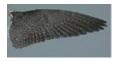
ADAPTATIONS - FIT FOR LIFE

Pre-Visit Activities

Windows on Wildlife **Definition** Adaptation

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

<u>Activity</u> – Wing Shapes Compare the shape of a Falcon & an Eagle wing



Peregrine Falcon:



American Bald Eagle

https://www.ystor.org/stable/community_6061241/search_text=percernae-falcon+wing&search_Ur=%2Faction%2FdoBasicNearch%3FDuerty%3Dpercernae%2Blakon%2Bwing%26mage_search%3Dpelobal%2660%3Drev%2650%3Drev

The shape of a raptor's wing relates to its hunting style. Peregrine Falcons have long, slim wings which taper to pointed tips. This shape helps prevent drag 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 glide slowly with minimum 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 that the big, heavy wings of an Eagle are not well suited for flapping.



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