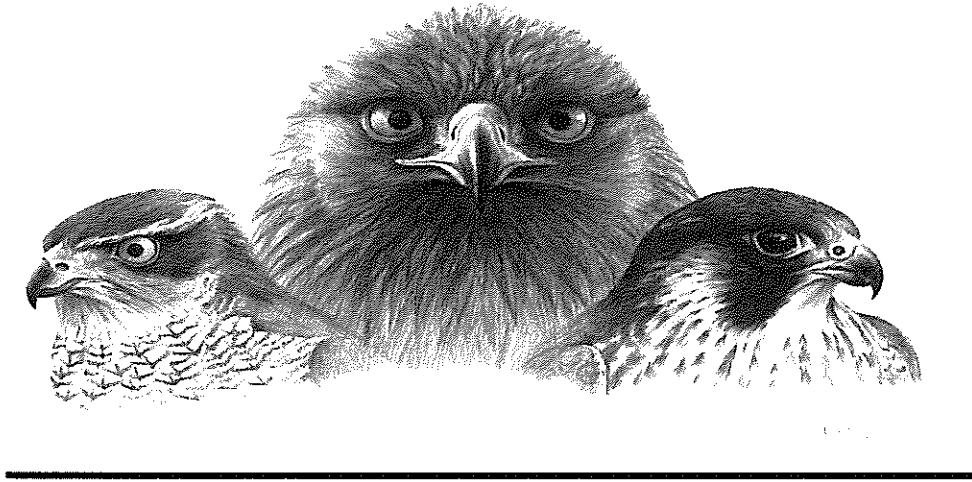


# Elite Falconry



## Owl Facts

**Ear Tufts;** *These are not ears. Certain species of owl which roost in trees have evolved them to break up their shadow against the foliage so that they are harder to be seen by predators against sticks, leaves and foliage. (Camouflage)  
The tufts are also lifted and dropped to express mood, fear or excitement.*

**Eyes;** *Owls eyes tell us what time of day they work at.*

*In most cases*

*Yellow or white = Diurnal ( daytime hunters)*

*Orange = Crepuscular ( dawn/dusk hunters)*

*Black or Brown = Nocturnal ( night hunters)*

*Owls eyes are also fixed solidly in bony sockets. The owl cannot move its eyes in the sockets by even one degree in any direction. This, combined with the eyes being mounted in the front of a wide flat face leads to a quite narrow field of vision. The eyes are also elongated – rugby ball shaped. This allows the light sensitive rods in the eyes to be longer than would be possible in a round eye. Because the rods are very densely packed, and long, any image travelling through the eye is exposed to rods for a longer period of time, enabling a more detailed picture to be ‘exposed’ in very poor light.*

**Facial Disc; This acts like a giant external ear or satellite dish gathering the sound of the owls prey and funnelling it into the ears. If we had external ears to the same proportion as the owl does, we would have huge coffee tables on the sides of our heads!**

**Ears: The inner ears are about level with the eyes under the feathers of the facial disc. One is higher and further back, one is lower and further forward. With the ears being off set, the owl receives the sounds of its prey to each ear at a very slightly different moment in time. As the owl bobs its head left and right, up and down, it eventually gets the sound to come into each ear at the same time. When this happens the owl has pinpointed exactly where the sound is coming from; The eyes are fixed, and positioned so the bird has no choice but to be looking directly down the line on which its ears are focussed, and at the spot therefore that the sound is coming from. Thus, sound is the primary sense, and vision is secondary, guided by the ears, and used to ensure the owl knows into what environment it is throwing its feet to secure its prey.**

**Feathers; Owls have completely silent flight. This is not for stealth. The owl is hunting such a tiny sound so far away that if it could hear the sound of its own wings in its ears when it was flying, it would drown out the sound of the prey. Silent flight allows the owl to continue tracking the sound of its prey throughout the hunt right up to the point of contact.**

**The science part; All bird of prey feathers are like Velcro ( where the invention came from ). So all across the feathers there is a perfect pattern of hooks and eyes, which is why you can ruffle up a feather and then "preen " it back to its original perfection. This helps the birds with aerodynamics so they cut through the air quick and efficiently. As the feathers cut through the air, it makes a rushing noise as it travels over the wing. Owls are different. Their feathers don't have a perfect pattern feather veins on the leading edge of the primary flight feathers. So the leading edge of the flight feathers appears fringed. This means that as the air comes over the feathers it is broken up gently and rolls in complete silence over the wings body and tail, hence the silent flight of owls. 😊**

**Feet; Owls have a unique foot shape. Pre-historically they had three toes at the front, and one at the back, same as the birds of prey. They are now evolving away from that. The outer toe on the owls is migrating around to the back. Eventually the owl will have a symmetrical, cylindrical grip with two pairs of opposing toes to match the round shape of its prey- mice, shrews, voles etc. All these animals have a similar cylindrical body shape.**

---

### **Other owl facts;**

***Owls are not birds of prey. They are a separate group entirely called the Strigiformes.***

***Owls have no crop.***

***Great Grey Owls have the best and most sensitive and accurate hearing of any animal on the planet that lives on dry land.***

***Owls cannot see in absolute darkness, their eyes can only utilise what little light is available. However, they can still hunt in absolute zero light as long as the prey makes sound – the ears will guide the owl to the sound with perfect accuracy – the owl just can't see if it's about to fly into an obstacle on the way!***

***Owls see colour in little detail. The eyes are packed with light sensitive rods, but few colour sensitive cones. Their world is pastel!***

***All owls will fly at the 'wrong end' of the day (you have to if you're a diurnal owl living in an arctic winter for example). To keep light levels comfortable, they can control the pupil in their eyes muscularly and by choice, forcing it open or closed beyond the involuntary reaction, to keep the light level entering the eye within the birds comfort zone. The ultimate in squinting!!!***

***Owls have an extra couple of vertebrae in their necks allowing them to move their heads a little further round than most birds – about 220 degrees. This makes up for their 'fixed' eyes and narrow field of vision.***