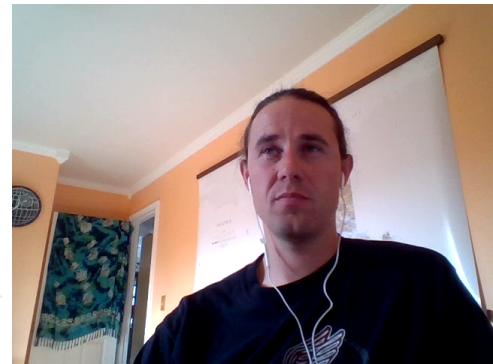


Seabird Camp!
duck

July 2021



About Me



What are sea ducks?



TYPES OF DUCKS.



Seabirds

vs.

Sea ducks



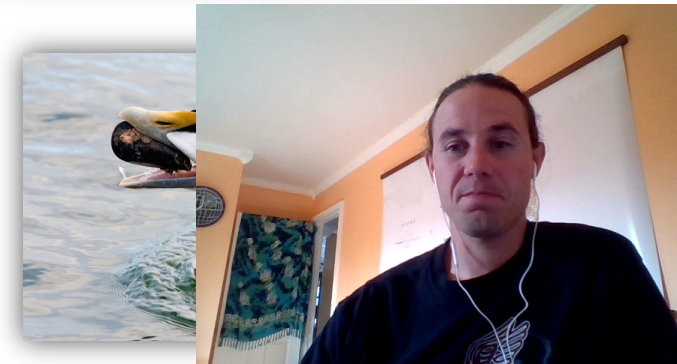
Sexual dimorphism



Nesting



Diet



Sea duck species found on St. Paul

King Eider





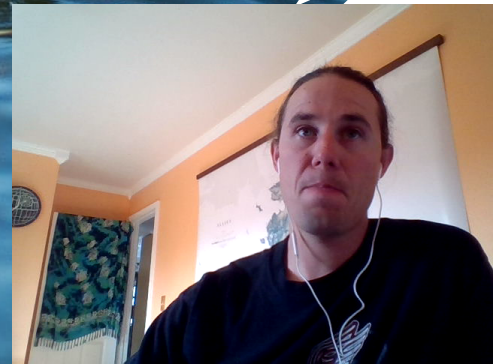
King Eider



Sea duck species found on St. Paul



Harlequin Duck





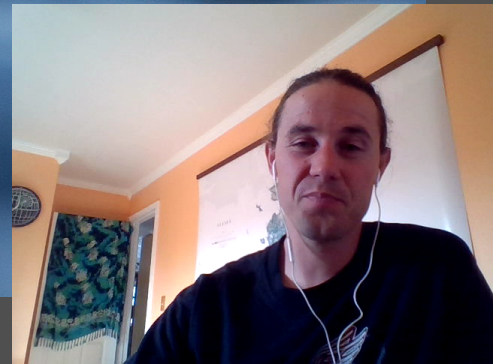
Harlequin Duck



Sea duck species found on St. Paul

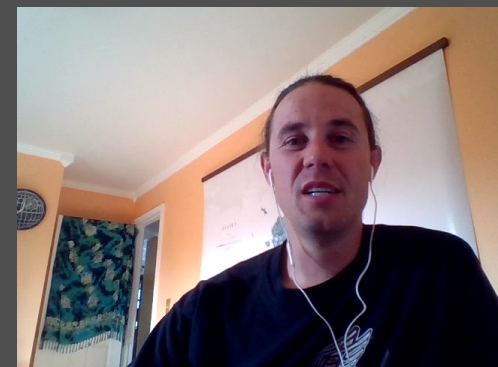


Long-tailed Duck





Long-tailed Duck



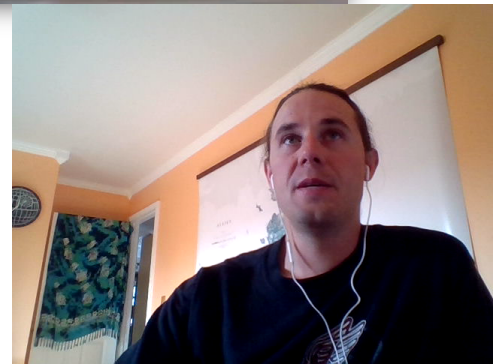
Other Sea Duck Species on St. Paul



Common Eider



Steller's Eider



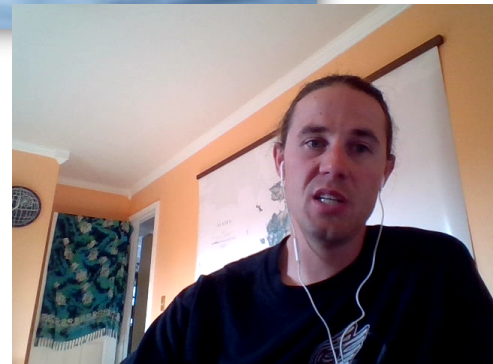
Other Sea Duck Species on St. Paul



White-winged Scoter



Black Scoter



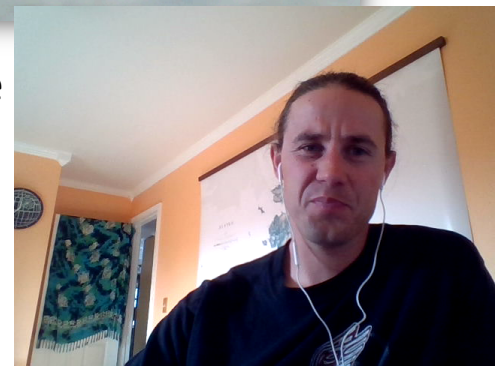
Other Sea Duck Species on St. Paul

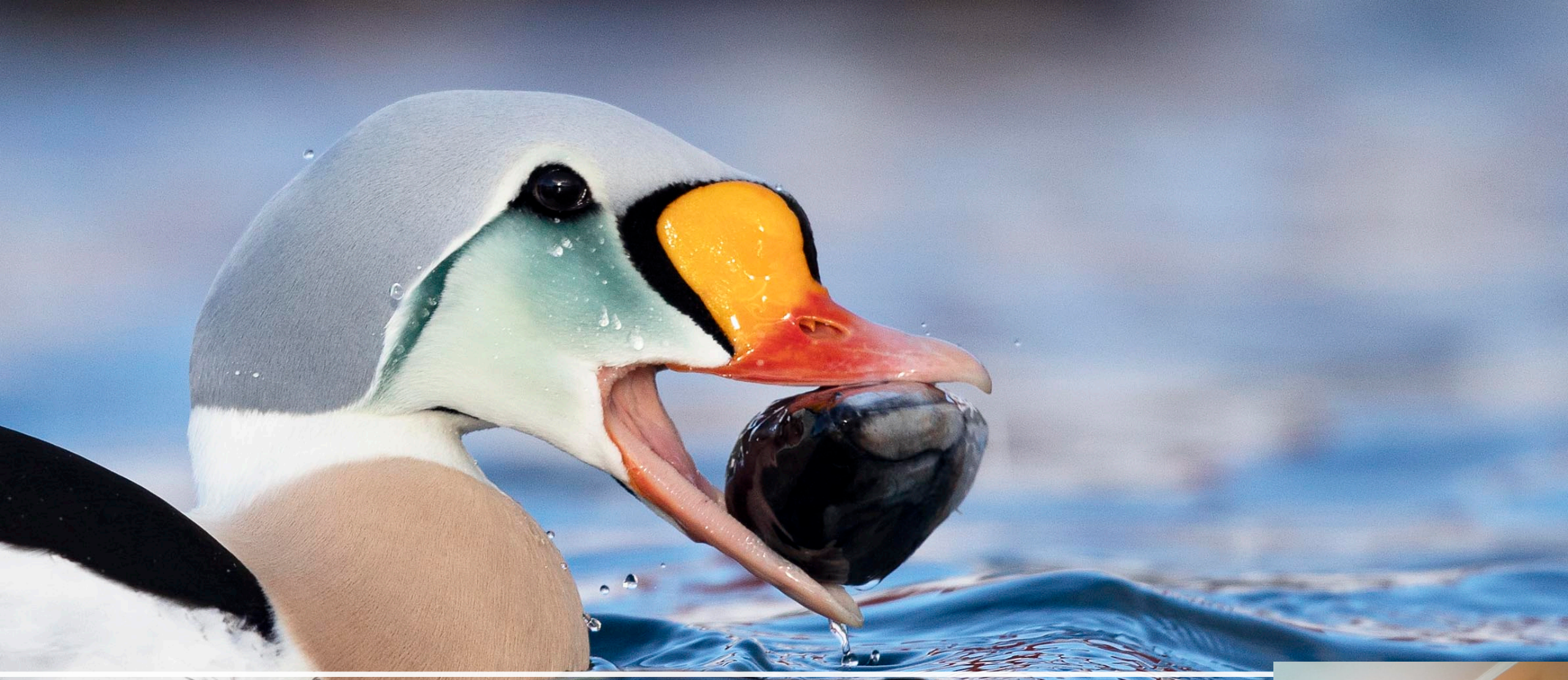


Bufflehead

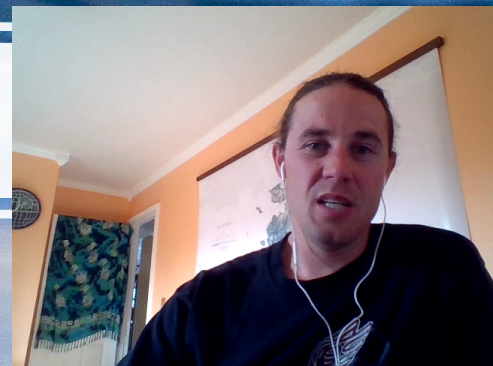


Barrow's Goldeneye





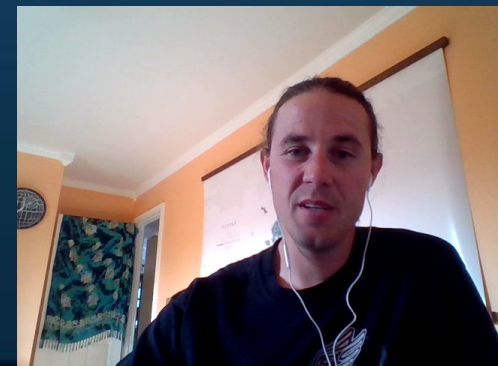
Sea Duck Diet





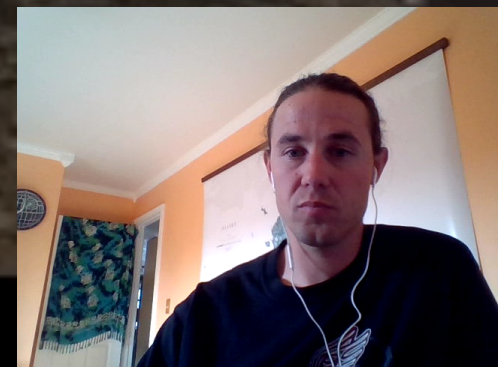
How they dive?

Combination of
wings and feet

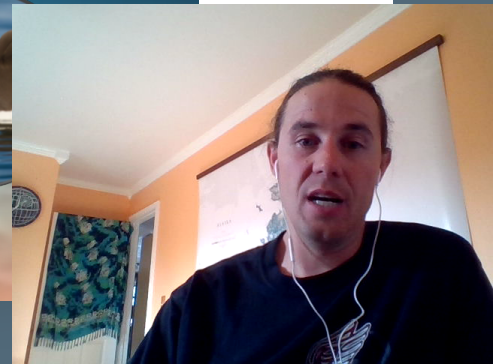


A duck is shown swimming underwater in a dark, murky environment. The duck is positioned in the upper center of the frame, with its head and neck visible. The water is very dark, and the bottom of the frame shows a sandy or rocky seabed. The text "How Deep?" is overlaid in white, centered in the middle of the image.

How Deep?

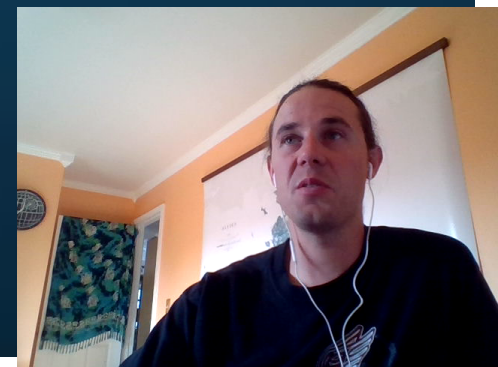


Dive Depths



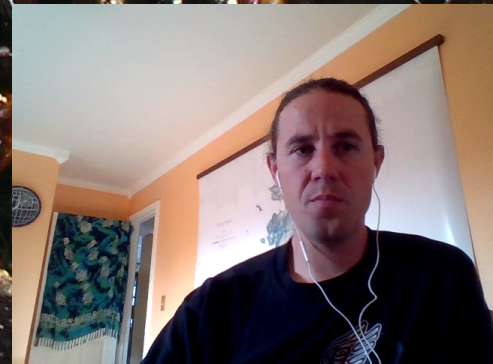
Video of Eiders diving



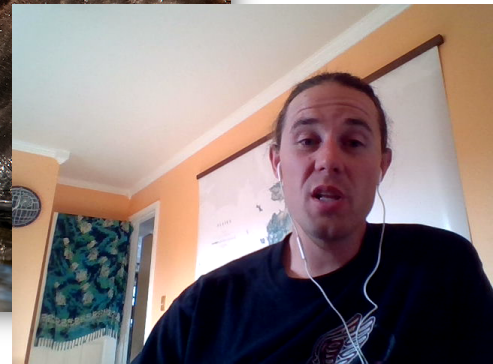
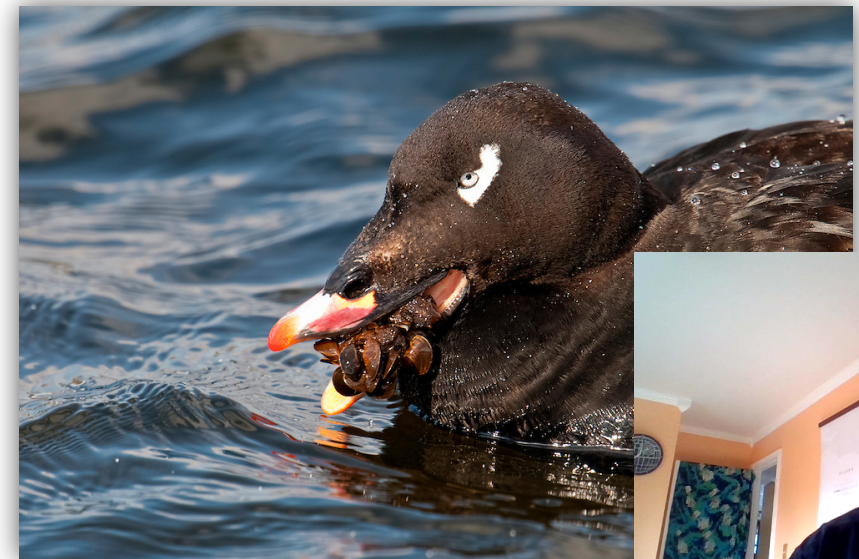
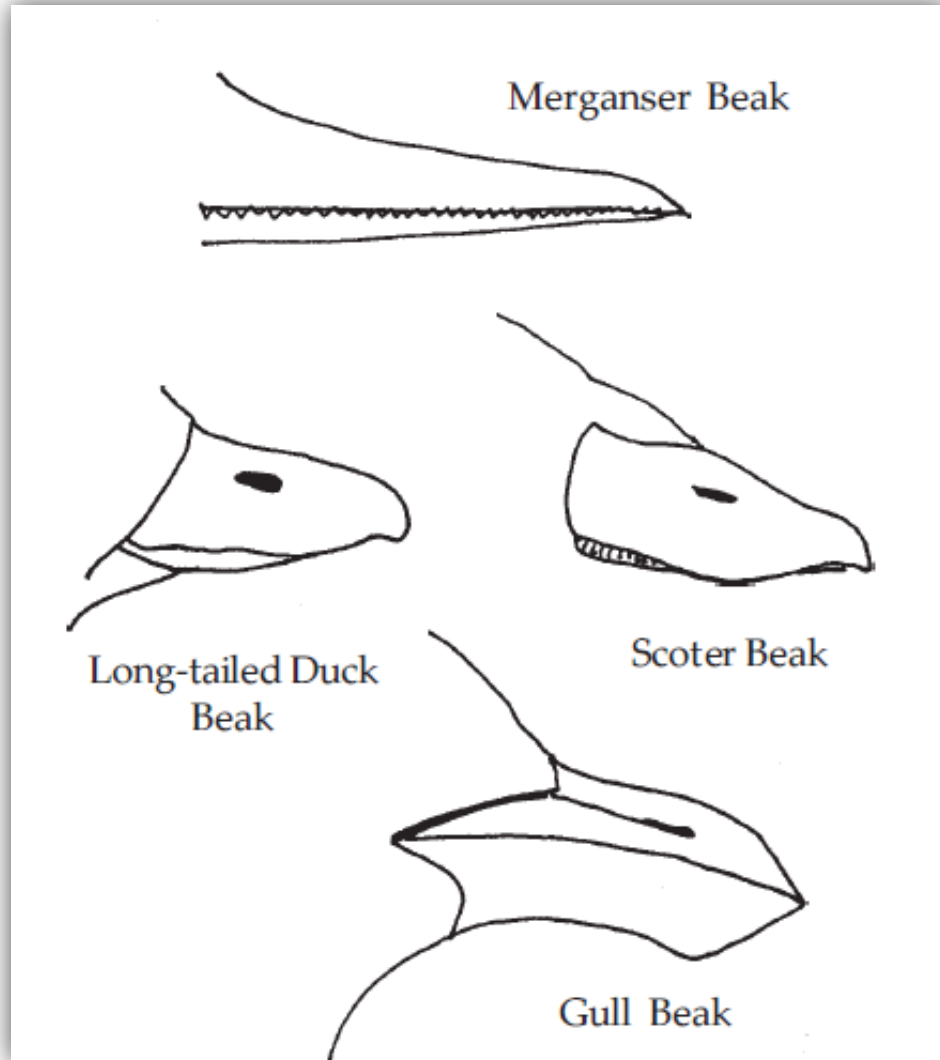




What Do Sea Ducks Eat?



Depends on the species...

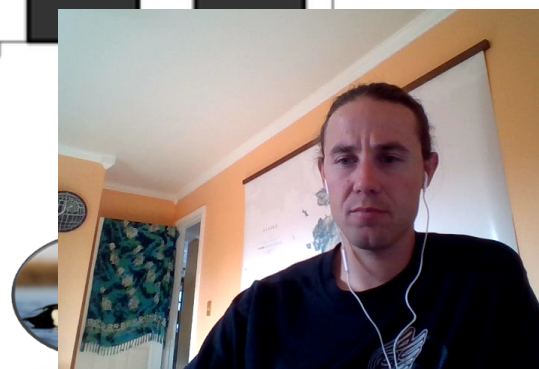
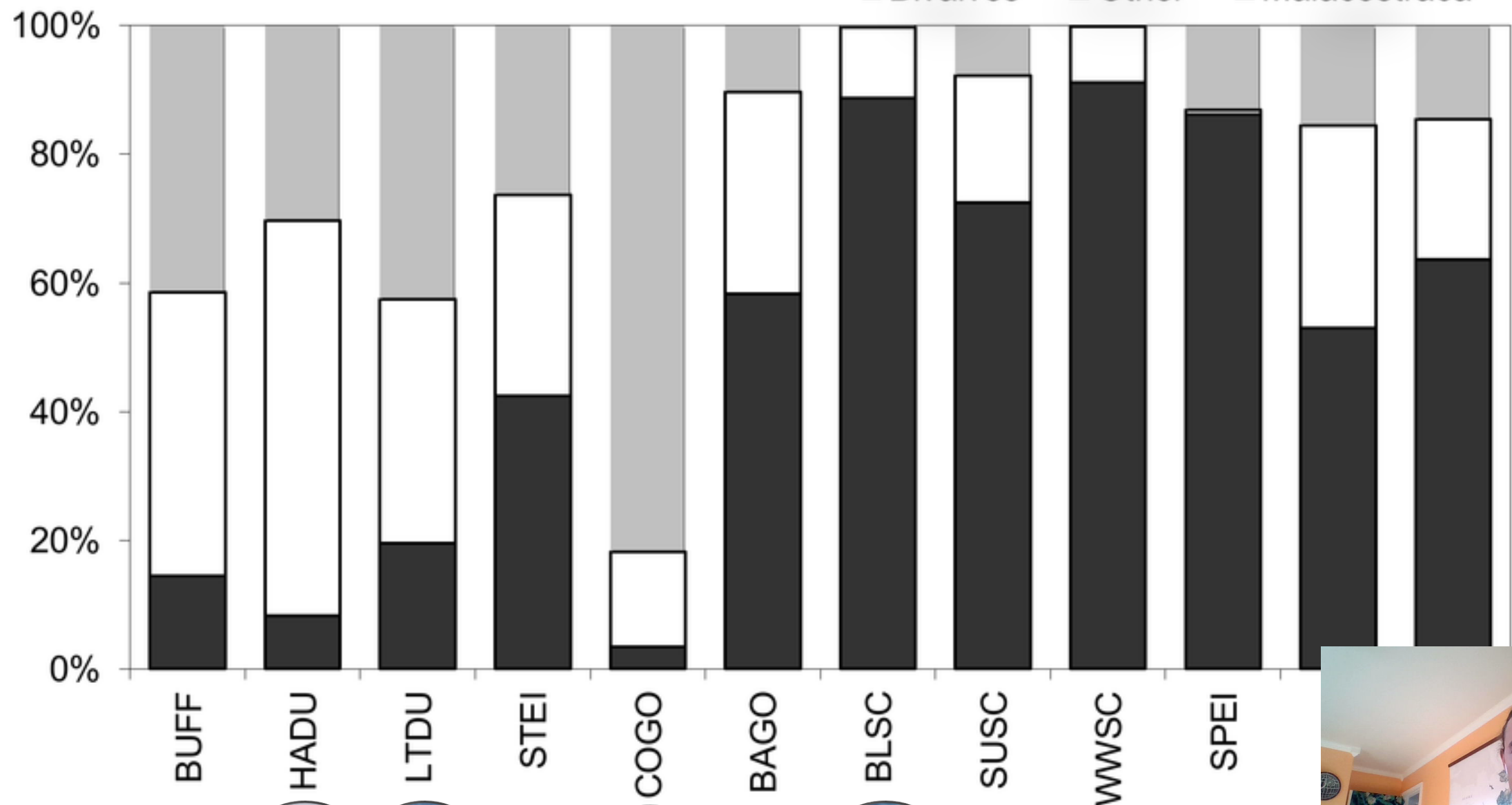




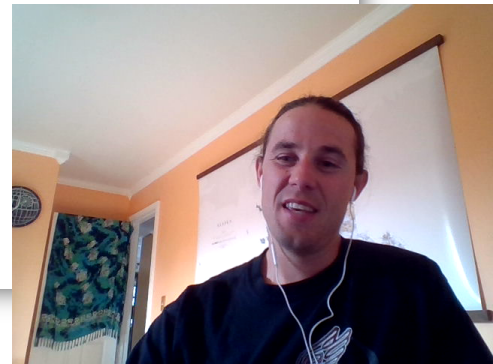
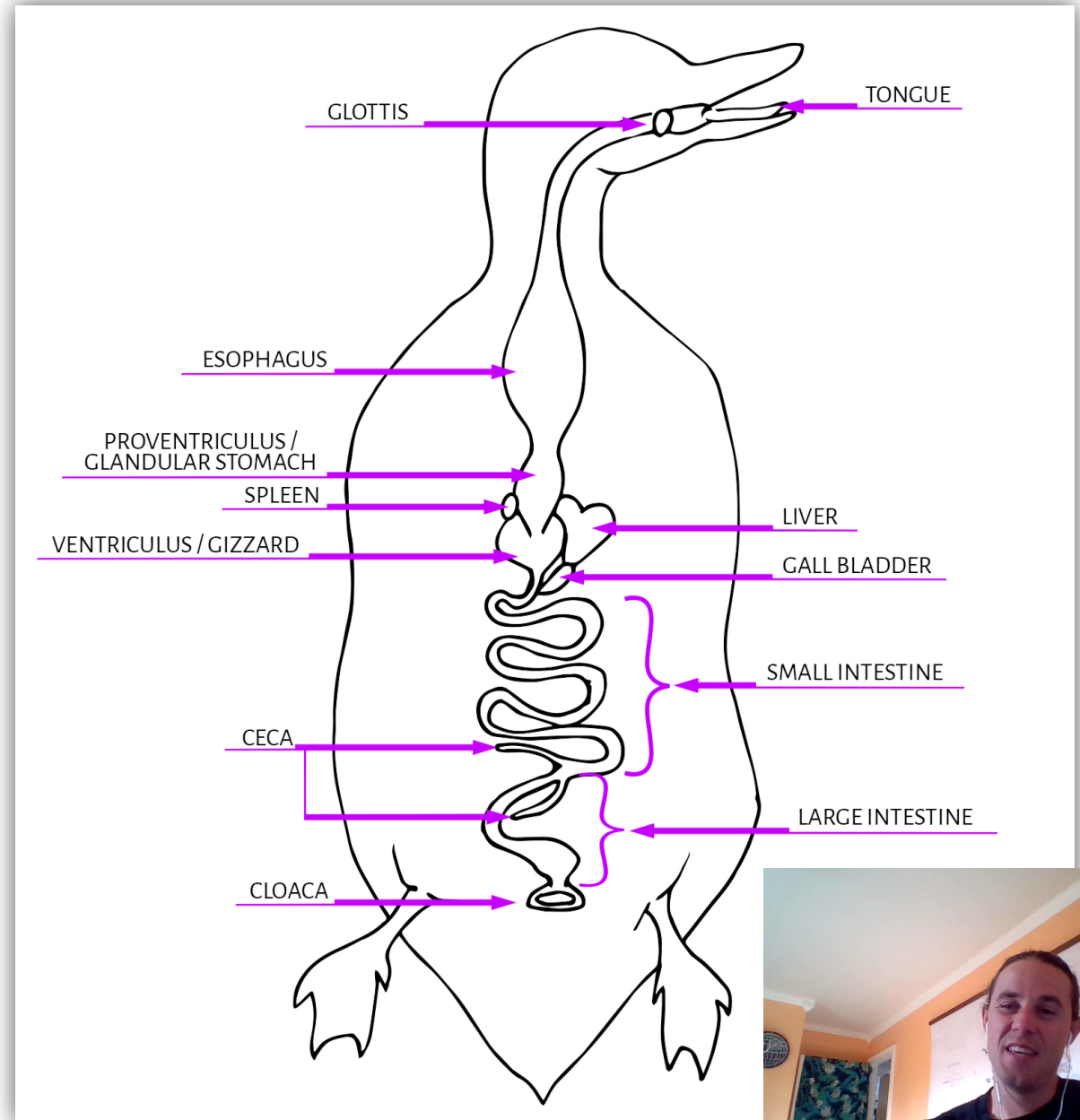
■ Bivalves

□ Other

■ Malacostraca

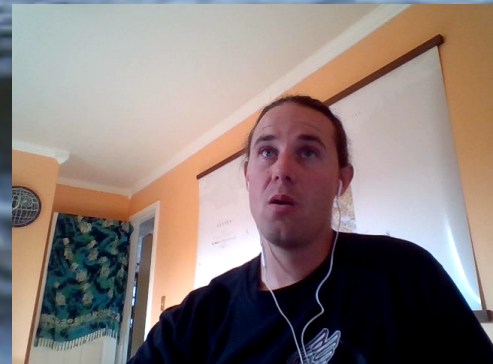


Sea duck digestive system



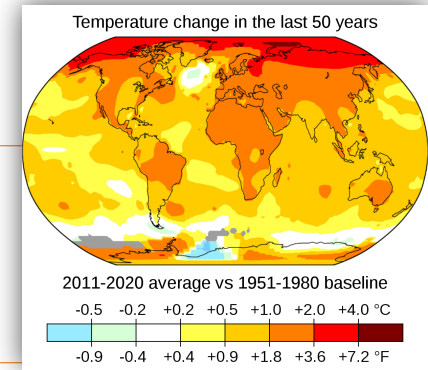


How to Study Sea Ducks



Conservation Issues

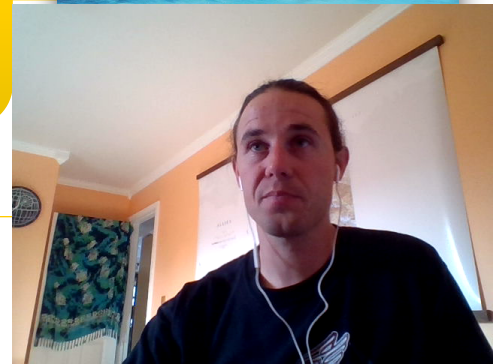
Climate change



Contaminants



Oil spills



Tag deployment





How to catch sea ducks?



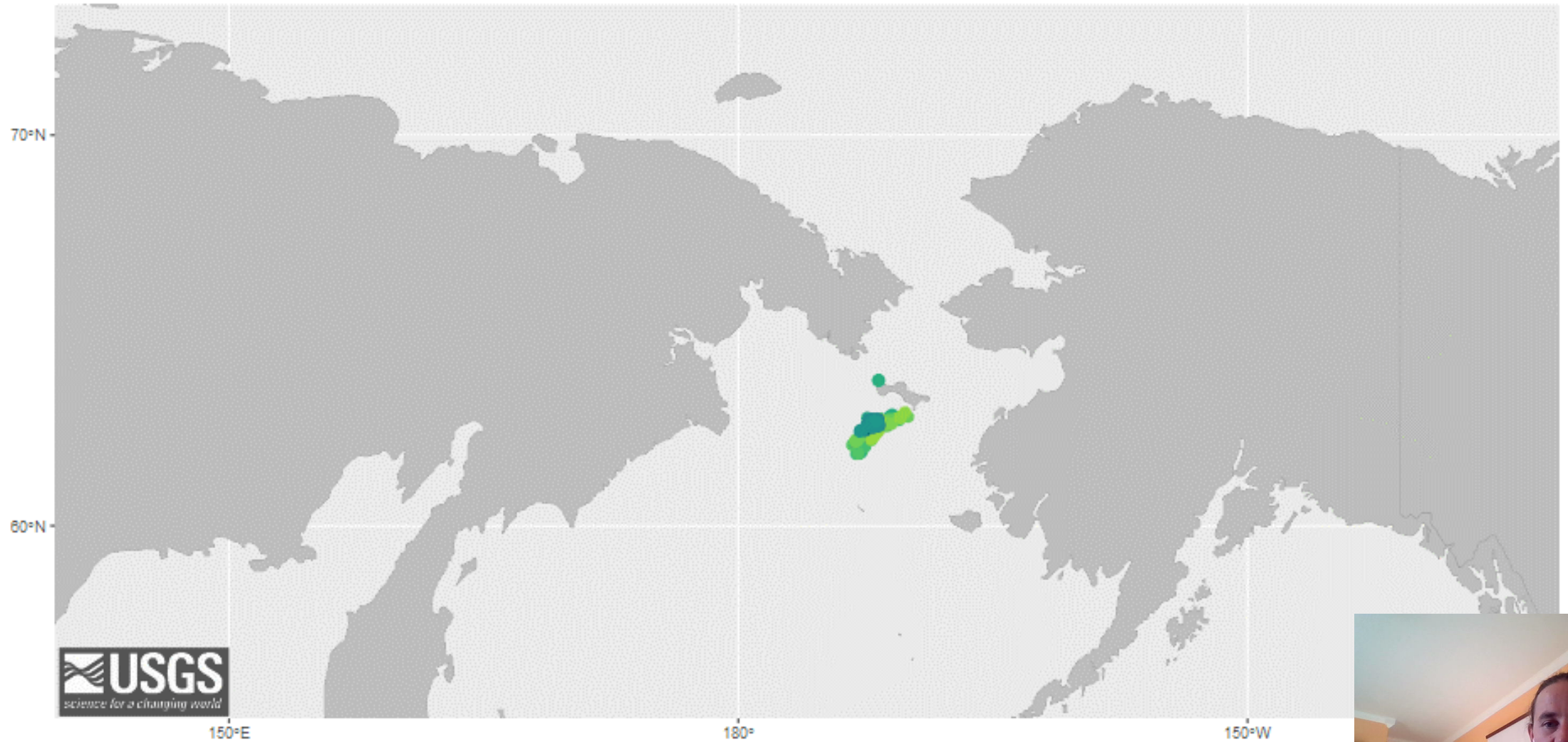


Eider satellite
transmitter tracks



Spectacled eider, Day of year: January 02

USGS ASC satellite tracking, doi: 10.5066/P9B091HG

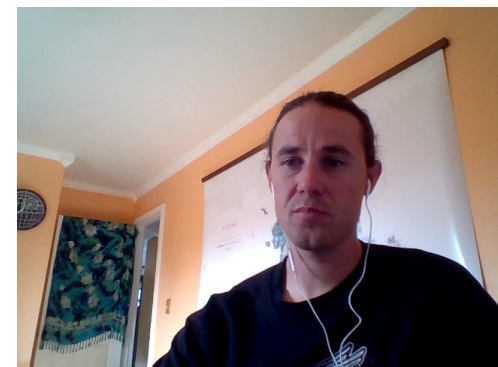


Locations every 12 hours were estimated with a continuous time movement model (R foieGras). Highly uncertain



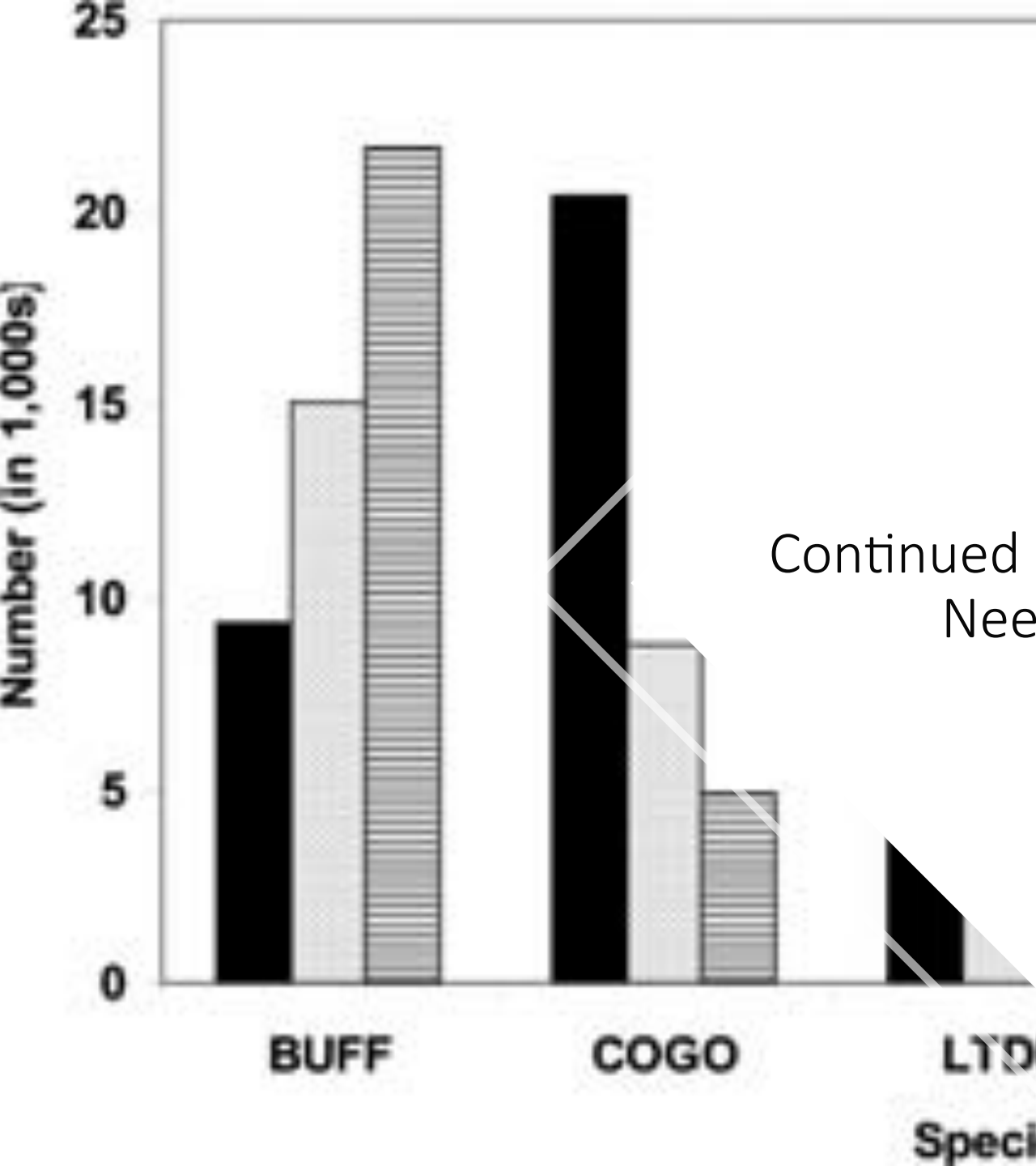


Surveys



Prepared in Cooperation with the Sea Duck Joint Venture Continental Technical Team

Visualizing Populations of North American Sea Ducks: Maps to Guide Research and Management Planning



Continued Research is Needed



Open-File Report 2019-1142

