
Woods Hole Oceanographic Institution
Biology Department Seminar



Thursday, July 16, 2015
Redfield Auditorium – 12:00 Noon

Asking the Auks about Atlantic Arctic Anomalies

Dr. Nina Karnovsky

**Associate Professor, Pomona College
And Visiting Scientist, MBL**

We use marine predators as a tool to understand changes in oceanographic conditions. The Atlantic sector of the Arctic has experienced declines in sea ice as well as shifts in water masses. To understand how changes in these physical factors influence the Arctic marine food web, we study the foraging behavior and reproductive success of dovekies (*Alle alle*) in the Greenland Sea. These seabirds are planktivores; their primary prey are *Calanus* copepods. Dovekies are sensitive to changes in the availability and type of prey in areas adjacent to their breeding colonies. In this study we compared the diving behavior, diets, and distribution at sea of dovekies in different locations and in different years. We found that while they show remarkable resilience to oceanographic variability, when suboptimal prey associated with warmer conditions are abundant, the adult birds need to greatly increase their foraging effort in order to successfully raise their young.