

## Variation in Growth Rate within and among Stocks and Families of Striped Bass

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*Abstract.*—Variation in growth rate within and among stocks and families of striped bass *Morone saxatilis* was evaluated in flow-through tank systems at the University of Maryland, College Park, Crane Aquaculture Facility. Effects of stock, family, gender, and their interactions were evaluated using a mixed-model analysis of variance, and best linear unbiased predictions (BLUP) of family merit were estimated. Significant differences in growth performance among distinct stocks originating from three areas of the Chesapeake Bay (1983 year-class) demonstrate among-stock differences that might be exploited in a selective breeding program for striped bass. Comparisons of growth performance within and among families (1991, 1992, 1993, and 1995 year-classes) revealed significant family and family  $\times$  gender effects for the 1992 and 1993 year-classes. The BLUP estimations of family merit and high within-family variance suggest directions for further research in heritability estimation and selective breeding.