

HOTWGPS Newsletter

Volume 12 issue 1

January 2020

January Meeting

The January meeting will be on the 21st at 6:30 PM. We will meet at the Lake Waco Wetlands 1752 Eichelberger Crossing.



Membership Dues

As a reminder, our 2020 membership dues were due January 1, 2020. If you bring your dues to the January meeting you can give them to Susan Peitsmeyer who will be the "acting Treasurer".

Dues may also be mailed to HOTWGPS, P.O. Box 852, Lorena, TX 76655.

Membership levels are:

- a. Individual -- \$18 per year
- b. Family -- \$24 per year
- c. Associate NON - Voting membership -- \$12 per year.
- d. Corporate/business -- \$100 per year.



This from the December 2019 issue of the Texas Invasives Newsletter

Zebra Mussels Now in Lake Marble Falls, Worsen in Granger Lake

Lake Marble Falls, upstream of Austin on the Colorado River, on Thursday joined a growing list of Texas lakes infested with invasive zebra mussels (*Dreissena polymorpha*), [according to the Texas Parks and Wildlife Department](#).

Lower Colorado River Authority biologists confirmed the presence of zebra mussels in Lake Marble Falls after finding mussels as well as larvae at multiple sites this fall, a statement from Texas Parks and Wildlife said. Biologists said they expected the zebra mussels to spread downstream to Lake Marble Falls because Lake LBJ had previously been found to be infested with the invasive mollusk.

Granger Lake in Williamson County was also upgraded from "positive" to "infested" Thursday after biologists repeatedly found zebra mussel and their larvae throughout the lake, the TWPD statement said.

The rapidly reproducing zebra mussels can have serious economic, recreational and environmental effects on Texas reservoirs and rivers, the statement said.

Zebra mussels are in 29 Texas lakes across five river basins as of November.

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Credit: Hans Landel, Texasinvasives.org, LBJWC



Researchers Studying Invasive Slugs in Texas for Harmful Nematodes

Several invasive slugs and one flatworm species present in Texas are becoming a human health concern, because they can transmit *Angiostrongylus* nematodes to mammals. Those slug species are the [Black Velvet Leatherleaf slug](#) (*Belocaulus angustipes*), [Yellow Garden slug](#) (*Limax flavus*), [Giant Garden slug](#) (*Limax maximus*) and [Marsh slug](#) (*Deroceras laeve*); and the flatworm is the [New Guinea flatworm](#) (*Platydemus manokwari*). The slugs are found throughout the state, and through citizen reporting and TISI expert collections,

we have documented the New Guinea flatworm in Gulf Coastal and Central Texas.

Over the past three years, the [Texas Invasive Species Institute \(TISI\)](#) has been documenting the true distribution of these species, and in late 2018, they started testing these slugs and flatworm for *Angiostrongylus* nematodes. The Rat Lungworm (*Angiostrongylus cantonensis*) and Intestinal Angiostrongyliasis (*Angiostrongylus costaricensis*) are the two species of concern for TISI. The Rat Lungworm is native to southeastern Asia but is found in Alabama, California, Florida, Hawaii, Louisiana, Mississippi and Oklahoma, while Intestinal Angiostrongyliasis is native to Central America and was once documented in Texas in the 1970s. In order to complete their lifecycle, *Angiostrongylus* species requires one mollusk (snail/slug) host and one mammal host. The TISI is focused on testing slugs/flatworm because the nematodes reach their infective larval (L3) stage within them, and those L3 are excreted in their slime trails.

In their native lands, these nematodes are often transmitted to humans eating raw or undercooked slugs and snails; however, in the USA, we are subject to exposure through the handling of infected slugs and/or garden vegetables/fruits covered with contaminated slime trails. Prevention of these nematodes is very easy: just simply washing your hands, fruits or vegetables can significantly reduce any exposure to *Angiostrongylus*.

TISI is still actively accepting sighting information and slug specimens. If you think you have one of these species, please email a photo and your location to Ashley

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Morgan-Olvera at arm001@shsu.edu for confirmation



Black velvet leatherleaf slug. Credit: Tim Searfoss, TISI Citizen Reporter



Giant golden slug. Credit: Jesse Berryhill, TISI Citizen Reporter



Marsh slug. Credit: Dustin Pfannenstiel, TISI Citizen Reporter



Yellow garden slug. Credit: Amanda Smith, TISI Citizen Reporter

US National Parks Face "Crisis" Over Invasive Animal Species

More than half of America's national parks are facing a "deep and immediate threat": the ongoing presence and spread of invasive animal species, such as rats, cats and feral hogs. The National Park Service (NPS) has taken the first step in combating this invasion by asking a group of experts to help chart a course that will ensure the survival of these national treasures. The new report notes that, "Of the 1,409 reported populations of invasive species in National Parks, only 11% are under control."

Among the efforts the report says the NPS should make is collaboration with the public and with neighboring agencies. David Hallac, superintendent of the National Parks of Eastern North Carolina and co-author of the report, said, "Without a question, the best possible way to manage invasive animals is to prevent them from invading an

ecosystem in the first place. And that can rarely be done alone by an individual park. That's something in which park managers have to absolutely partner with and work collaboratively with communities and adjacent land managers." The NPS must also develop better coordination among the parks, capitalize on emerging technologies, and improve management and monitoring.

Learn more at www.sciencedaily.com, www.cnn.com, and www.bbc.com.

The original article published in *Biological Invasions* can be found [here](#).

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Credit: feral hog - TPWD; feral cat - C. Potter, Department of the Environment, Australia



Pond Vac

As a reminder, this is a “Members Only” benefit. You can rent this super-duper pond cleaning machine very reasonably! John Enders is the “official pond Vac keeper”. Call him 254-848-9596 or send him an email at jnenders@aol.com to schedule your time with the machine. One note of caution when using the pond Vac, watch how much water you are removing from your pond!! It works so well sucking up the “yuk” that one can easily forget how much water is also being removed! That is the voice of experience talking!!



Please support these businesses who have agreed to give our members a discount at their stores

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Steve Kainer
Owner/General Manager



HILL COUNTRY
WATER GARDENS
& NURSERY

Phone 512-260-5050
Fax 512-260-5060
steve@hillcountrywatergardens.com

1407 N. Bell Blvd (Hwy 183 N)
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