#### WikipediA

# Sea eagle

A **sea eagle** or **fish eagle** (also called **erne** or **ern**, mostly in reference to the white-tailed eagle) is any of the birds of prey in the genus *Haliaeetus*<sup>[2]</sup> in the bird of prey family Accipitridae.

### Contents

Taxonomy and evolution

**Evolution** 

**Species** 

Description

In popular culture

See also

References

General sources

**External links** 

# Taxonomy and evolution

The genus *Haliaeetus* was introduced in 1809 by French naturalist Marie Jules César Savigny in his chapter on birds in the *Description de l'Égypte*. The two fish eagles in the genus *Ichthyophaga* were found to lie within *Haliaeetus* in a genetic study in 2005, they were then moved accordingly. They are very similar to the tropical *Haliaeetus* species. A prehistoric (i.e. extinct before 1500) form from Maui in the Hawaiian Islands may represent a species or subspecies in this genus.

The relationships to other genera in the family are less clear; they have long been considered closer to the genus <u>Milvus</u> (kites) than to the true eagles in the genus <u>Aquila</u> on the basis of their morphology and display behaviour; [6][7] more recent genetic evidence agrees with this, but points to their being related to the genus <u>Buteo</u> (buzzards/hawks), as well, a relationship not previously thought close. [8]

A 2005 molecular study found that the genus is paraphyletic and subsumes <u>Ichthyophaga</u>, the species diverging into a temperate and tropical group. [9]



#### **Evolution**

*Haliaeetus* is possibly one of the oldest genera of living birds. A <u>distal</u> left <u>tarsometatarsus</u> (DPC 1652) recovered from early <u>Oligocene</u> deposits of <u>Fayyum</u>, <u>Egypt</u> (<u>Jebel</u> <u>Qatrani</u> Formation, about 33 million years ago (Mya)) is similar in general pattern and some details to that of a modern sea eagle. [10] The genus was present in the middle Miocene (12-16 Mya) with certainty. [11]

The origin of the sea eagles and fishing eagles is probably in the general area of the <u>Bay of Bengal</u>. During the <u>Eocene/Oligocene</u>, as the <u>Indian subcontinent</u> slowly collided with <u>Eurasia</u>, this was a vast expanse of fairly shallow ocean; the initial sea eagle divergence seems to have resulted in the four <u>tropical</u> (and <u>Southern Hemisphere subtropical</u>) species living around the <u>Indian Ocean today</u>. The <u>Central Asian Pallas</u>'s sea eagle's relationships to the other <u>taxa</u> is more obscure; it seems closer to the three <u>Holarctic</u> species which evolved later and may be an early offshoot of this northward expansion; it does not have the hefty yellow bill of the northern forms, retaining a smaller, darker beak like the tropical species. [8]

The rate of molecular evolution in *Haliaeetus* is fairly slow, as is to be expected in long-lived birds which take years to successfully reproduce. In the mtDNA cytochrome *b* gene, a mutation rate of 0.5–0.7% per million years (if assuming an Early Miocene divergence) or maybe as little as 0.25–0.3% per million years (for a Late Eocene divergence) has been shown. [8]

# **Species**

The 10 extant species are: [6]

Image	Scientific name	Common name	Distribution
	Haliaeetus Ieucocephalus	Bald eagle	All of the continental <u>United States</u> , <u>Canada</u> , and northern <u>Mexico</u>
	Haliaeetus leucogaster	White- bellied sea eagle	India and <u>Sri Lanka</u> through <u>Southeast Asia</u> to <u>Australia</u>
	Haliaeetus sanfordi	Sanford's sea eagle	Solomon Islands
	Haliaeetus vocifer	African fish eagle	Sub-Saharan Africa
	Haliaeetus vociferoides	Madagascar fish eagle	Madagascar
	Haliaeetus leucoryphus	Pallas's fish eagle	Central Asia, between the Caspian Sea and the Yellow Sea, from Kazakhstan and Mongolia to the Himalayas, Bangladesh and northern India.
	Haliaeetus albicilla	White-tailed eagle	Western Greenland, most of Eurasia as far south as southeastern China and Japan
	Haliaeetus pelagicus	Steller's sea eagle	Coastal northeastern Asia



# **Description**

Sea eagles vary in size, from Sanford's sea eagle, averaging 2–2.7 kilograms (4.4–6.0 lb), to Steller's sea eagle, weighing up to 9 kg (20 lb). [6] At up to 6.9 kg (15 lb 3 oz), the white-tailed eagle is the largest eagle in Europe. Bald eagles can weigh up to 6.3 kg (13 lb 14 oz), making them the largest eagle native to North America. There are exceptional records of even heavier individuals in both the white-tailed and bald eagles, although not surpassing the largest Steller's sea eagles. The white-bellied sea eagle can weigh up to 4.5 kg (9 lb 15 oz). [6] They are generally overall brown (from rich brown to dull grey-brown), often with white to the head, tail or underparts. Some of the species have an all-yellow beak as adults, which is unusual among eagles. [6]

Their diets consist mainly of fish, aquatic birds, and small mammals. Nests are typically very large and positioned in a tree, but sometimes on a cliff. [6]

The tail is entirely white in adult *Haliaeetus* species except for Sanford's, white-bellied, and Pallas's. Three <u>species pairs</u> exist: white-tailed and bald eagles, Sanford's and white-bellied sea eagles, and the African and Madagascar fish eagles, each of these consists of a white- and a tanheaded species.

### In popular culture

- The bald eagle is the national symbol of the United States.
- The silver eagle on red shield on the arms of Poland has been interpreted as the sea eagle.
- Namibia, Zambia, and Zimbabwe have the African fish eagle as their national bird.

- The white-tailed eagle is the national bird of Poland.
- The Manly Warringah Sea Eagles are an Australian professional rugby league club that competes in the National Rugby League (NRL).
- Nesting pairs of both the bald eagle and white-bellied sea eagle have been subject to live-streaming webcam footage. [12][13]
- In <u>heraldic language</u>, the <u>osprey</u> is termed a "sea-eagle", although ospreys come from the taxonomic family <u>Pandionidae</u> and are not classified as true sea eagles.



A sea eagle in the flag of Naval Reconnaissance Battalion of Finnish Navy

#### See also

- Brahminy kite, also called red-backed sea eagle
- Osprey

### References

- 1. "Mindat.org" (https://www.mindat.org/taxon-2480444.html). www.mindat.org. Retrieved 2021-05-28.
- 2. Etymology: New Latin "sea eagle", from Ancient Greek [1] (http://archimedes.fas.harvard.edu/c gi-bin/dict?name=lsj&lang=el&word=a%28lia%2fetos&filter=CUTF8) ἀλιάετος (haliaetos) or ἀλιαίετος (haliaietos, poetic (e.g. Homeric) variant), "sea eagle, osprey" (hali, "at sea" (dative case), + aetos, "eagle"). The two variant Greek forms lie behind the equally correct latinizations haliaetus (as in Pandion haliaetus) and haliaeetus.
- 3. <u>Savigny, Marie Jules César</u> (1809). *Description de l'Égypte: Histoire naturelle Volume 1* (in French). Paris: Imprimerie impériale. pp. <u>68 (https://www.biodiversitylibrary.org/page/1598945</u> 7), 85 (https://www.biodiversitylibrary.org/page/15989474).
- 4. Mayr, Ernst; Cottrell, G. William, eds. (1979). <u>Check-list of Birds of the World. Volume 1 (http s://www.biodiversitylibrary.org/page/16108939)</u>. Vol. 1 (2nd ed.). Cambridge, Massachusetts: Museum of Comparative Zoology. p. 299.
- 5. Lerner, Heather R.L.; Mindell, David P. (2005). "Phylogeny of eagles, Old World vultures, and other Accipitridae based on nuclear and mitochondrial DNA" (http://www-personal.umich.edu/~hlerner/LM2005.pdf) (PDF). Molecular Phylogenetics and Evolution. 37 (2): 327–46. doi:10.1016/j.ympev.2005.04.010 (https://doi.org/10.1016%2Fj.ympev.2005.04.010). PMID 15925523 (https://pubmed.ncbi.nlm.nih.gov/15925523).
- 6. del Hoyo, Elliott & Sargatal 1994.
- 7. Brown, L. H, & Amadon, D. (1968). *Eagles, Hawks and Falcons of the World*. Country Life Books, Feltham.
- 8. Wink, Heidrich & Fentzloff 1996.
- 9. LM2005.pdf (http://www-personal.umich.edu/~hlerner/LM2005.pdf)
- Rasmussen, D., Tab, O., Storrs, L., & Simons, E. L. (1987). Fossil Birds from the Oligocene Jebel Qatrani Formation, Fayum Province, Egypt. Smithsonian Contributions to Paleobiology 62: 1–20. PDF Fulltext (http://www.sil.si.edu/smithsoniancontributions/Paleobiology/pdf\_hi/SCt P-0062.pdf) (file size 8.1 MB)
- 11. Lambrecht, K. (1933). Handbuch der Palaeornithologie. Gebrüder Bornträger, Berlin.
- 12. AFP (5 April 2011). "Eagle cam becomes net sensation" (http://www.smh.com.au/digital-life/digital-life-news/eagle-cam-becomes-net-sensation-20110405-1czwn.html). Sydney Morning Herald. Retrieved 5 April 2011.
- 13. "Sea-Eagle CAM" (http://www.sea-eaglecam.org/index.html). Sea Eagle Cam, BirdLife Australia. Retrieved 7 September 2020.

#### **General sources**

- del Hoyo, J.; Elliott, A.; Sargatal, J., eds. (1994). <u>Handbook of the Birds of the World</u>. Vol. 2. Barcelona: Lynx Edicions. ISBN 84-87334-15-6.
- Wink, M.; Heidrich, P.; Fentzloff, C. (1996). "A mtDNA phylogeny of sea eagles (genus *Haliaeetus*) based on nucleotide sequences of the cytochrome *b* gene" (http://www.uni-heidelberg.de/institute/fak14/ipmb/phazb/pubwink/1996/20\_1996.pdf) (PDF). *Biochemical Systematics and Ecology*. **24** (7–8): 783–791. doi:10.1016/S0305-1978(96)00049-X (https://doi.org/10.1016%2FS0305-1978%2896%2900049-X).

#### **External links**

■ Media related to Haliaeetus at Wikimedia Commons

Retrieved from "https://en.wikipedia.org/w/index.php?title=Sea eagle&oldid=1118647475"

This page was last edited on 28 October 2022, at 03:50 (UTC).

Text is available under the Creative Commons Attribution-ShareAlike License 3.0; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.