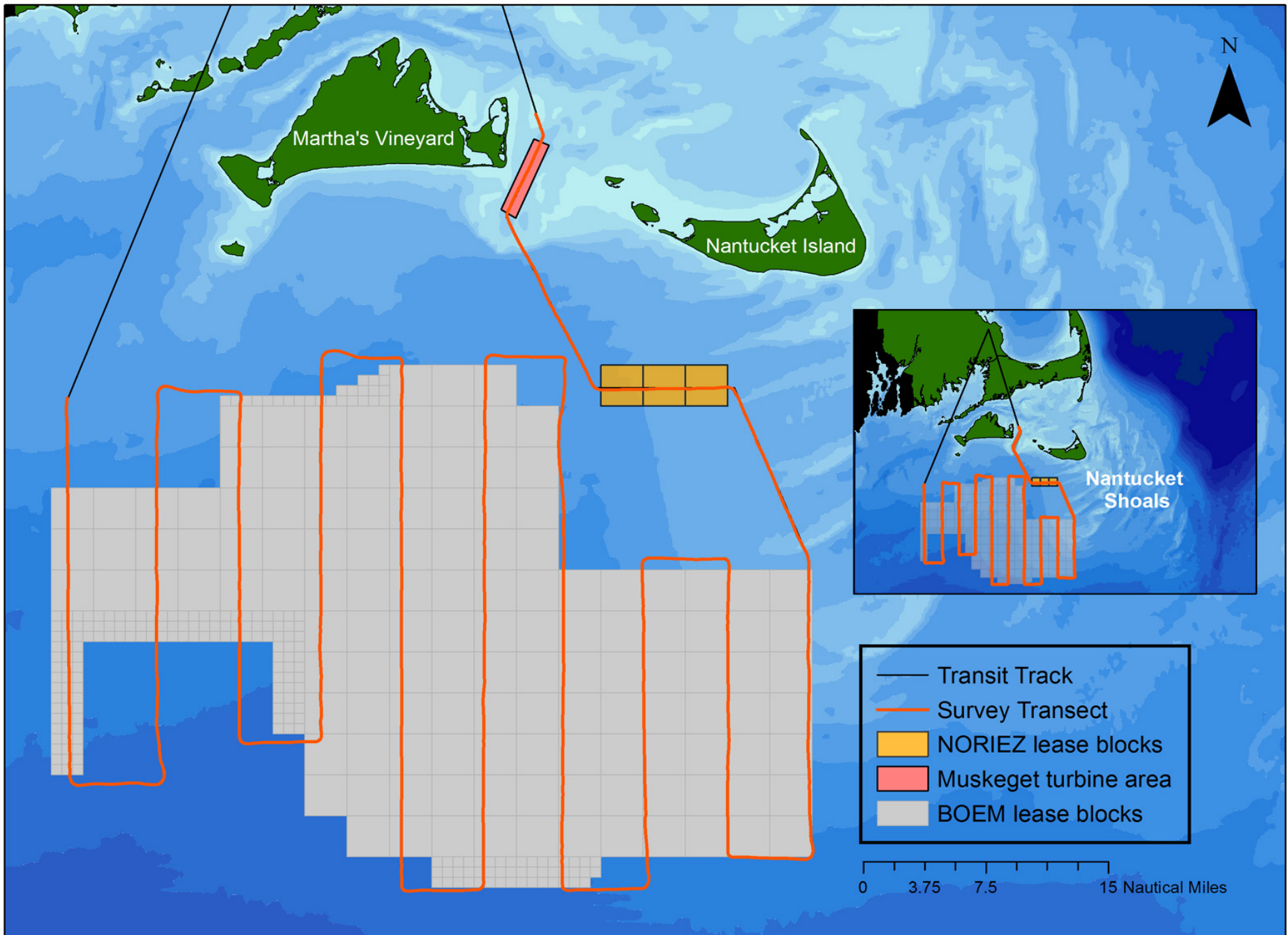


Abundance and Distribution of Seabirds off Southeastern Massachusetts, 2011-2015

Richard R. Veit¹, Timothy P. White^{1,2}, Simon A. Perkins^{1,3} and Shannon Curley¹

¹Biology Department, College of Staten Island, City University of New York, 2800 Victory Boulevard, Staten Island, NY 10314; and CUNY Graduate Center, 365 Fifth Avenue, New York, NY 10016; ²NOAA, National Centers for Coastal Ocean Science 1305 East West Highway, SSMC IV Silver Spring, MD 20910 ³Notice Nature, Inc., 61 Elm Brook Lane, Concord, MA 01742.

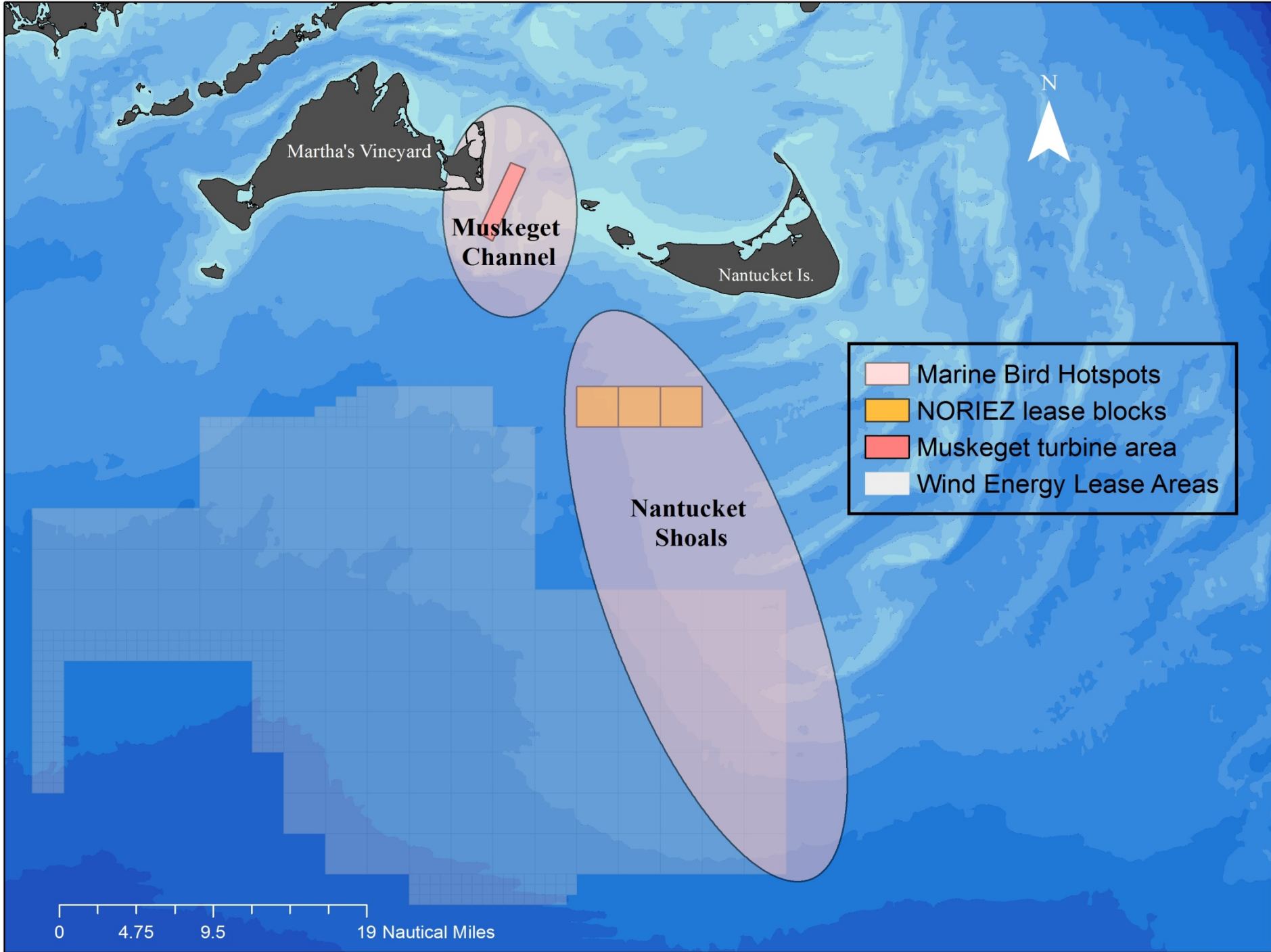


Objectives

- 1.) Quantify distribution and abundance of seabirds south of Nantucket and Martha's Vineyard, especially over BOEM Lease Blocks
- 2.) Quantify seasonality
- 3.) Identify persistent Hotspots of seabird abundance

Results

- Two Hotspots:
- 1.) Nantucket Shoals
- (Long-tailed Duck, White-winged Scoter, terns)
- 2.) Muskeget Channel
- (Loons, Black Scoters, Common Eiders, terns)



Martha's Vineyard

Muskeget Channel

Nantucket Is.

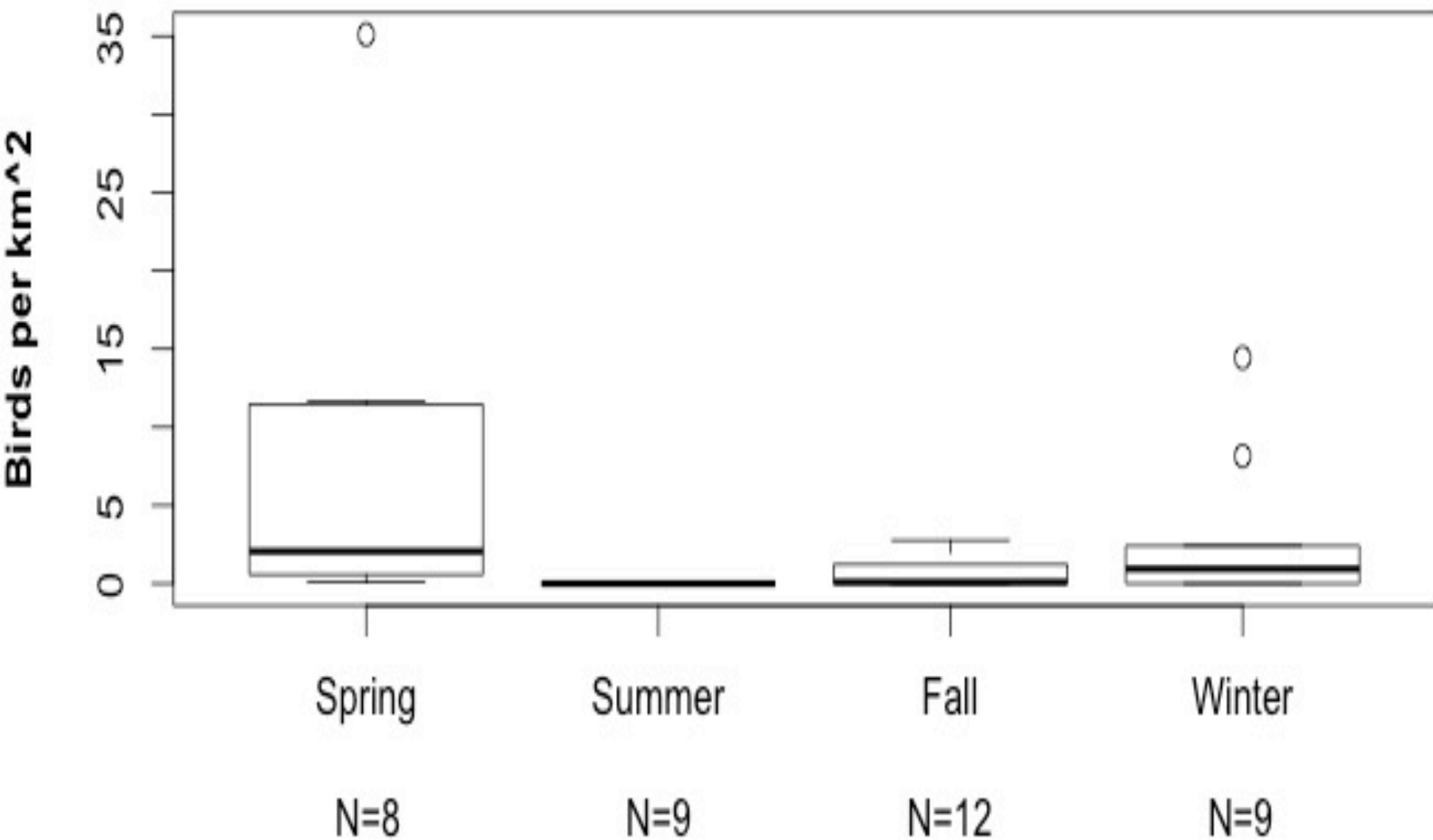
N

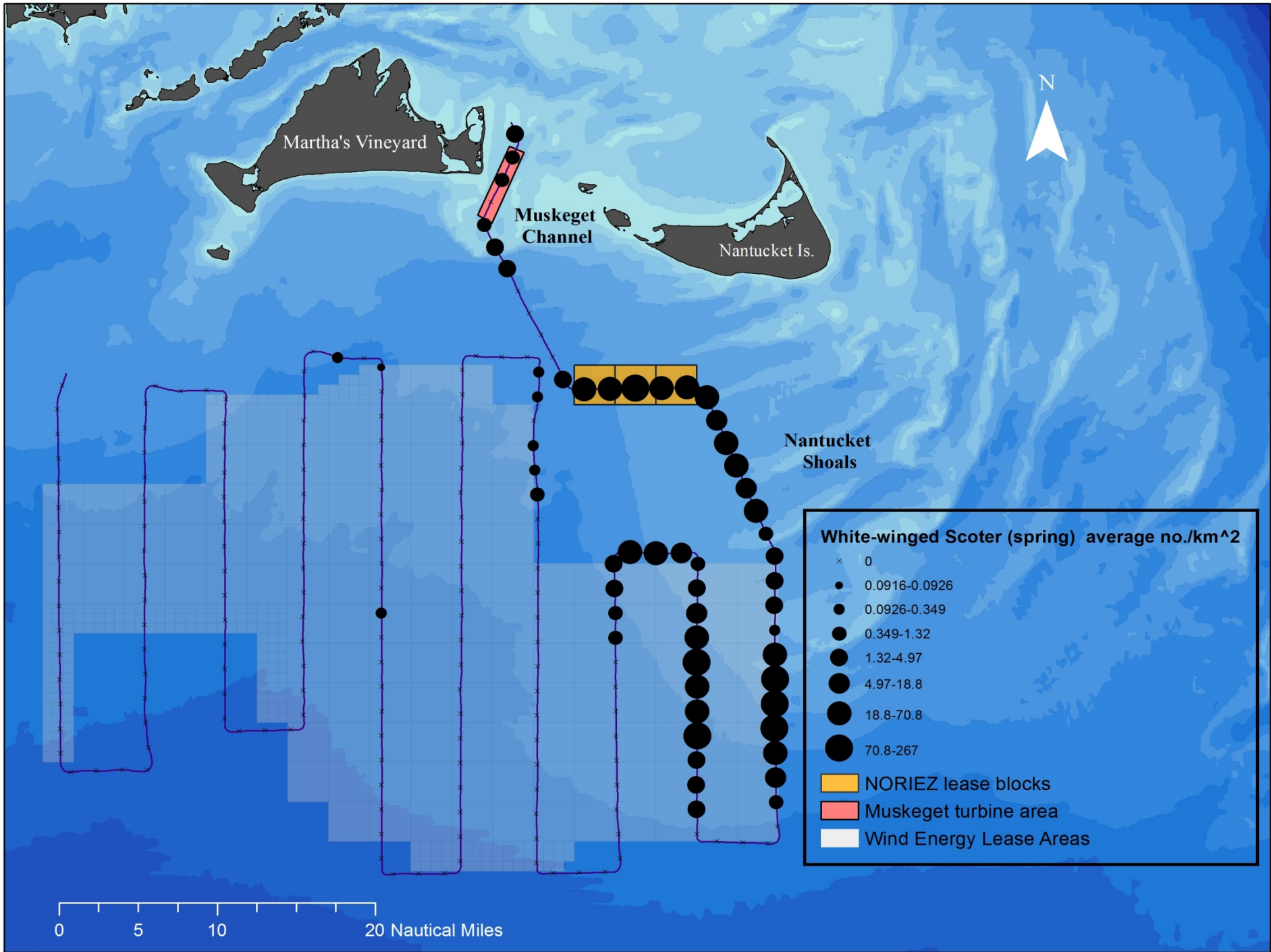
- Marine Bird Hotspots
- NORIEZ lease blocks
- Muskeget turbine area
- Wind Energy Lease Areas

Nantucket Shoals

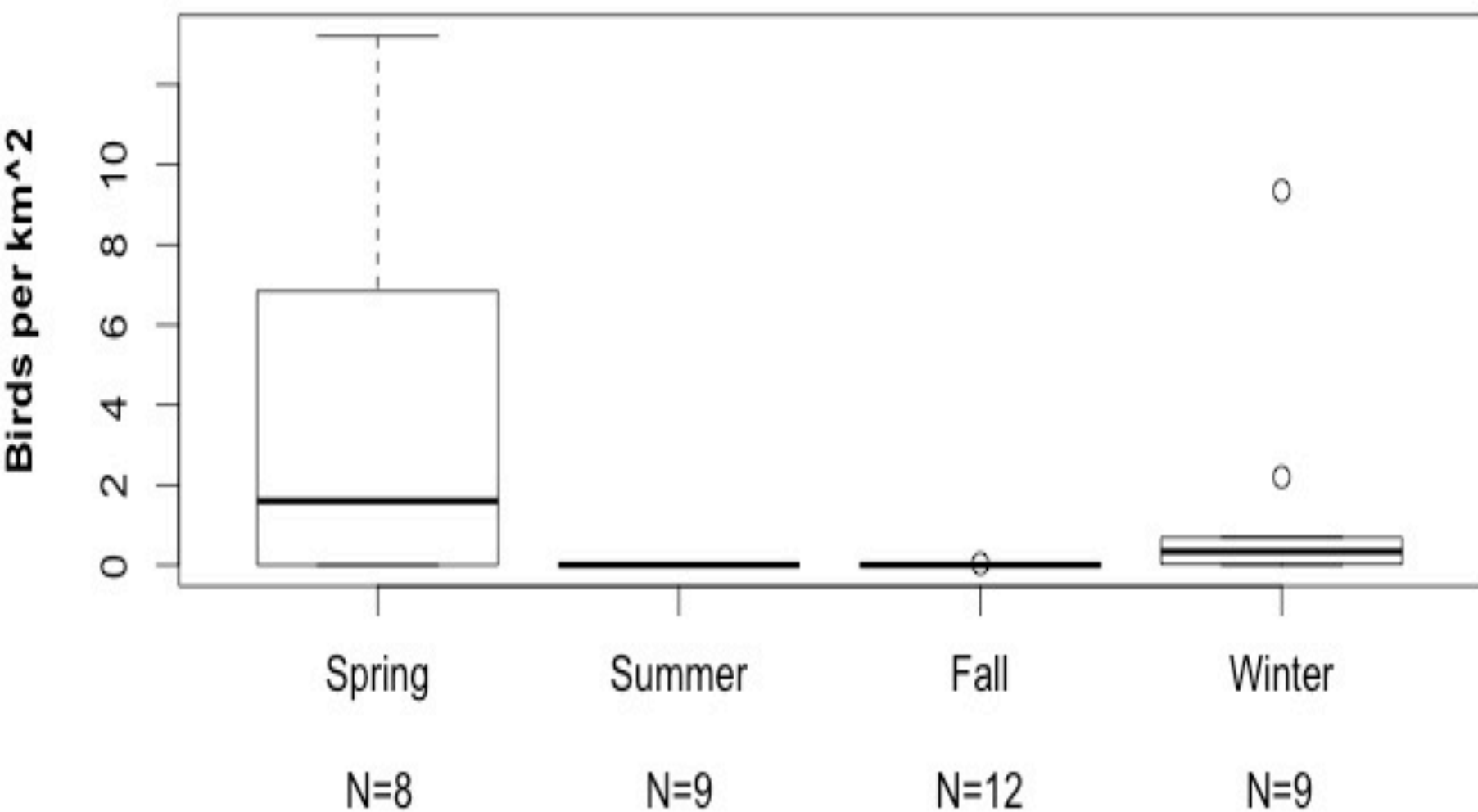
0 4.75 9.5 19 Nautical Miles

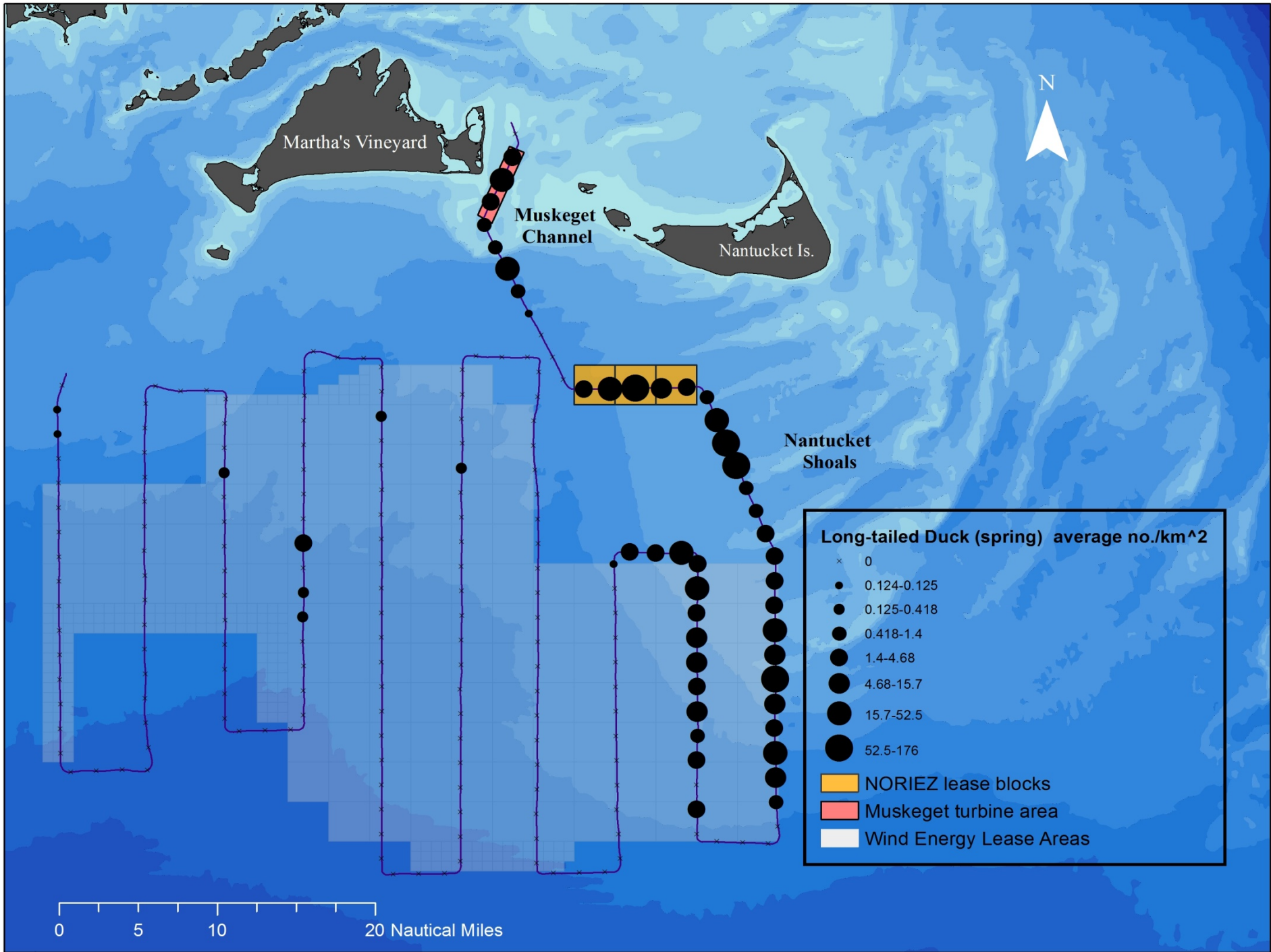
White-winged Scoter





Long-tailed Duck





Recommendations

- 1.) Ignore “flight height” data collected from boats or planes. Such data are always collected during fair (nonwindy) weather. All seabirds fly low under such conditions. Collisions with wind turbines likely to occur during >30kn winds, when ALL seabirds fly at “rotor height”.
- 2.) Include raw maps (nonmodeled) data of bird distribution in all reports. Arbitrarily collected ocean data (chosen for their availability) can often bias the actual distribution of seabirds.