



Macaroni penguins acquired their name from 19th-century sailors who thought their distinct feathers resembled “macaronism,” a flamboyant 18th-century European style of dress.¹

Conserving Macaroni Penguins

Macaroni penguins (*Eudyptes chrysolophus*) are known for their bright yellow and orange crest feathers and prominent red-orange bills.² While their appearance resembles the other six crested penguin species, they are the only members of the *Eudyptes* genus to call Antarctic waters home.

About macaroni penguins

There are 6.3 million breeding pairs³ of macaroni penguins in at least 258 colonies. The largest populations can be found in sub-Antarctic waters on the Crozet, Kerguelen, Heard, South Georgia, and Marion islands.⁴

The International Union for Conservation of Nature lists the macaroni penguin as Vulnerable to extinction.⁵ In the past 36 years, the populations has declined considerably. Scientists believe that climate change and competition for food from increased commercial fishing are the leading causes.⁶

Did You Know?

- Macaroni penguins lay two eggs but raise only one chick. The first eggs are often removed in the nest-building process or are deliberately ejected from the nests.⁷
- It has been reported that macaroni penguins consume 4 million tons of krill a year.⁸

Habitat and threats

Macaroni penguins are widely distributed across Antarctic and sub-Antarctic waters. They are migratory birds that live primarily in rocky areas and on cliffs above the ocean.⁹

Although the number of macaroni penguins is large, the species is in decline globally. Access to their main food supply could potentially be in jeopardy because of climate change and expanded industrial fishing for krill in penguin foraging habitat.¹⁰ Additionally, introduced species such as cats, rabbits, and rats could substantially impede penguin breeding. These nonnative predators have caused problems for other types of nesting seabirds and could pose a significant threat to the success of macaroni breeding on some sub-Antarctic islands.¹¹

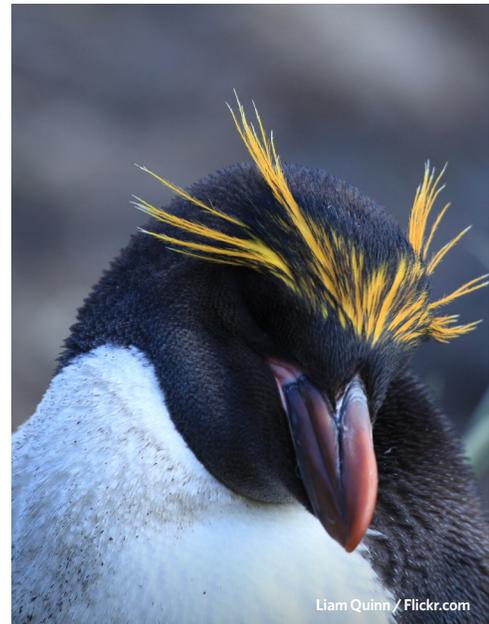
Increased tourism could also put additional pressure on macaroni penguins through colony disturbance.

What we can do

Macaroni penguins depend on ocean resources that are at risk because of ocean warming and overfishing. Establishing protections could make a big difference in their long-term survival. The Pew Charitable Trusts recommends:

- Creation of marine reserves to protect macaroni penguin food sources and foraging areas.
- Precautionary management of the Antarctic krill fishery.
- Appropriate management of tourism activities to prevent harm to penguin foraging and nesting areas.

The consensus-based Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) is composed of 24 countries and the European Union and has the authority to create large-scale, fully protected marine reserves in the Southern Ocean. Action by CCAMLR is needed to help alleviate pressure on these penguins and protect them for the future.



Where Macaroni Penguins Live



Threats:

Climate change, introduced predators

Population:

6.3 million breeding pairs

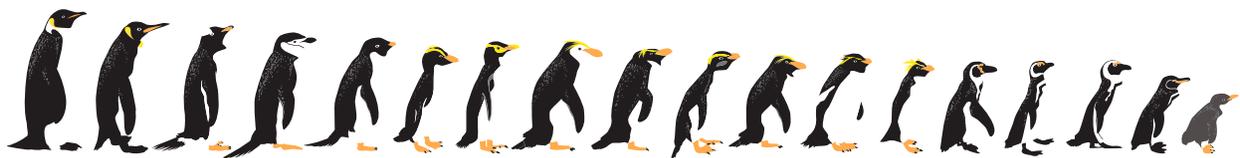
IUCN status:

Vulnerable

There are more than 250 macaroni breeding colonies found throughout Antarctic and sub-Antarctic waters.

Endnotes

- 1 New England Aquarium, "Penguin Blog: Macaroni vs. Rockhopper Penguins," accessed Aug. 5, 2014, <http://penguins.neaq.org/2014/07/macaroni-vs-rockhopper-penguins.html>.
- 2 Glenn T. Crossin et al., "Macaroni Penguin (*Eudyptes chrysolophus*) and Royal Penguin (*Eudyptes schelegli*)" in *Penguins: Natural History and Conservation*, eds. Pablo Garcia Bororoglu and P. Dee Boersma (Seattle: University of Washington Press, 2013), 185.
- 3 International Union for Conservation of Nature Red List of Threatened Species, "Eudyptes chrysolophus," accessed March 14, 2014, <http://www.iucnredlist.org/details/22697793/0>.
- 4 Ibid.
- 5 Ibid.
- 6 BirdLife International, "Macaroni Penguin *Eudyptes chrysolophus*," accessed Aug. 5, 2014, <http://www.birdlife.org/datazone/speciesfactsheet.php?id=3857>.
- 7 Colleen Cassady St Clair et al., "Unfit Mothers? Maternal Infanticide in Royal Penguins," *Animal Behavior* 50 (1995): 1177-85, doi:10.1016/0003-3472(95)80034-4.
- 8 P. Dee Boersma and D.L. Stokes, "Conservation: Threats to Penguin Populations," in *Bird Families of the World—The Penguins*, ed. T.D. Williams (Oxford: Oxford University Press, 1995).
- 9 Katie Reynolds, "Eudyptes chrysolophus Macaroni Penguin," University of Michigan Museum of Zoology, Animal Diversity Web, accessed Aug. 5, 2014, http://animaldiversity.ummz.umich.edu/accounts/Eudyptes_chrysolophus.
- 10 Crossin et al., "Macaroni Penguin," 194.
- 11 Ibid.



Find out how you can help macaroni penguins:

pewtrusts.org/penguins

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