Owl's Ears - Dan Gleason describes the purpose of owl ears.

Owl’s Ears

Many owls have tufts of feathers on the tops of their heads which are often referred to as "horns" or "ears." Even their names reflect this terminology: Great Horned Owl, Long-eared Owl, and Short-eared Owl.

But these structures are neither horns (a bony outgrowth of the skull of some mammals), nor are they ears or in any way associated with hearing. A bird's ears are on the side of the head not on the top where these feather tufts are located.

So what purpose do these "horns" or "ears" serve?

It is thought that these structures may play a role in non-vocal communication. Nearly all of the owls with these "horns" or "ears" atop the head are found in dense woodlands. Owls of open country often have rounded heads. The Short-eared Owl is a bird of open lands and, while it does have these feather tufts, they are seldom visible unless fully erected and even then, they are quite short. An owl silhouetted in open country may be relatively easy to see while a bird in dense woodlands may be much more difficult to locate. By erecting these tufts of feathers, a more distinct outline suddenly becomes visible. This may allow pairs of birds (or families with young) to silently keep track of each other's presence, communicating by erecting and lowering these feathers. These tufts may also serve as signals to potential enemies by making the owl suddenly seem larger and more of a threat when the feathers become fully erect atop the head.

In addition to communication, "ear" tufts play a very different role in assisting the owl, a role which is opposite of communicating. They assist in camouflaging the bird. Erecting the feathers as a way to communicate is done while the bird is in the open, on a perch where it can be easily seen. While sleeping or trying to avoid being seen, many owls (especially Screech-Owls) close the eyes tightly and erect the feathers over the brow and top of the face in such a way as to form a "V". Erecting the ear tufts fully extends this V above the head and breaks up the visible contour of the face. In these cases, the owl is usually perched on a branch and is pressed up against the tree trunk, or more frequently, perched in a tree hole. The pattern of coloration in the feathers, combined with the concealment posture, makes it nearly impossible to distinguish the owl from the bark of the tree trunk.

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