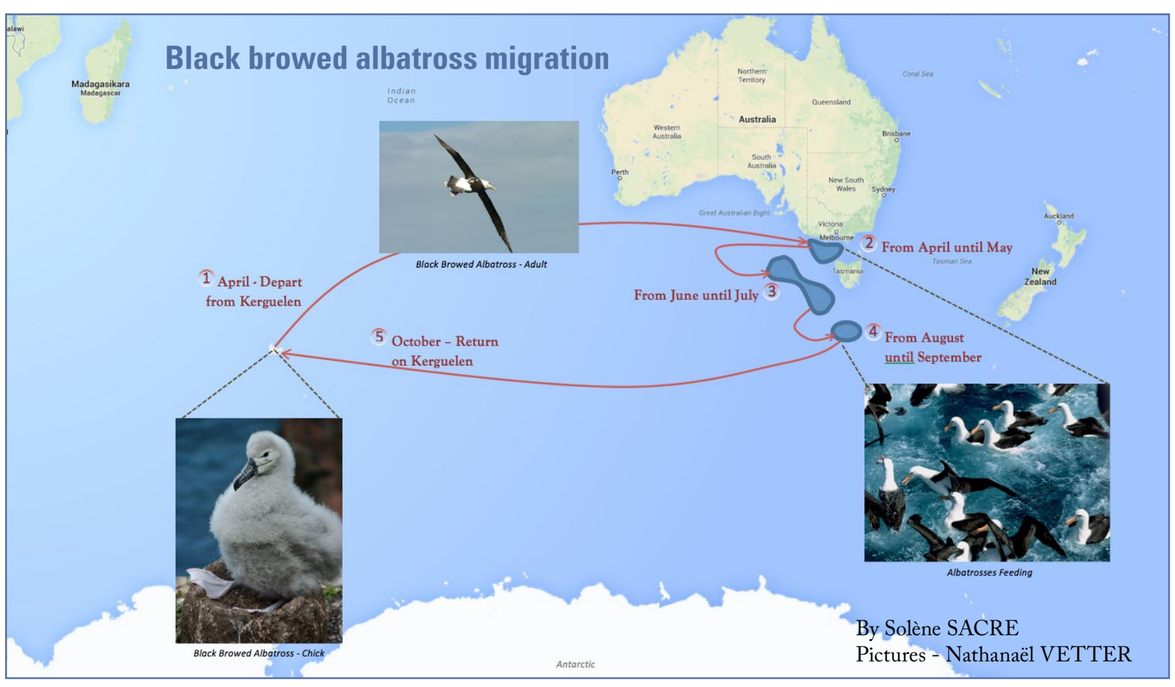
From Penguins to Polar Bears

The Impacts of Climate Change

Sponsor: Elizabeth W. and Henry A. Morss, Jr., Colloquia Endowed Fund

Wandering albatross



Birds of Flight

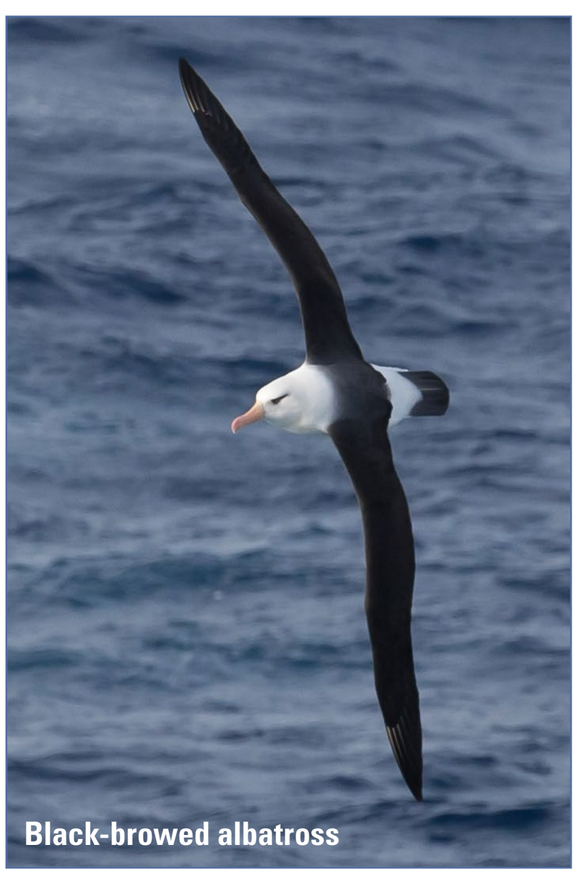
The Artic and Antarctic are home to a remarkable array of seabirds. From the magnificent Wandering albatross in Antarctica to the charismatic Atlantic puffin in the Arctic, these birds have developed survival mechanisms to adapt to the harsh polar environment, foraging over open ocean and breeding along dynamic coastlines.

Although their environments are naturally harsh and extreme, changes in wind patterns and water temperature can dramatically impact how well they can fly, how much prey is available, and their foraging strategies, and ultimately determine their ability to breed and survive. Sea level rise is impacting coastal breeding grounds as well as causing saltwater intrusion into some fresh water habitats.

Researchers at Woods Hole Oceanographic Institution (WHOI) are studying the strategies different species employ to survive in these extreme environments and are using data from climate models and sea ice forecasts, and demographic information to predict how they will fare as climate continues to change in the future.

Atlantic puffin

Antarctic petrel



Black-browed albatross

Policies that can help

Better management of fisheries. Over-fishing of herring stocks can spell disaster for some seabirds, such as puffins, with not enough fish to feed their young. Industrialization of krill fisheries in the Antarctic has drastically reduced the amount of food available for penguin species and other birds.

Prioritize protection of habitats that are most resilient to the effects of climate change. It is important to recognize that climate change is already happening and to find ways to adapt and protect existing species.

Protect species under threat. Organizations like Audubon's Project Puffin are pushing to preserve species most threatened by environmental change.

Woods Hole Oceanographic Institution Seabirds' Lab

Audubon Project Puffin