Sampling Efficiency for Burbot in Standing Waters of the Wind River Drainage, Wyoming

Andrew Dux, Joe Deromedi, and Dave Dufek, Wyoming Game and Fish Department,
3030 Energy Lane, Suite 100, Casper, WY 82604, Andrew.Dux@wgf.state.wy.us

Burbot are poorly understood by fishery managers in Wyoming, despite their importance as a native sportfish. Previous attempts to study burbot have been hindered by ineffective sampling techniques. We tested the efficiency of three different gear types (hoop net, cod trap, trammel net) for sampling burbot in lakes and reservoirs of the Wind River drainage. Hoop nets and cod traps have been used successfully to sample burbot in other states, but trammel nets have never been tested. We established three study areas to represent a diversity of standing water habitats, varying from a small, natural lake to a large reservoir. Within each study area, nine sampling sites were selected. Gears were randomly rotated through the sites, allowing each gear to fish at a site for one night during a three night period. We also evaluated seasonal differences in burbot sampling efficiency. Burbot are most active from late-autumn through early-spring, so we sampled each study area prior to ice-up in 2005 and replicated sampling soon after ice-out in 2006. This study is the initial step towards developing statewide sampling protocols for burbot in Wyoming and will lead to more detailed burbot population assessments.