

Species Spotlight: *Introducing Bald Eagles & EagleCam to your students*



An American Icon



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



<http://alaskazoo.org/sites/alaskazoo.org/files/bald%20eagle2.jpg>



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

1st Year

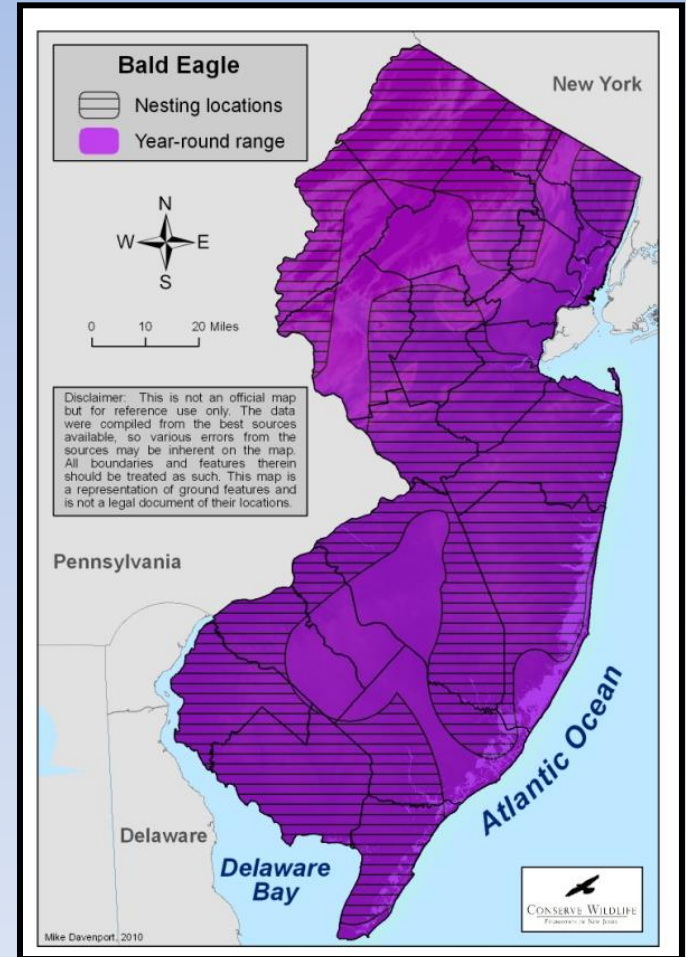


4th Year



Range & Habitat

- 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



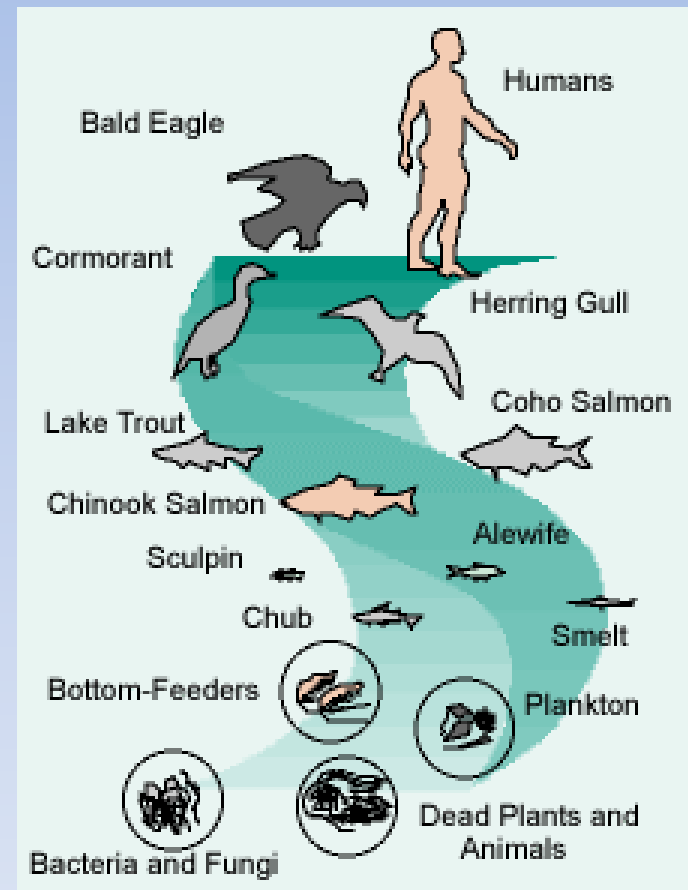
Raising Their Young

- 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



www.epa.gov



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!





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Keeping New Jersey's Wildlife in Our Future

www.ConserveWildlifeNJ.org