



Student Activity

Raptors: Adaptations for Predation

NATURE Science Education Series

Vocabulary:

raptors, elite, birds of prey, nimbleness, vultures, stealth, falcons, stoop, peregrine falcons, nictitating membrane, viscous, falconers, banding, osprey, kestrel, thermal soaring, dynamic soaring, turkey vulture, shear layer, aeronautical engineers, ruff, stealth flyers, dampens, minimize, hovering, image stabilization, unmasking, ultraviolet, voles, sweet spot, stereoscopic vision, acuity, diffused, tactics, strategy, Mexican free-tailed bats, exploit, cannier, goshawk, food chain, Harris' hawks, peregrine-gyrfalcon hybrid

Pre-Viewing Discussion:

What birds are included in the category, birds of prey? What is another name for birds of prey?

What birds are members of the raptor family?

How are raptors adapted to be predators?

Why would aeronautical engineers study the flight of raptors or the physical characteristics of raptors?

Post-Viewing Discussion:

How are the peregrine falcon's eyes and eyelids adapted to the speed of its stoop?

How have researchers been able to study the range of raptors? What have they learned from their investigations?

What is the purpose of the unique flight pattern known as thermal soaring? What is the purpose of dynamic soaring? How are specific raptors adapted for thermal or dynamic soaring?

What have aeronautical engineers learned from observing raptor flight patterns and raptors' physical adaptations for spotting and hunting prey?

Further Activities:

Compare the structure of a raptor's eye to that of a human eye.

Find out how falconers train and command their birds.

Find out if any raptors are endangered, how they became endangered and what is being done to restore their populations to health.

Find several opinions of why the bald eagle was chosen as an emblem of the United States.