner pan-feather.

The peacock has 20 tail feathers. Each of them has a slight arched bend in the median surface. The outer part of the fan is slightly smaller than the inner part. The tail feathers of a peacock are taupe; it has structure which is typical for penna and almost identical for males and females. At the beginning of the fan, each pen and tail feather has from 5-8 to 40 branches, which barbs that are not linked to each other. These branches fill the gaps between quills of neighboring feathers, forming a whole ambient surface of the wings and tail.

Pen and tail feathers are covered by supportive feathers. Supportive feather is smaller than pen and tail feather, but much bigger than the cover feathers. Supportive dorsal tail feathers or upper tail feathers form the well-known beautiful males' tail. The mature peacock has from 140 to 160 of these feathers. Like the tiles they overlap each other. The shortest feathers are based cranially; the longest feathers are based caudally. The trunk is long, hard, thick, slightly arched bend in cord-medial direction. The proximal end hasn't got branches or barbs. At the end of the proximal third of the trunk away first branches and trunk barbs from it at a very acute angle. The length of branches increases, the angle at which they depart from the trunk and the distance between the branches increased gradually in distal direction. All these branches do not adhere to each other forming genuine or not continuous contour fan. At the end of the distal third of the trunk distance between the branches decreases, their barbs interlock with each other. Because of the specific color of barbs, shape and size of branches, a fan of this part of each upper tail forms "eye", typical for them.

Covered feather of peacock is contour-downy – the branches of distal part of the feather firmly adhere to each other by barbs with has cilia and hooks. The proximal part of the fan is volume, as the barbs of the branches haven't got devices for coupling together. Peacock's down has no trunk. Short and relatively thick quill divided into a large number (100 or more) of down branches from each of which branch off from 1100 to 1500 down barbs. Length of down branches and barbs much (on average ten times) greater than the length of these structures in other types of peacock's feathers.

On the heads of both sexes located forelocks which are made of feathers which are much longer than the cover feathers. Forelocks' feathers aren't counter, because most proximal part of them are rare (located far away from each other) branches without barbs, that don't give them the opportunity to grapple with each other.

Peacock ordinary, flight feathers, supporting feathers, tail feathers, rod, quill, fan, trunk, branches, barbs