



Introductions and spread of non-native species to our aquatic environments have been increasing at alarming rates. The economic costs of invasive species are estimated at over \$100 billion dollars annually in the U.S. Federal and state agencies are investing considerable resources, both manpower and funds, to deal with the spread of invasives. The Oklahoma Department of Wildlife Conservation has recently initiated development of a statewide plan to address prevention of introductions and further spread of invasive species already present in Oklahoma waters. Public support and participation in preventive measures are vital to the success of the plan.

### KEY INVADERS

Zebra mussels were first found in the Arkansas Navigation System in 1993, most likely coming from the Great Lakes via barge traffic. Zebra mussels now infest the Arkansas Navigation System throughout Arkansas all the way to the Port of Catoosa. Zebra mussels moved to Oologah Lake, most likely as hitchhikers on recreational boats and/or trailers. Zebra mussel



abundance in Oologah is currently as high as peak numbers seen in the Great Lakes and is interfering with recreational activities. Recreational boaters moved zebra mussels to El Dorado Lake, Kansas. From there, zebra mussels moved downstream to Kaw Lake in Oklahoma and continued moving downstream, now infesting Sooner, Keystone and the Arkansas River below Keystone.



Zebra mussels harm the aquatic environment by replacing native mussel populations and reducing game fish lakes through removal of phytoplankton which serves as the food source of most species that sport fish eat. Zebra mussels can foul

water intake and steering equipment, reducing performance or resulting in more serious damage.



Aquatic plants are easily transported from one body of water to another on boat motors and trailers. Hydrilla has recently been found at Arbuckle, Murray, and Sooner lakes. While small amounts of vegetation are beneficial to sportfish, particularly shoreline-oriented species like largemouth bass, invasive plants tend to form dense mats that outcompete native vegetation, lead to oxygen depletion, and can actually interfere with boat traffic.



Some invasive species are not visible to the naked eye. Largemouth bass virus (LMBV) and golden alga are present in numerous lakes and can be spread by moving water from an infested lake to another body of water.

## PREVENTIVE MEASURES

Recreational users of our aquatic environments have a vested interest in doing what they can to prevent the spread of invasive species. Invasive species often infest waters faster than our ability to detect them. Consequently, measures to prevent spread of these invaders should be made a routine part of your activities whether or not the body of water is currently known to be infested. As organizers and participants in fishing tournaments, the opportunity exists to be leaders in this effort.

Procedures can be put in place at several steps in the tournament process to eliminate the risk of transporting invasive species.

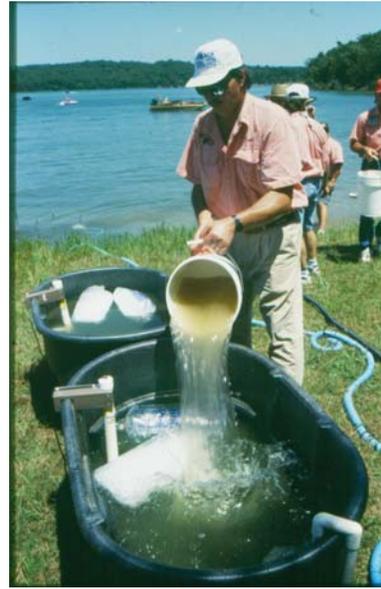
### Weigh-In

- Use only water obtained on-site for weigh-in tanks
- Drain all tanks on-site once weigh-in is complete
- Air dry all equipment for 5 days before reuse

Or

- Power wash all equipment with heated water (140°F) before reuse
- Wash all equipment with a 10% Chlorox solution followed by thorough rinsing\*

\*Air drying or heated power wash will kill zebra mussels and LMBV; if golden alga is a concern chlorine rinse must be used



### Fish Release

- Use only water obtained on-site to fill live release tanks
- Release all fish on-site; never transport fish to another lake
- Drain all tanks on-site once release is complete



- Air dry all equipment for 5 days before reuse
- Or
- Power wash all equipment with heated water (140°F) before reuse
  - Wash all equipment with a 10% Chlorox solution followed by thorough rinsing\*
  - Remove any aquatic plants on trailers and/or boats prior to leaving boat ramp

### Tournament Participants

All anglers should adhere to these guidelines to ensure that they do not play a role in spreading invasive species.

- Drain all water from bilge and livewells before leaving boat ramp
- Remove any aquatic plants on trailers and/or boats prior to leaving boat ramp
- Air dry all equipment for 5 days before reuse

Or

- Power wash all equipment with heated water (140°F) before reuse
- Never move fish from one lake to another; you may be introducing LMBV or golden alga

It should be the responsibility of all resource users to ensure that their activities do not negatively impact the resources that they are enjoying.