



2021 ANKNEY AWARD RECIPIENT

Jordan Thompson, MS Student

Jordan is a MS student at the University of Wisconsin – Steven’s Point. He has spent the past few summers studying emperor geese in SW Alaska on the waterfowl rich Yukon Kuskokwim Delta. Sport and subsistence harvest of emperor geese in Alaska were closed in the mid 1980’s following >50% population declines between the mid 1960’s and mid 1980’s. However, after a gradual population increase spanning 30 years, subsistence harvest and a limited sport harvest season were reopened in 2017. Maintaining the recently opened harvest season requires that the emperor goose population remains above the harvestable threshold set forth by managers.

Therefore, it is important to understand drivers of variation in demographic rates of emperor geese, particularly those associated with reproduction, as this could help managers further understand mechanisms influencing their population dynamics. Furthermore, understanding how environmental and ecological factors on the nesting grounds influence nest survival and nesting habitat selection of emperor geese can help managers understand the potential effects of climate change scenarios.

Jordan will assess nest survival models and analyze them in a Bayesian framework to test for drivers of annual and individual variation, compare characteristics of used nest sites and associated randomly determined sites, and will construct a multistate capture-mark-recapture model to predict the probability of an emperor goose returning to within 200 m of their nest site in the previous year.

