

# **Protecting Chinstrap Penguins**

With its distinctive black markings and beak, the aptly named chinstrap penguin (*Pygoscelis antarcticus*) is one of the most recognizable species of Antarctic and sub-Antarctic penguin.

Although populations of these birds are generally strong, natural decreases in the abundance of their prey,<sup>2</sup> increases in commercial krill fishing,<sup>3</sup> and melting and shifting sea ice<sup>4</sup> could have a detrimental impact on colony stability and health.

# **About chinstrap penguins**

There are about 4 million breeding pairs<sup>5</sup> of chinstrap penguins, with most concentrated in the Antarctic Peninsula and the South Shetland, South Orkney, and South Sandwich islands in the Southern Ocean.<sup>6</sup> They are roughly the same size as Adélie penguins, with adults weighing 3.5 to 5.5 kilograms (about 7.7 to 12 pounds).<sup>7</sup>

Chinstrap penguins are at little risk of extinction, according to the International Union for Conservation of Nature (IUCN), which gives them a rating of Least Concern.<sup>8</sup> However, some colonies are in decline, and increased interest in krill fishing around the Antarctic Peninsula, combined with climate-driven declines in fish stocks and greater human activity in the Southern Ocean, could contribute to population changes.

#### **Did You Know?**

 Chinstrap penguins have been observed shedding their stomach linings,<sup>9</sup> which could help cleanse them of fluoride ingested when they feed on krill.<sup>10</sup>

## Habitat and threats

Chinstrap penguins generally forage in shallow waters and depend almost entirely on krill, the tiny shrimplike crustaceans that serve as building blocks of the food web in the Southern Ocean. As industrial krill fishing increases, particularly off the Antarctic Peninsula, less food may be available in chinstrap penguin foraging areas, and the birds' populations could decline.<sup>11</sup>

Antarctic tourism, particularly to the peninsula, is also on the rise. More than 37,000 travelers visited the Southern Ocean in the 2013-14 season.<sup>12</sup> Increased human interference could affect colony health as well.

### What we can do

Successful foraging for krill is key to the survival of chinstrap penguins, as is minimizing potential disturbances from humans. The Pew Charitable Trusts recommends:

- Creation of marine reserves to protect chinstrap 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 made up 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 Chinstrap Penguins Live



#### Threats:

Climate change

# Population:

4 million breeding pairs

#### **IUCN status:**

Least Concern

Chinstrap penguins can be found throughout the Southern Ocean but are mostly concentrated in the Antarctic Peninsula and South Shetland, South Orkney, and South Sandwich islands.

### **Endnotes**

- 1 Wayne Trivelpiece and Sue Trivelpiece, "Chinstrap Penguin (*Pygoscelis antarctica*)," in *Penguins: Natural History and Conservation*, eds. Pablo Garcia Borboroglu and P. Dee Boersma (Seattle: University of Washington Press, 2013), 61.
- 2 A.S. Lynnes, K. Reid, and J.P. Croxall, "Diet and Reproductive Success of Adelie and Chinstrap Penguins: Linking Response of Predators to Prey Population Dynamics," *Polar Biology* 27, no. 9 (2004): 544-554, doi:10.1007/s00300-004-0617-1.
- 3 D.A. Croll and B.R. Tershy, "Penguins, Fur Seals, and Fishing: Prey Requirements and Potential Competition in the South Shetland Islands, Antarctica," *Polar Biology* 19, no. 6 (1998): 365–74, doi:10.1007/s003000050261.
- 4 Jaume Forcada et al., "Contrasting Population Changes in Sympatric Penguin Species in Association with Climate Warming," *Global Change Biology* 12, no. 3 (2006): 411–23, doi:10.1111/j.1365-2486.2006.01108.x.
- 5 "Pygoscelis antarcticus," International Union for Conservation of Nature Red List of Threatened Species, accessed July 21, 2014, http://www.iucnredlist.org/details/22697761/0.
- 6 Trivelpiece and Trivelpiece, "Chinstrap Penguin (Pygoscelis Antarctica), 60.
- 7 Ibid., 59.
- 8 "Pygoscelis Antarcticus."
- 9 Albert Beintema, "Penguins Shed Stomach Linings," Nature 352, no. 6335 (1991): 480-81, http://www.nature.com/nature/journal/v352/n6335/pdf/352480b0.pdf.
- 10 Boris Culik, "Fluoride Turnover in Adélie Penguins (Pygoscelis adeliae) and Other Bird Species," Polar Biology 7 (1987): 179.
- 11 Croll and Tershy, "Penguins, Fur Seals, and Fishing."
- 12 "Antarctica visitors up 9% in 2013/14 season, totaling 37.405, according to IAATO," MercoPress, May 28, 2014, http://en.mercopress.com/2014/05/28/antarctica-visitors-up-9-in-2013-14-season-totaling-37.405-according-to-iatto.



# Find out how you can help chinstrap penguins:

pewtrusts.org/penguins

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