
CHANGES IN AQUATIC SPECIES INTRODUCTIONS WITH EVOLUTION FROM MSY TO ECOSYSTEM-BASED FISHERIES MANAGEMENT

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The American Fisheries Society was formed in 1870 to promote the development of fish culture in North America, and inland fisheries management was focused on stocking to maintain populations and introductions to create new fisheries. The primary philosophy for inland fisheries management evolved during the 20th century to maximum sustained yield (MSY) and was then tweaked to the notion of optimum sustained yield (OSY) with little change in attitude toward aquatic species introductions. Late in the 20th century, fisheries managers began to recognize the consequences of habitat alterations and aquatic species introductions on aquatic ecosystems, as well as the need to maintain the components and processes of ecosystems. Over the last decade there has been increasing focus by fisheries managers on preservation and restoration of ecosystems, management goals confounded by intended and unintended species introductions. Preservation of rare species, control of undesired exotic species, and prevention of further introductions of aquatic species, including fish, invertebrates, pathogens, and aquatic plants, are becoming dominant goals in fisheries management programs. Many questions can be asked about the future of inland fisheries management as we begin to recognize the linkages across landscapes. This talk delves into questions pertinent to the education and practices of fisheries managers as maintenance and restoration of linkages across landscapes become a larger focus into the 21st century.