



ADAPTATIONS – FIT FOR LIFE

Pre-Visit Activities

Windows on Wildlife

Definition

Adaptation

A change in a species that makes it more fit for survival in a particular environment.

Activity – Wing Shapes

Compare the shape of a Falcon & an Eagle wing

Peregrine Falcon:

<http://digitalcollections.pugetsound.edu/cdm/singleitem/collection/slaterwing/id/11758/rec/5>

American Bald Eagle

<http://digitalcollections.pugetsound.edu/cdm/singleitem/collection/slaterwing/id/10378/rec/3>

The shape of a raptor's wing relates to its hunting style. Peregrine Falcons, for example, have long, slim wings which taper to pointed tips. This shape keeps drag to a minimum and allows the peregrine to dive at speeds of over 200 miles per hour and literally grab birds out of the air. An eagle's wing is much wider and longer. It allows them to soar slowly with deliberate wing beats so they can scan the land below for prey.



Experiment

Question: Are Eagle wings better designed for gliding or flapping?

Experiment: Have kids stand and hold their arms straight out to their sides. Ask them to “flap” their arms like wings for 30 seconds. Then have them hold a heavy object in each hand and flap for another 30 seconds. This should demonstrate how the big, heavy wings of an Eagle are better suited to gliding than flapping.

Video

Compare a Peregrine Falcon's and a Bald Eagle's wings in action

Peregrine Falcon: <http://www.bbc.co.uk/programmes/p00715hq>

Bald Eagle: <http://macaulaylibrary.org/video/412584>