

Lake Ecosystems Depend on Balance

Education can prevent the devastating effect of invasive species introductions on our lakes and streams

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Most anglers recognize a balance of aquatic plants and algae is important for maintaining a healthy lake with an abundance of fish. Some anglers prefer more or less plants, but most realize an out-of-balance system is harmful to all.

Aquatic plants provide the important ecosystem service of filtering water, giving shelter to fish and invertebrates, and offering a target for recreational anglers. "There is nothing like the anticipation of a strike when working a topwater lure or poppin-bug over submersed vegetation... Every twitch of the bait keeps an angler on edge, ready for that sudden and explosive strike that pumps adrenaline through your veins at the speed of light!"



Encroaching algae smothering aquatic plants

Complex aquatic cycles exist in our lakes and streams and vary as much as ocean cycles, albeit on a smaller scale. To simplify things, anglers who fish across the U.S. categorize waterbodies based on five groups: natural lakes, highland reservoirs, lowland reservoirs, riverine, and tidal systems. Food chains in natural lakes tend to be dominated by the growth cycles of aquatic plants and algae. Reservoirs, riverine, and tidal systems all tend to be driven by sediment and algal-based food webs that ebb and flow with currents and nutrient levels.

The abundance and diversity of aquatic life in our lakes, such as crawfish, midges, fish, and fowl, are dependent on the proper balance of food chains. The Aquatic Ecosystem Restoration Foundation (AERF) facilitates the progressive understanding of nuisance and invasive species to ultimately provide us a better understanding of how to protect this delicate balance. Encroachment of a single invasive species can easily damage our lakes like a locus scourge on a Kansas wheat field.

Educating the public about the dangers of accidental introductions of plants, harmful algae, and other invasive species must continue. Without this knowledge, anglers like you and me could unknowingly cause the spread of nuisance species and the eventual demise of the natural resources we enjoy.

Please share the word about invasive species and visit the AERF website for publications and more in-depth information (www.aquatics.org).



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