



November 21, 2016

William Douros West Coast Regional Director NOAA Office of National Marine Sanctuaries 99 Pacific Street, Suite 100F Monterey, CA 93940

Dear Mr. Douros:

My colleagues and I are writing in support of the creation of a National Marine Sanctuary at St. George Island in the Bering Sea. We are an international group of seabird biologists who have all had the privilege to study aspects of the social and ecological systems of the Pribilof Islands and the Bering Sea. Collectively our research spans four decades and is often cross-disciplinary, including participation in the North Pacific Research Board's Bering Sea Integrated Ecosystem Research Project. We strongly support the creation of this Sanctuary.

The Bering Sea is an extremely productive ecosystem. The Walleye Pollock fishery alone accounts for one third of seafood landings in the United States and the crab and halibut fisheries sell their catch to global markets. The region's marine resources also contribute to other sectors of the national and local economy. For example, *The Deadliest Catch*, a popular reality TV show, documents the trials and tribulations of crab fisherman, and intrepid tourists to the region enjoy the unrivaled experience of watching fur seals frolic in the ocean, and seabirds wheel in the sky. The islands are world famous as a destination for seeing seals and seabirds, and generations of children grow up reading Kipling's short story "The White Seal," which is set on St. George. Prior research indicates that the system that supports these abundant marine resources is sensitive to changes in sea ice cover and sea-surface temperature, making future research to understand their functioning crucial to supporting the ongoing sustainable management of these invaluable resources.

St. George, located near the region's productive "Green Belt", offers an unparalleled opportunity to study this productive marine system from land. St. George hosts one of the largest concentrations of seabirds in the Northern Hemisphere. During the breeding season, it is home to the majority of the world's Red-legged Kittiwakes, a species of conservation concern, large colonies of Thick-billed and Common Murres, Least Auklets, Black-legged Kittiwakes, and other seabirds including Parakeet and Crested Auklets,

Horned and Tufted Puffins, Northern Fulmars, and Red-faced Cormorants, another species of conservation concern. Such a concentration of seabirds has attracted researchers, like us, from around the world to learn more about their ecology and facility as indicators of the marine environment. We have found that species respond differently to changes in oceanographic conditions around the Pribilof Islands. Specifically, Blacklegged Kittiwakes, murres, and Least Auklets reflect changes in the type and distribution of zooplankton and forage fish that occur in response to changes in sea ice extent and its retreat in the spring. Creation of a marine sanctuary would assist in the preservation these ecosystems and cultural resources for generations to come.

In addition to the incredible biological research opportunities on St. George, each of us has been lucky to enjoy the cultural aspects of working on the island and interacting with the community. Working and living on St. George provides a chance to gain a unique understanding of the history of the United States, from the first cultures to use the islands, through first European contact, the Alaskan purchase, and continuing through World War II to the present day. A recent study based in the community of St. George highlights the importance of the seabird community to the local culture (Young *et al.* 2014, *Ecology & Society* 19:40). Talking to residents it is possible to gain a better appreciation for the role that seabirds play in the island's human community, and to place our current observations into a broader context provided by the observations of long-time residents. In addition to their importance as a food source, seabirds, provide important connections to family, history, and culture for the Unangan people of the Pribilofs.

As researchers who have worked in this area and with the community of St. George, we fully support the creation of this sanctuary. The St. George Unangan Heritage National Marine Sanctuary will preserve delicate marine ecosystems, promote collaboration between the community and researchers, encourage economic development, and allow continued scientific research into this unique place.

Please contact us with any further questions or information (Rebecca Young: <a href="mailto:rebeccacyoung@gmail.com">rebeccacyoung@gmail.com</a>, 1-812-322-8458; Alexander Kitaysky: askitaysky@alaska.edu, 1-907-474-5179). Thank you for your consideration.

Sincerely,

Rebecca C. Young, PhD

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