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HELLO INVASIVE SPECIES.
GOODBYE TEXAS.

Texas' Invasive Species Public Awareness Campaign

Damon Waitt, Ph. D
Lady Bird Johnson Wildflower Center
at the University of Texas at Austin

A Joint Meeting of the Gulf, South Atlantic and Western Regional Panels
September 17-19, 2014
Crowne Plaza Downtown
Houston, Texas USA

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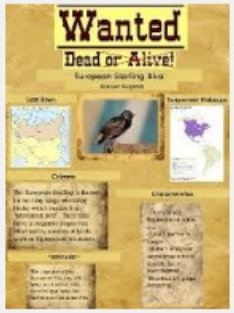
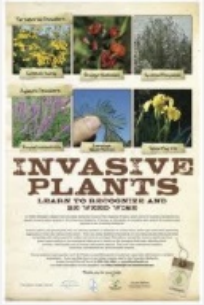
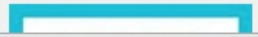
Google invasive species posters

+Damon Share

Web Images Shopping News Videos More Search tools SafeSearch







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- Texasinvasives.org
- iWire Monthly Electronic Newsletter
- Texas Invasive Plant & Pest Council (TIPPC)
- Texas Invasive Plant & Pest Conference
- Public Awareness Campaigns
- Invasive Plant Control and Restoration Research
- Invaders of Texas Citizen Science Program
- Sentinel Pest Network
- Eradicator Calculator

Lady Bird Johnson Wildflower center
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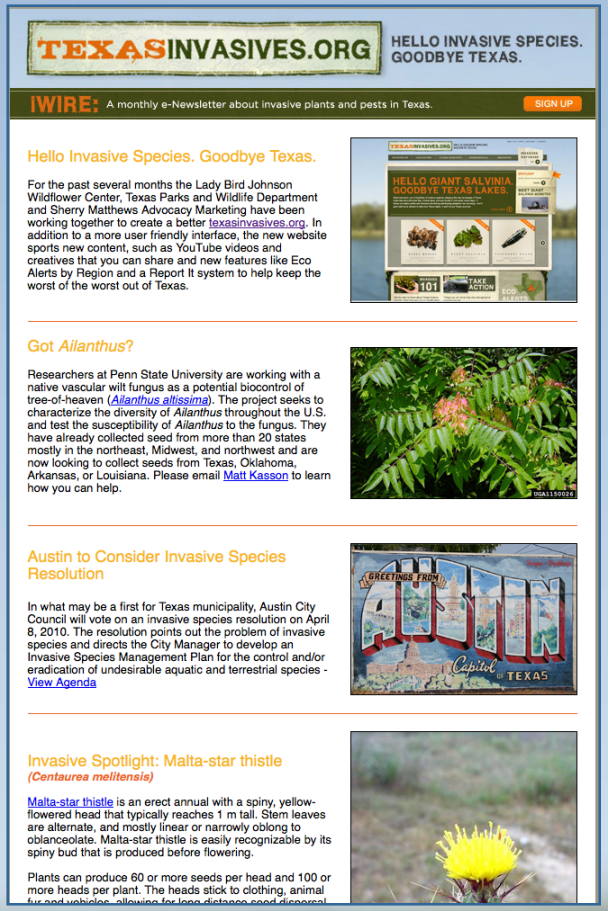
iWire monthly email newsletter

- Important updates
- Invasive species spotlights
- News from TX and beyond
- Citizen Scientist of the Month (person, group or project)
- Workshop Schedules
- 2000+ Subscribers

KEEP INFORMED

Sign up for the iWire to get breaking , events and the species spotlight.

your email SIGN UP



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IWIRE: A monthly e-Newsletter about invasive plants and pests in Texas. SIGN UP

Hello Invasive Species. Goodbye Texas.

For the past several months the Lady Bird Johnson Wildflower Center, Texas Parks and Wildlife Department and Sherry Matthews Advocacy Marketing have been working together to create a better texasinvasives.org. In addition to a more user friendly interface, the new website sports new content, such as YouTube videos and creatives that you can share and new features like Eco Alerts by Region and a Report It system to help keep the worst of the worst out of Texas.

Got *Ailanthus*?

Researchers at Penn State University are working with a native vascular wilt fungus as a potential biocontrol of tree-of-heaven (*Ailanthus altissima*). The project seeks to characterize the diversity of *Ailanthus* throughout the U.S. and test the susceptibility of *Ailanthus* to the fungus. They have already collected seed from more than 20 states mostly in the northeast, Midwest, and northwest and are now looking to collect seeds from Texas, Oklahoma, Arkansas, or Louisiana. Please email Matt Kasson to learn how you can help.

Austin to Consider Invasive Species Resolution

In what may be a first for Texas municipality, Austin City Council will vote on an invasive species resolution on April 8, 2010. The resolution points out the problem of invasive species and directs the City Manager to develop an Invasive Species Management Plan for the control and/or eradication of undesirable aquatic and terrestrial species - View Agenda

Invasive Spotlight: Malta-star thistle
(Centaurea melitensis)

Malta-star thistle is an erect annual with a spiny, yellow-flowered head that typically reaches 1 m tall. Stem leaves are alternate, and mostly linear or narrowly oblong to oblanceolate. Malta-star thistle is easily recognizable by its spiny bud that is produced before flowering.

Plants can produce 60 or more seeds per head and 100 or more heads per plant. The heads stick to clothing, animal

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CITIZEN SCIENTISTS

WELCOME CITIZEN SCIENTISTS
BECOME A CITIZEN SCIENTIST
TOOLKIT
SATELLITES
WORKSHOPS
ONLINE TRAINING
LOGIN & REPORT

LOGIN & REPORT

Invaders of Texas Citizen Scientist Login

username password

LOGIN

CITIZEN SCIENTISTS

The Invaders of Texas Program is an innovative campaign whereby volunteer "citizen scientists" are trained to detect the arrival and dispersal of invasive species in their own local areas. That information is delivered into a statewide mapping database and to those who can do something about it. The premise is simple. The more trained eyes watching for invasive species, the better our chances of lessening or avoiding damage to our native landscape.

The Invaders of Texas Program supports the creation and perpetuation of a network of local citizen scientist teams who seek out and report outbreaks of selected environmentally and economically harmful invasive species. These teams, coordinated by the Wildflower Center contribute important data to local and national resource managers who will, in turn, coordinate appropriate responses to control the spread of unwanted invaders. The Invaders Program is designed to move the target audience beyond awareness to action on invasive species.

Creating a Successful Citizen Science Model to Detect and Report Invasive Species

TRAVIS GALLO AND DAMON WAITT

The Invaders of Texas program is a successful citizen science program in which volunteers survey and monitor invasive plants throughout Texas. Invasive plants are being introduced at alarming rates, and our limited knowledge about their distribution is a major cause for concern. The Invaders of Texas program trains citizen scientists to detect the arrival and dispersal of invasive plants in their local areas and to report them into an online, statewide mapping database. In order to test the value of citizen scientists' data, we compared Invaders of Texas citizen scientists' observations of Arundo donax *(giant reed) with previously recorded* A. donax *observations in Texas and found an increase in the reed's overall distribution. A comparison with observations from the Invasive Plant Atlas of New England (Mehrhoff et al. 2003), a similar citizen science program, confirmed that, given proper training, citizen scientists are able to detect and report invasive plants in their local areas, and the data they collect can be used by professional scientists.*

Keywords: citizen science, Texas, Arundo donax*, early detection, online mapping database*

Humans have surpassed natural forces as the chief global disperser of vascular plants, and the large volume of international commerce virtually guarantees that new weeds will turn up in new ranges (Mack and Lonsdale 2001). Potentially invasive species are being introduced into the United States at an alarming rate, and our knowledge of their actual distribution is limited. Invasive plants, animals, and fungi are the second-leading cause of native plant endangerment, exceeded only by habitat destruction and degradation, and influence biodiversity, aesthetics, recreation, and property value (Wilcove et al. 1998, Mack et al. 2000, Leung et al. 2002). The majority of plants used in agriculture, forestry, and horticulture in North America are not native to the continent (Reichard and White 2001). In the history of the United States, over 5000 nonnative invasive plants have been introduced for food crops, land restoration, erosion control, or ornamental purposes and have become established in our natural ecosystems (Morse et al. 1995). Some of these species have caused major economic loss in agriculture, forestry, and other segments of the US economy, not to mention grave harm to the environment through the displacement of native plant species (Pimentel et al. 2005). Invasive plants spread at a rate of 14% per year and, on public lands, consume 4600 acres of wildlife habitat per day (Babbitt 1998).

Cheatgrass (*Bromus tectorum*), an introduced plant that now covers millions of acres in western North America, illustrates how an invasive plant can outcompete and dominate native plants in a region (Rossman 2001). Because of the sporadic introductions and rapid spread of invasive plants, many resource managers, biologists, and policymakers have limited knowledge about the extent of infestation by invasive plants in their regions. For proper management of invasive species, there is not only a need for data on where they occur but also a need for that data to be freely and readily available to enable cost-effective responses by resource managers (Buhle et al. 2005, Delaney et al. 2008). Such information provides a quantitative rationale for policymakers to allocate society's resources most effectively and efficiently (Leung et al. 2002). We have created a model program in Texas that relies on citizen scientists to collect invasive species data, which is then recorded in a public database that resource managers can access for weed management, scientists can use for predicting weed distributions, and policymakers can use to understand the scope of invasive species problems.

Citizen scientists are volunteers who participate as field assistants in scientific studies (Cohn 2008). Citizen scientists currently play an active role in a wide range of ecological projects, and their contribution has enabled scientists to collect large amounts of data over wide areas at a minimal cost (McCaffrey 2005, Braschler 2009). Early citizen scientist programs were created merely as educational tools, but there has been a growing focus on using citizen scientists to collect long-term data. Many citizen scientist–based networks help address the needs of ecologists and scientists to collect data for large-scale projects, such as breeding bird surveys,

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Statewide Invasive Plant & Pest Conference

- Professional level meeting designed to serve scientists, land managers, agencies, non-profits and other professionals with an interest in Texas' invasive species.
- Hosted the 2005 & 2007 event before handing it to TIPPC for the 2009, 2011, 2014 conferences.

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TEXAS INVASIVE PLANT AND PEST COUNCIL
TIPPC
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INVASIVES DATABASE
GO

HELLO BASTARD CABBAGE. GOODBYE BLUEBONNETS.

Bastard cabbage - Don't let it if fool you! The bright yellow flowers towering over the blues and reds of our native bluebonnets and Indian paintbrush are an invasive species with an overwhelming presence along Texas' roadways. Rapistrum rugosom (AKA Bastard Cabbage) is taking up space and resources meant for our native wildflowers. This is not going un-noticed by Texans, and there is a rising level of concern over the spread of bastard cabbage.

LEARN MORE

SPOTLIGHT
Invasive Species News and Events
MORE

DO YOUR PART TO STOP THE SPREAD!

ALERT

GIANT SALVINIA
SALVINIA MOLESTA
BRAZIL | AQUATIC INVASIVE

ALERT

SOAPBERRY BORER
AGRILUS PRIONURUS
MEXICO | WOOD BORING BEETLE

ALERT

JAPANESE CLIMBING FERN
LYGODIUM JAPONICUM
EAST ASIA | FOREST THREAT

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INVASIVES DATABASE
GO

HELLO GIANT SALVINIA. GOODBYE TEXAS LAKES.

Giant salvinia is one of hundreds of invasive species changing the very landscape of Texas. Giant salvinia suffocates fish, chokes lakes and can double in size every seven days. It forces out native plants and threatens the fishing and boating recreation we now enjoy. And if giant salvinia is allowed to take over Texas lakes, it won't be our Texas anymore.

LEARN MORE

SPOTLIGHT
News, Alerts and Announcements
MORE

MEET GIANT SALVINIA MONSTER

ALERT

- fig. 2 -
WATER HYACINTH
GENUS SPECIE LOREM IPSUM
NATIVE ORIGIN | OTHER INFO

ALERT

- fig. 3 -
SOAPBERRY BORER
AGRILUS PRIONURUS
MEXICO | WOOD BORING BEETLE

ALERT

- fig. 1 -
GIANT SALVINIA
GENUS SPECIE LOREM IPSUM
NATIVE ORIGIN | OTHER INFO

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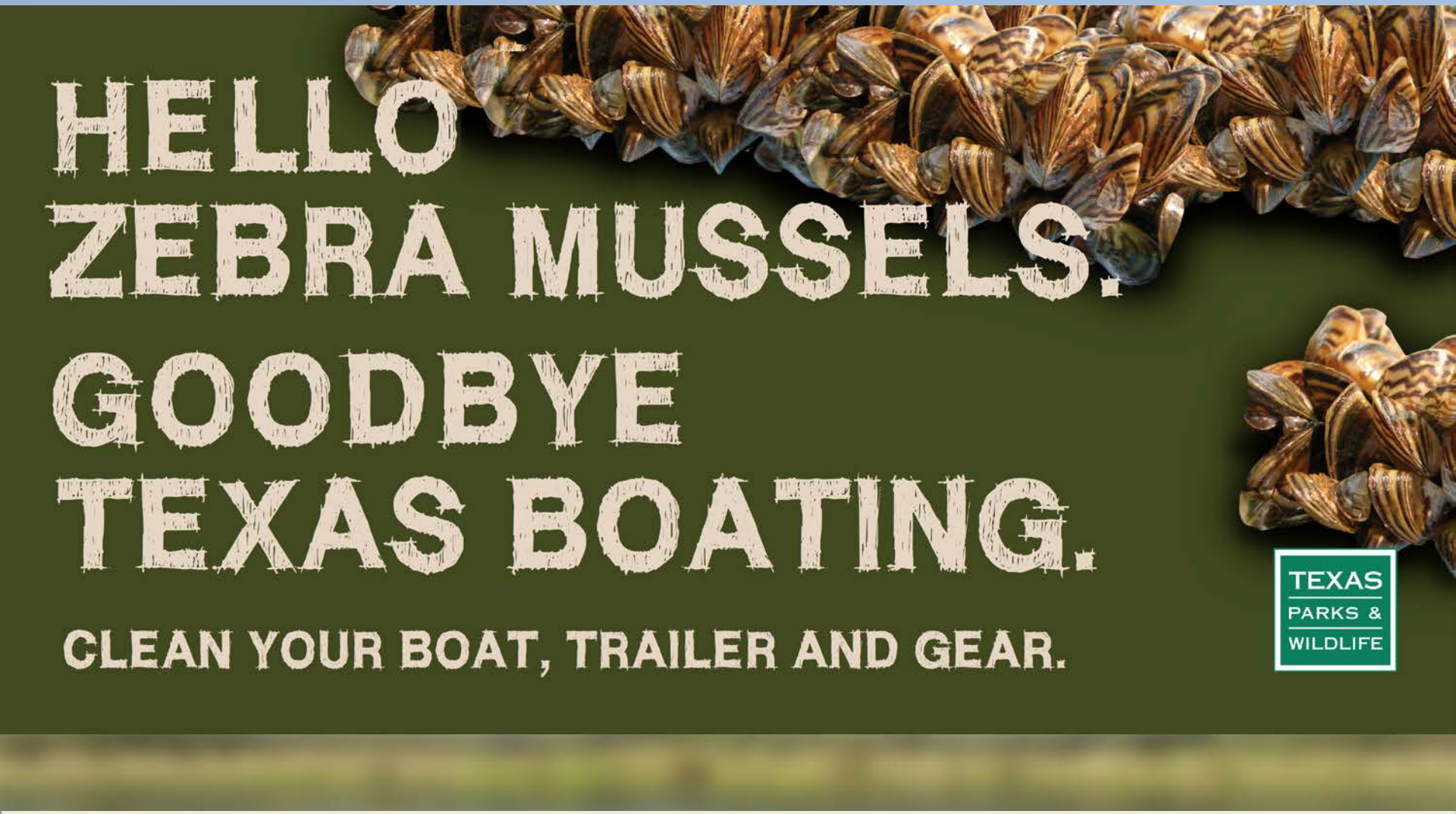

HELLO ZEBRA MUSSELS. GOODBYE TEXAS BOATING.

CLEAN YOUR BOAT, TRAILER AND GEAR.

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TAKE ACTION

STOP THE SPREAD
REPORT IT
SPREAD THE WORD
GET INVOLVED
GO NATIVE

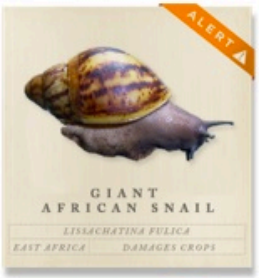
KEEP INFORMED

Sign up for the iWire to get breaking news, events and the species spotlight.

your email SIGN UP

REPORT IT

We need your help to stop the spread of invasive species! Please report any new sightings of the following key invasive species. If possible, take a picture of the plant or pest and record its GPS location.

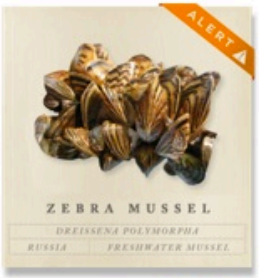


GIANT AFRICAN LAND SNAIL

Lissachatina fulica

A large terrestrial snail that can reach up to 8 inches in length and nearly 5 inches in diameter. The brownish shell covers at least half the length of the snail. Damages native plants and crops. Scientists consider the giant African snail to be one...

REPORT IT



ZEBRA MUSSELS

Dreissena polymorpha

The zebra mussel is a highly invasive aquatic species that multiplies rapidly and can cause tremendous environmental and economic damage. This bivalve mollusk, originally from the Balkans, Poland and the former Soviet Union, has become established in...

REPORT IT

EMERALD ASH BORER

Agrilus planipennis

KILLER SNAILS IN TEXAS!

By **Tap Vann** on May 8, 2013

2 Votes

African land snails are attacking thousands of Texans!

The snails are potentially vicious and dangerous and they can carry meningitis. Scientists have warned anyone who comes in contact with them to – run!!

COMMENTS (3)

CATEGORIES: HEADLINES, TOPSTORY

TAGS: HOUSTON, INVASIVE SPECIES, KPRC-TV, LADY BIRD

A woman gardening in East Texas was attacked and killed while she was planting her petunias.

Governor Rick Perry has called in the National Guard to deal with the snail crisis. "We are Texans. We are not going to let a bunch of snails take us down," said Governor Perry.

Meanwhile, Texans are arming themselves with special "Snail Guns" that can kill up to 500 snails in one shot. "We're going to need a lot of them snail guns down here," said Sheriff Johnny Jimjohn of Dallas. "We gots lots of snails to kill."

PETA is trying to stop Texans from killing the snails. "They can rid the state of the pests without committing snail slaughter," said a spokeperson for PETA>

The giant killer snails can lay 1,000 eggs per month, so there will be

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ZM Public Awareness Campaign

Goals:

- Create awareness of zebra mussels
- Inform target of how zebra mussels negatively impact them and Texas
- Motivate target to take action

Target: Boaters using infested lakes

Timing: Primarily Memorial Day – Labor Day

Call-to-action: Clean, drain and dry your boat!

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Campaign Integration

- On-the-Ground
  - Boat ramp signage
  - Gas station advertising
  - Informational materials
    - Brochures
    - Posters
    - Wallet Cards
- Media
  - Media events
  - News releases
  - Radio PSAs
  - Billboards
  - Print and online ads
  - Social media

PARTNERS

HELLO ZEBRA MUSSELS. GOODBYE TEXAS LAKES.

CLEAN, DRAIN AND DRY YOUR BOAT.

WHAT ARE ZEBRA MUSSELS?

Zebra mussels are a small, destructive invasive species that can spread across Texas by hitching a ride on boats and trailers. They grow to only about 1 ½ inches and develop a distinctive zebra-striped shell. One zebra mussel can produce up to one million microscopic larvae. Zebra mussels can cause tremendous environmental and economic damage – hurting aquatic life, damaging your boat, hindering water recreation and even threatening your water supply.

WHERE ARE ZEBRA MUSSELS?

Zebra mussels are currently in the following lakes: Texoma, Ray Roberts, Lewisville, Bridgeport, Lavon and Belton. They have also been found on isolated occasions in Lake Ray Hubbard, Lake Grapevine, Lake Fork, Lake Takwoni, the Red

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ZEBRA MUSSELS: INVISIBLE UNTIL THEY'RE NOT.

CLEAN, DRAIN AND DRY YOUR BOAT.

Save your boat. Zebra mussels may sound cute, but these destructive invasive species cling to boat hulls, plug motors, hinder water recreation and destroy aquatic ecosystems. They are small freshwater mussels—larvae are microscopic and they grow to only 1½ inches—and are spread from lake to lake on boats like yours. Save your boat and lakes: Next time you boat, remove all debris and drain all the water from your boat, engine, trailer and gear. Wash it all with hot, soapy water and dry it for at least a week before boating in another waterbody.

HELLO ZEBRA MUSSELS. GOODBYE TEXAS LAKES.

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STOP
ZEBRA
MUSSELS.
CLEAN, DRAIN AND
DRY YOUR BOAT.
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Boaters who had heard about zebra mussels:

- Lewisville Lake – 94.1%
- Lake Ray Roberts – 98.8%
- Lake Waco – 73.2%
- Lake Brazos – 66.7%

Reported actively practicing “clean, drain and dry”

- Lewisville Lake - 93.9%
- Lake Ray Roberts - 97.6%
- Lake Waco – 75.5%
- Lake Brazos – 76.2%

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