

Ponderings

Official
Newsletter of
The Tucson
Watergardeners



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NOTEWORTHY:

We need to complete our 2012 Officer and Board member slate for October elections.

Vacancies: **President**; **Vice President**; and **Treasurer**. These are one year terms. Three new **Board members** are needed for two-year terms (2012-2013). Contact Paul Roberts to place your name on the ballot!

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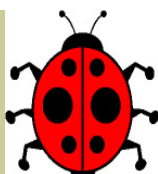
Summer Whites!

Pictured above is the hardy waterlily "Denver" blooming in our intense summer desert sunshine.

Board Meetings Date/Location

A Fall Board meeting date to be set.

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Ponders Calendar

General Meeting

Thursday, August 25th 7:30 PM at the Junior League of Tucson 2099 E. River Road

Program: "Integrating Fish Into Water Gardens" by Dr. Noel L. Shaw

(See page 2 for a bit more about Dr. Shaw)

Refreshments:

Michael Young & Ray March

Thank you for generously providing refreshments for two of our public meetings this year!

Share your extra plants & stuff!

Gila Topminnow

Poeciliopsis occidentalis occidentalis

The Gila topminnow is a small (approximately two inches long), guppy-like fish. It is also called a Sonoran topminnow or Charalito. The belly is often white with a darker body above; the scales have dark outlines; and, this fish has a lateral dark band on its side. This small, short-lived fish bears its young live. True to its name, the Gila topminnow lives near the surface in shallow water.

Gila topminnows are omnivorous. They consume a broad spectrum of food such as crustaceans and vegetable material, but will feed voraciously on aquatic insect larvae, especially mosquitoes, when abundant. In fact, the Gila topminnows are an excellent species for mosquito control. Recent studies claim that the Gila topminnow appears to be as effective – if not more so, than the Gambusia (Gambusia affinis) as a mosquito control agent.

So, what went so wrong to land this tiny desert fish on a Federal list of endangered species under the Endangered Species Act in 1967? The dubious honor of making this list means that you are reaching the point of extinction!

The Gila topminnow once occupied aquatic habitats below 5,000 feet elevation throughout the Gila River drainage in New Mexico, Arizona and Mexico. Historically, the Gila topminnow occupied springs, marshes, cienegas, small, slow-flowing streams, and backwater areas of slow-moving rivers. In southeast Arizona, the Gila topminnow occurred all along the Santa Cruz and San Pedro rivers.

The Gila topminnow's decline is attributed to habitat degradation and destruction, development of water resources, and drought conditions. Another critical factor was the introduction of highly aggressive "foreign" fish, e.g., the Mosquito fish, and other exotic fish, into the desert riparian environments. This combination of factors has driven the Gila topminnow to the point of extinction.

Gila topminnows remain a Federally listed species (listed under the Endangered Species Act in 1967) and being designated as such requires certain federal guidelines and

oversight because it is a listed species.

Today's Safe Harbor Agreements (SHA) to hold Gila topminnows are generally targeted for habitats that meet a higher criteria (for example sites that have greater than 600 sq. feet and are enrolled in the SHA for greater



Photo courtesy Arizona Game and Fish Department

than 15 years). The goal is to establish large populations, with thousands of the Gila topminnows, to be used as a future stocking resource. Mr. Ross Timmons, the Arizona Game and Fish Department's lead expert on topminnow and pupfish species, indicated that a minimum new habitat to be considered for a SHA would be a 30 x 40 foot pond, with a depth of 4–6 feet. There should also be no non-native species, e.g., koi, goldfish, or gambusia,

This consideration would also apply to non-native turtles, frogs, or toads.

If you are interested in establishing a larger conservation habitat, Timmons suggested contacting him by email (RTimmons@azgfd.gov), with a description of the pond and pond photographs —as a first step. The intent behind a SHA is to provide for long term security and well being of the endangered species. If the property containing such a habitat is sold, the SHA can convey to the new owners; if there is no interest in maintaining a SHA habitat, then there will be assistance in salvaging and relocating the species to another SHA habitat. A future goal (2 -3 years out) of Arizona Game and Fish is to expand the Gila topminnow habitat "base" to the back yard pond environment through a citizen-scientist monitored program.

"Yes, one does need a special permit to hold, handle, and maintain the Gila topminnow –even if these fish are in a backyard pond environment."

*-Clayton Crowder
Gila River Basin Native
Fishes Arizona Game and
Fish Department*

If conservation and promotion of native aquatic species is the primary goal of a small pond owner, then today's alternative might be to stock the pond with Longfin Dace (Agosia chrysogaster), which is a very hardy silvery minnow native fish. The Longfin Dace is also an excellent fish for controlling mosquitoes. Because the Longfin Dace is also a conservation population, a Wildlife Holding License is required. That license can be obtained from the appropriate Arizona Game and Fish Department Regional Office.

About Our Speaker.

This month's speaker is Dr. Noel L. Shaw. Dr. Shaw is an Associated Koi Clubs of America (AKCA) koi health advisor. He also does pond and filter consulting. In his "other" life, Dr. Shaw is a Certified Chiropractic Sports and Injury Physician. He was a guest speaker at our general meeting in October 2009. Please give Dr. Shaw a very warm welcome for his return speaking engagement!

CALENDAR EVENTS

There are several changes to be noted for the remainder of our 2011 watergardening calendar, based on the July Tucson Watergardeners Board meeting.

September

Sunday September 18
1:00 P.M. To 5:00 PM
Members Only Pond Tour

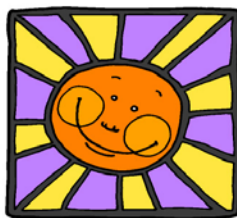
This year will be a Members Only Pond Tour. The tour will conclude with a fabulous potluck at Dennis & Mary McMacken's west side residence. Tour details in our September issue.

If you are located centrally or on the west side of the Tucson Valley, we would love to consider your water garden for this Tour! Contact your Editor.

Sunday September 25 2:00 PM
Ponds of the International Wildlife Museum *This replaces our regularly scheduled monthly Thursday evening meeting.*

October

Thursday, October 27th
7:30 PM Final Public Meeting & Election of 2012 Officers and Board Members. Our guest lecturer will be Mr. Jeff Babson, Environmental Educator, Sky Island Tours, who will be speaking on dragonflies and damselflies.



Watergardening Classifieds

Fish Mate UV+Bio Pond Filter 16 W. *STILL AVAILABLE.* A gently used pond filter, purchased in 2007, has been graciously donated to the club for resale. Asking price is \$50.00/OBO; original price just under \$200.00. Contact your Editor.

Free Water Lettuce. Call Karen at 979-6201.

Fertilizer Spikes & Tabs. If you are running low, these items will be available at our monthly meeting. \$5.00 per pack.

Sell or Trade Water Garden Items. Ad space is free to members! Write-ups on your items must be into the Editor by the 4th of each month.

Note: There will not be a 2011 Public Watergarden Tour, which was previously scheduled for September 17th & 18th. This year there will be a Members' Only Tour & Potluck on Sunday, September 18th.

Officer & Board Directory

President: Paul Roberts paul.robertstwg@yahoo.com
Vice President: Dan Jenks pdq211@yahoo.com
Treasurer: Mary McMacken azwhiner@yahoo.com
Secretary: Wayne Tomczyk waynet@us.ibm.com
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Bill Hudson lloydhudson@cox.net
Cynthia Rae amsearae@juno.com
Tony Shrader bluee3t@yahoo.com
HL Swain hl@swain.net (also **Webmaster**)
Steve Walkosak steve@x-streamponds.com

Other Positions:
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Editor: JoAn Stolley jstolley@cox.net



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Summer Papyrus

Our web address: <http://tucsonwatergardeners.org/>

Aquatic Plant Profile



Hornwort (*Ceratophyllum demersum*)

Hornwort is sometimes called Coon Tail, and is a submerged perennial herb. It has fluffy, filamentous, bright-green leaves. This plant is rootless and generally free floating; it can also be loosely anchored in muddy bottoms. Its flowers are very small and inconspicuous.

What's so special about this plant?

Hornwort is one of the top oxygenating plants. It is also tolerant of a broad range of pond conditions and does well in our desert environment. Hornwort has layered hair-like foliage that helps oxygenate and clarify the water, as well as keeping algae growth to a minimum. It makes an excellent fish breeding area; cover for newly hatched fish; and, goldfish love to eat it. Hornwort also harbors numerous small aquatic insects.

The plant tips will shorten and thicken in fall, before falling off and settling on the pond floor to spend the winter as buds. In spring, these buds grow to repopulate the pond. Hornwort can be prolific. However, it's easy to scoop from the pond and head to the compost pile.