Species Spotlight:
Introducing Bald Eagles & EagleCam to your students
Through our EagleCam, students can learn first-hand from this majestic symbol of the American wilderness – a living embodiment of nature’s recovery when people lend a helping hand.
Bird Characteristics

- Vertebrates
- Warm-blooded
- Feathers
- Wings
- Beak
- Eggs
Raptor Characteristics

- Large eyes
- Strong, hooked beak
- Strong, grasping feet
- Claws call talons
- Diet consists of mostly other animals
Adult Identification

- White head and tail
- Dark brown body
- Yellow legs, bills, and eyes
- Females are slightly larger than males
- 30-40 inches long
- Wingspan 6-8 feet
- Weigh 8-14lbs
Juvenile Identification

- Brown with some white patches
- At 4-5 years old, full white heads and tails with dark brown-black bodies
- Juvenile to adult transition occurs at 12 weeks old when the chicks can fly
• Restricted to North America
• Year-round in New Jersey; many stay close to nest site
• Live close to water
• Highest concentration along the Delaware Bay in Salem and Cumberland counties
Diet

• Extremely opportunistic
• Primarily fish and other aquatic animals
• Have been known to eat frogs, lizards, rabbits, turtles, snakes, other birds – even carrion!
Breeding Behavior

- Mate late September to early April
- Build large stick nests in tall trees
- Nests can reach 10ft in diameter & weigh up to 2,000lbs
- Adults return to the same nests and often add to it every year
- The female chooses the nest, both male and female build it

Conserve Wildlife Foundation of New Jersey
Raising Their Young

- Pairs lay 1-3 eggs from February to March
- Both males and females provide parental care
- After 5 weeks, the young stand up and feed themselves
- After 11-12 weeks, the young fledge (have flight feathers)
- Stay near parents for next 6 weeks for food while learning to hunt on their own
The Effects of DDT Use

- Pesticide contamination thinned the eggshells resulting in them being crushed during incubation
- **Bioaccumulation**: increase in concentration of a pollutant from the environment to the first organism in a food chain
- **Biomagnification**: increase in concentration of a pollutant from one link in a food chain to another
- Their presence tells us that their habitat is clean and safe
- Unfortunately, they are continuing to be contaminated by chemicals

[Image of a food chain diagram showing various organisms from bacteria and fungi to humans, indicating the bioaccumulation and biomagnification of DDT]
Bald Eagle History in New Jersey

• 1950s – Introduction of DDT
• By 1970 – Only 1 nest remained in NJ
• 1972 – DDT banned
• 1973 – Listed as Endangered under New Jersey's new Endangered and Nongame Species Conservation Act
• 1978 – Listed as Federally Endangered (lower 48 states), under the Endangered Species Act (ESA).
• 1982 – Biologists with the New Jersey Division of Fish and Wildlife's Endangered and Nongame Species Program (ENSP) began artificial incubation of eggs.
• 1983-1990 – State biologists introduced a hacking project where they relocated 60 eagles from Canada to NJ.
EagleCam

- Located in Duke Farms in Hillsborough, NJ.
- Provides an up close view to bald eagles as they breed, incubate, and raise their young.
- Nest discovered in the Fall of 2004, active in 2005. In 2012, Hurricane Sandy tore off the upper half of the nesting tree, destroying the nest. The pair built a new nest 100ft south of the old tree, 80ft high up in a sycamore tree.
- The camera is situated above the nest, providing an over head view.
How can you help?

• Make your home wildlife friendly
• Slow down when driving
• Reduce, Reuse, Recycle
• Plant a garden
• Avoid using pesticides and herbicides
• Spread the word!
Keeping New Jersey’s Wildlife in Our Future

www.ConserveWildlifeNJ.org