

Eagles Eyes - The eyes of an eagle are exceptionally sharp.



Eyes of an Eagle (Bald Eagle, Denali)

An eagle's vision is exceptionally sharp because each eye has two foveae - areas of acute vision - as compared with the human eye which only has one. The cones in the eagle's fovea are very small and tightly grouped, allowing the eagle to see small details from extreme distances.

For example, an eagle can spot an object as small as a rabbit from a distance of almost two miles-and pick it out from the background. On the other hand, a man would have to look through a pair of powerful binoculars to see the same thing.

The eyes of the eagle are placed forward on the eagle's head, giving him accurate depth perception. This is important for an eagle when he is pursuing prey. The placement of the eyes also enables the eagle to see each side.

The eagle can see even with his eyelids shut. In addition to his normal pair of eyelids, the eagle has a set of clear eyelids called nictitating membranes. These eyelids can be closed for protection without affecting the eagle's vision.

Eagles can voluntarily dilate and constrict their pupils as part of focusing near and far, as well as change the curvature of the cornea. However, it's always been assumed that because they can focus so far away, that they perhaps lose some depth of field close up and that's why they hit cars or wires or fences.