

Bald eagle

Haliaeetus leucocephalus

Class: Aves **Order:** Falconiformes (diurnal birds of prey) **Suborder:** n/a **Family:** Accipitridae (eagles, hawks, kites)

Other names: none

Other subspecies: Two subspecies of bald eagle are generally recognized, the northern *H. l. alascanus*, and the smaller, southern *H. l. leucocephalus*. However, the boundaries between the two are not clearly defined [1].

Other Relatives:

Zoo Eagles 0.2.0

Saphira 0.1 – female, DOH: April 16, 2013 AQ: December 18, 2013

Approximate Weight: 5.33 KG (~11.75 lbs)

About Saphira

Acquired from a rehabilitator in Tamarack, Pittsburg. She was blown out of her nest during a tornado and broke her wing in the process and did not heal properly. This injury resulted in her not being able to outstretch her left wing fully. However, she is still able to move around successfully without flying and is otherwise physically and mentally healthy. Saphira has not developed her distinctive white head and tail, and will remain mottled brown and white until she is about 4-5 years old.

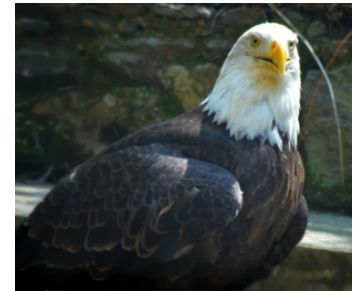


Granite 0.1– male, DOH: 2006-2008? AQ: March 16, 2014

Approximate Weight: 5KG (~11 lbs)

About Granite

Granite was acquired from a wildlife rehabilitator in Maine. She suffers from lead poisoning. Though unfortunately common in eagles and other animals at the top of the food chain, it is unclear what caused her case of poisoning. Usual sources include bioaccumulation, contaminated water, and scavenging contaminated prey from hunters. She is fully-flighted, but lacks the endurance to fly the long distances required for hunting due to her condition.



Status

Least Concern [2]. This species has an extremely large range, and hence does not approach the thresholds for Vulnerable under the range size criterion, but populations appear to be increasing (<10,000 mature individuals) [2]

Geographic Range

Bald eagles are native to Canada, Mexico, Saint Pierre and Miquelon, and the United States. [3]

Habitat

Bald eagles can be found in forested areas near bodies of water such as lakes, reservoirs, rivers, marshes and coast lines. [4]

Characteristics

Size: *Female length:* 3 feet [3] *Wingspan:* 7 feet for females, 6 feet for males [3] *Female weight:* 10-14 pounds. [3]

Longevity: **Wild** 15-20, record 28 years [1]

Captivity 20-30 years, record of 47 in captivity [1]

Physical Description

- The second largest North American bird of prey after the Californian condor [1]
- Mature adult bald eagles have dark brown bodies and wings with distinguishable white heads and tails. Their beaks and legs are a bright yellow.
- Named for its conspicuous white head, with 'bald' coming from an old English word meaning 'white' [1].
- Immature juvenile bald eagles have brown wings and bodies that are mottled with white in varying amounts. Their heads and tails are mostly dark, and adult plumage will not be attained until about five years of age.
- Bald eagles have hooked beaks and heavy bodies. When flying they hold their wings out flat.

Dimorphism

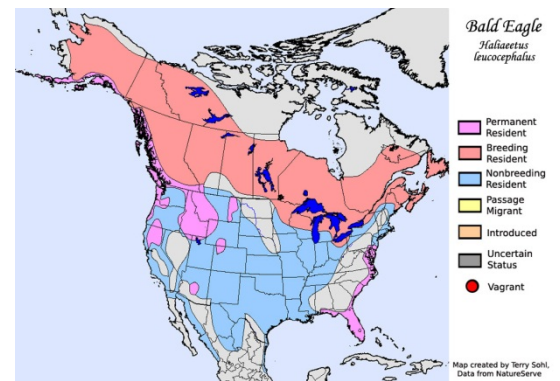
Males:

Females: Female bald eagles are larger than males, but otherwise similar in appearance. [4]

Diet: Carnivores

Opportunistic forager, feeding on a variety of prey including mammals, birds, reptiles, amphibians, crustaceans, **carrion**, and even garbage, although fish are preferred.

Diet in the Wild: The diet of bald eagles consists of many types of fish and a wide variety of birds, reptiles, amphibians, invertebrates and mammals. This includes salmon, herring, catfish, shad, crabs, rabbits, and muskrats. Bald eagles will eat live,



fresh prey or dead as carrion. [3] Bald eagles will sometimes ingest large amounts of food and digest it over a period of several days. They can survive for many days, even weeks fasting. [4]

Diet in the Zoo:

Behavior

- Diurnal, *day-active*
- Bald eagles can soar, glide, and flap over long distances.
- Bald eagles are capable of floating and can be found using their wings to “row” over deep water. [4]

Social Structure & Communication

- Bald eagles are often solitary, although they pair bond during the nesting season [1].
- Bald eagles defend their territories during breeding season from a multitude of intruders such as raptors, ravens, coyotes, and foxes.
- Although these birds are often solitary they can be found congregating by the hundreds at communal roosts and feeding sites particularly in the winter.

Feeding Behavior

- Bald eagles catch fish by swooping down to the surface of a lake or stream and grabbing the ones closer to the top
- In addition to hunting, bald eagles will sometimes steal food from other birds such as ospreys.

Reproduction

- Bald eagles mate in the air, flying high, locking talons, and spiraling downward together. To avoid crashing, they will break off at the last minute before hitting the ground.
- The nests range from cylindrical to conical to flat in shape. [4] Both males and females bring materials to the nest but the female weaves sticks together, filling the cracks with softer grasses, moss, or cornstalks. [3] The female will line the inside of the nest in layers starting with lichen or other fine wooded material, then with downy feathers and sometimes sprigs of greenery. Nests can take up to three months to construct and may be reused or added to year after year.
- Trees are usually where Bald eagles build their nests except in places where ground sites or cliff faces are available. Nests built on the ground are built on any available surface such as kelp and driftwood near coast lines. [4]
- Bald eagles are monogamous and remain together until one dies once they are paired.
- Mating season ranges anywhere from late September to early April.
- The female will lay from one to three eggs and both sexes share the duty of incubation for 35 days. [3] Chicks fledge at 8-14 weeks.

Conservation

The bald eagle is listed under Appendix II of the Convention on International Trade in Endangered Species (CITES), meaning international trade in the species should be carefully controlled.

- **Use & Trade:**
- **Threats:** Bald eagles were once placed on the Endangered Species list in 1978 due to a dramatic decline in populations caused by the heavy use of DDT pesticide, and rapid trapping and shooting. In June 2007, after a spectacular recovery, the bird was taken off the list and has achieved a status of least concern. [3] Lead poisoning from ammunition in hunter shot prey and contaminated watersheds, motor vehicle collisions, and destruction of habitat are all continuing threats to Bald eagles. [2]
- **Predators:**
A study in Florida found that a year after fledging, immature bald eagles have a survival rate of 89% in rural habitats and 65 to 72% in suburban habitats. After their 1st year, birds have an annual survival rate of 84 to 90%, regardless of their habitat type.

Did You Know?/Fun Facts

- Bald eagles build the largest nest of all birds. They are up to 4m deep and 6 feet in diameter. [3]
- DDT poisoning weakens the shell of eggs and prevents them from hatching. [3]
- The United States declared the bald eagle as the national symbol when the great seal of the U.S. was adopted in 1782. [5]
- The bald eagle is also the only eagle solely native to North America [1]

Glossary: List of definitions of the most important recurrent technical terms used in the text.

Carrion - The flesh of a dead animal.

Opportunistic – an opportunistic feeder is an animal that will eat whatever food is available. In the case of the bald eagle, it is an opportunistic carnivore; it will both hunt prey, eat from carrion, and even steal from other animals.

References:

[1] Encyclopedia of Life, "Bald eagle," Encyclopedia of Life, 2015. [Online]. Available: <http://www.arkive.org/bald-eagle/haliaeetus-leucocephalus/#src=portletV3api>. [Accessed February 2015].

- [2] "Haliaeetus leucocephalus," IUCN Red List of Threatened Species, 2014. [Online]. Available: <http://www.iucnredlist.org/details/22695144/0>. [Accessed 20 August 2014].
- [3] "Fact Sheet: Bald Eagle," Defenders of Wildlife, 2014. [Online]. Available: <http://www.defenders.org/bald-eagle/basic-facts>. [Accessed 24 February 2014].
- [4] "All About Birds: Bald Eagle," Cornell Lab of Ornithology, [Online]. Available: http://www.allaboutbirds.org/guide/Bald_eagle/lifehistory. [Accessed 25 February 2014].
- [5] "Bald Eagle Facts Sheet: American Bald Eagle Information," Bald Eagle Info, 2014. [Online]. Available: <http://www.baldeagleinfo.com/eagle/eagle-facts.html>. [Accessed 24 February 2014].