

## Eaglet Physiology

Eagle babies have many important physical characteristics to help them survive. Look closely at this eagle chick. How does each part of the chick help it survive?

Remember: There's always a WHY behind WHAT you see.

### Feathers

Why does a baby eagle have such long, fluffy feathers on its head?

The head loses body heat more quickly than other parts of the body, so the fluffy feathers provide important insulation. These long white feathers grew in very quickly after baby eagle hatched. They will be pushed out as mature feathers grow in.



### Eyes

Why are both of the eagle's eyes set with forward views?

Eagles can use both eyes together to see ahead. This gives them binocular vision and depth perception. An eagle's binocular vision helps it catch prey. Many birds have their eyes set more to the sides. This means limited forward views. (That's why robins tilt their heads to look for worms with just one eye.)

### Nostrils

Why the huge nostrils?

Birds need to breathe in lots of oxygen for their high-energy activities. Eagles also need to take in as much oxygen per breath as possible when flying at high altitudes because there is less useable oxygen way up there.

## **Mouth**

Why is a baby eagle's mouth so different from that of an adult?

Notice the yellow corners of the mouth, called the "gape." Unlike the beak, the gape is made of very soft, stretchy tissue. The wide mouth makes it easier for the babies to eat large food. The wide mouth also gives a bigger target for parents helping the babies to eat. As the beak grows with the growing bird, the gape slowly shrinks.

## **Tongue**

Can you peek into the mouth and see the eaglet's tongue?

Eagles use their tongues to help them swallow, just as we do. But their tongues are not as long, so they can't stick them out. An eagle usually keeps its mouth shut. When hot or nervous, eagles open their mouths to pant.

## **Body Feathers**

Why do you suppose baby eagles are dressed like this?

Notice how thick the down feathers are. They look more like fur than feathers.

As the outer feathers grow in, this down will be covered up by "contour feathers"--the feathers that will give it that distinctive eagle appearance. It will take 3 or 4 years for this bald eagle to grow white feathers on its head and tail.

