

1135-VF-1052      **Benjamin MacDonald\*** (bcmacdon@uvm.edu), **Mykhaylo M. Malakhov**, **Shandelle M. Henson** and **J. M. Cushing**. *A Model of Population Dynamics and Behavior for Pacific Northwest Seabirds*.

Increases in sea surface temperatures (SSTs) in the Pacific Northwest of the US and Canada are associated with reductions in food resources, as well as marked behavioral changes in seabirds. Higher SSTs lead to an increase of egg cannibalism in gulls, which in turn promotes every-other-day egg-laying synchrony in the colony. We develop a simplified discrete-time model to study the population dynamics both within and between breeding seasons. The model allows us to examine the long-term dynamics and tipping points for the population as a function of SST. (Received September 18, 2017)