

Master's Thesis Defense

**Susan A. Norris**

**Monday, May 17, 2004**  
**1:00 p.m.**

**JEB 002**

**Comparison of Maximum Likelihood and Bailey Estimators of  
Outmigration Size from Stratified Samples**

**ABSTRACT**

This work attempts to answer, through simulation, the question, "How reliable and consistent are the maximum likelihood and Bailey bootstrap confidence intervals for out-migrating smolt population abundance sampled in strata?" This is accomplished by comparing the bootstrap and corrected bootstrap confidence intervals for the maximum likelihood estimator and Bailey estimator through the generation of these estimators from a stratified out migration season determined by periods of fairly homogeneous trapping.

Major Professor: Kirk Steinhorst