Diving to extinction: Water birds at risk

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"... I catch fish in style and am a principled eater! This has been a royal family legacy, unlike those gluttonous beings that have no manners and just prey on food wherever."

– In "Family Legacy"; *The Kingfisher Story Collection* [1]

Our Earth's climate is changing. Any species living in the Earth's ecosystem need to thrive to adapt to the new living conditions. Otherwise, extinction will be their outcome. In the race for adaptation, waterbirds (Aequorlitornithes), such as penguins, cormorants, and alcids, seem disadvantageous.

Illustration. Great Blue Heron, taken by Russ Hartung. Retrieved from: https://www.audubon.org/news/audubon-members-wade-through-memories-their-favorite-water-birds

A recent study published in Proceedings of the Royal Society B discovered that diving has been acquired independently at least 14 times in waterbirds, but there were no instances of diving birds reversed into the non-diving forms [2]. The analysis was conducted on a collection of 727 waterbird species across 11 bird groups. Among these 727 species, one-fifth are listed as vulnerable, endangered, or critically endangered by the International Union for Conservation of Nature (IUCN) [3].

As the evolution into the diving form is irreversible, waterbirds with highly specialized bodies and behaviors for diving will be vulnerable to climate change and face a higher risk of extinction. For species with such inflexible adaptation capability to survive long-term, human involvement in keeping their surrounding environment unchanged or only changing slightly is necessary.

We are often proud of our adaptability, so this is a good chance to prove such capability by adopting the eco-surplus values and saving these inflexible species from the upcoming climate change induced by humans [4].

References

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