Volume 16 issue 2

Happy Valentines Day!

February 2024

#### **HOTWGPS Events**

Unfortunately, our January meeting had to be cancelled due to the "nasty for Texas" winter weather. The February meeting is scheduled for the 20<sup>th</sup> at 6:30 PM, Location is yet to be determined.



Roses

We can trim our roses back by about 1/3 any time after Valentines Day. That is also a good time to give them a little fertilizer.



Membership dues <u>were due</u> January 1. Family \$30.00 Individual \$20.00 Non-Voting associate \$15.00 Corporate/Business \$125.00 Bring your dues to the meeting on the 20<sup>th</sup> or mail your check to HOTWGPS, 700 Fox Ridge Rd., Lorena, TX 76655



#### **Pond Vac**

As a reminder, this is a "Members Only" benefit. You can <u>rent</u> (\$5.00 for up to 72 hours) 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!!

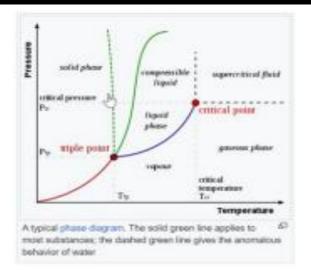


The following article written by Lauri Pesseto, North Texas Water Garden Society newsletter editor.

Maybe you have fish, maybe you have plants, or maybe you have both-but we all have water. Water unites us. We are water. Water is necessary for civilization to flourish. The human body ranges from 55-78% water. Water is the universal solvent and present in all living organisms. The earth's surface consists of 71% water, and of that water, 96.5% is in a sea or ocean. Agriculture utilizes 70% of usable water. The earth's largest and smallest creatures live in water. The gram is based on a volume of water. Water exists as a liquid, solid, or gas; and at the Triple Point, a point of pressure and temperature, it can be any of the three. The temperature of the triple point of water is defined to be exactly 273.16 (where K is the absolute zero of temperature).

DISCLAIMER: While the information contained in this newsletter was carefully collected and compiled to be as accurate as possible, there are no expressed or implied warranties that the information contained herein, including paid advertisements, is correct, of any value, or suitable for any purpose. If you use this information in any way, you assume full responsibility for the results of your actions. In no event will the author or others be liable for any results or the lack thereof

# HOTWGPS NewsletterVolume 16 issue 2Happy Valentines Day!February 2024



Water is an inorganic compound with covalent bonds. It is the most studied chemical compound. The neutral ph of water is 7. Water can form four hydrogen bonds. The hydrogen bonds result in higher melting and boiling points. The covalent bonds cause the high surface tension and capillary action.

Capillary action is the tendency of water to move up a narrow tube against the force of gravity, and is used by all vascular plants. Water is less dense and expands 9% when frozen.

Water studies seek to define and predict the behavior of water, but water seems to have a mind of its own. The hydrophilic and hydrophobic behaviors of water are not simple nor easy to understand. Most studies use water as ice in their examinations, but even frozen water molecules continue to move. Just google water and you'll find everything from What? to Whoa! about water. (or you might try some of the references listed)

The psychology of water is also studied. And here we are! Simply being near water can

boost your happiness, and immersion is even more powerful. These studies coin the term blue-mind, our minds under the influence of water.

Dr. Wallace Nichols, marine biologist, describes calm, peacefulness, unity, and a sense of general happiness and satisfaction with life in the moment as results of being by water. The blue-mind effect, Nichols says, may result at least in part from the action of neurotransmitters. catecholamine The neurochemicals, which relay stress signals in the brain, recalibrate in (and by!) water to low levels similar to those delivered bv meditation-reducing stress and anxiety. "The best way to handle stress," Nichols says, "may be to get to the closest beach."

Some researchers describe even the thought of water as being restorative to mind and body. Water increases dopamine, serotonin, and oxytocin, and decreases cortisol. The color, sound, and feel of water can lower pulse rate and increase feelings of calmness. Spending time in and around aquatic environments leads to significantly more positive mood, reducing negative mood and stress. When near water we feel better, are more satisfied, grateful, happy, humble, tranquil, relaxed. Our brain function improves, and the mind relaxes, allowing thinking and creativity to expand. The sensory experience of the sound of waves crashing, with the sight of water rising and ebbing, combine to put the mind at ease and cause mental energy to rise.

All these benefits are not only found at the beach, but by your pond, listening to your waterfall, and watching your stream giggle along. That water is the foundation of a water gardener's passion.

Happy "watering" to you all!

DISCLAIMER: While the information contained in this newsletter was carefully collected and compiled to be as accurate as possible, there are no expressed or implied warranties that the information contained herein, including paid advertisements, is correct, of any value, or suitable for any purpose. If you use this information in any way, you assume full responsibility for the results of your actions. In no event will the author or others be liable for any results or the lack thereof

Volume 16 issue 2

Happy Valentines Day!

February 2024

Copy and paste this link in your browser for a very well done video about water.

https://youtu.be/vmUk-gDfZA0



The following is from The Pond Guy including their advertising



#### I heard fish can get swim bladder disease this time of year, what is it?

Many bony fish, like the fancy goldfish found in ornamental ponds, have an organ called a swim bladder. This gas-filled sack has two main purposes: It helps the fish control its buoyancy and remain at a particular depth without having to waste energy on swimming, and it keeps the fish in an upright position. When a fish is unable to control its depth, or starts swimming sideways, upside side down, or head or tail down, it may have "swim bladder disease."

A fish with swim bladder disease can be a troubling sight to see, but it can be treated. Here's what you need to know about what causes it and how to get your fish swimming the right way again.

#### Your Gluttonous Goldfish

Although intestinal parasites and microorganisms can cause swim bladder disease, it mainly stems from overeating, eating too quickly or gulping too much air during feeding time. The fish gobbles mouthfuls of pellets, which expand like sponges as they soak up water in the mouth and digestive tract leading to constipation. Enough pressure on the swim bladder will cause the fish to swim any which way but up.

#### Time for a Diet Change

Water temperatures dip – sometimes precipitously – in the fall, and that change can slow your fishes' digestive processes. They have a harder time digesting protein when it's cold, and it can build up in their gut and result in an enlarged intestine.

To prevent this from happening, switch your fish food during the fall (and spring). Using a <u>pond thermometer</u>, periodically check your water temperature. Once temperatures are consistently between 40°F and 50°F, change over to a lower-protein, higher-carbohydrate diet like <u>The Pond Guy Spring and Fall Fish</u> <u>Food</u>, which is packed with easier-to-digest wheat germ. Feed them two to three times a week and only give them an amount that they will eat within 5 minutes. When temperatures drop below 40°F, stop feeding them entirely.

DISCLAIMER: While the information contained in this newsletter was carefully collected and compiled to be as accurate as possible, there are no expressed or implied warranties that the information contained herein, including paid advertisements, is correct, of any value, or suitable for any purpose. If you use this information in any way, you assume full responsibility for the results of your actions. In no event will the author or others be liable for any results or the lack thereof

# HOTWGPS NewsletterVolume 16 issue 2Happy Valentines Day!

February 2024

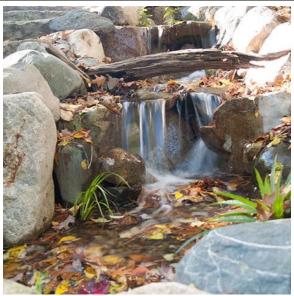
#### Peas to the Rescue

The best treatment for swim bladder disease is found in your refrigerator or freezer. Frozen or cooked peas, will blast through the impaction and reduce the pressure on the fish's swim bladder. If your fish starts floating sideways, we recommend you stop feeding them for a few days and then hand feed peas to help clear up any blockages.

Medicating fish in outdoor ponds with cooler temperatures really is not an option, as the medications won't work – so stick with the fasting-plus-peas remedy.

If one of your fish is really stressed, a salt bath could help – but you will need to dissolve the salt in an indoor holding tank filled with warm 78 to 80°F water. Keep in mind that when you transfer your fish from the cooler  $40^{\circ}-50^{\circ}F$  outdoor water to the warmer treatment tank, that temperature change can easily shock the fish. It should be avoided.





How to Clear Brown Pond Water

There's only one thing worse than green water, and that's brown pond water. In some ponds or water features, the water can begin to take on a discolored appearance at the end of summer or the beginning of fall. Generally, it's caused by one of two reasons:

**Debris Tea:** When leaves or pine needles fall into your pond, the tannins in them create a type of all-natural debris tea, which can give pond water a brown tint rather than the clean and clear look you're used to. This is the most common cause of brown koi pond water.

Sediment Stew: If you have a lot of floating particulates or sediment in your pond, playful fish, wind, or some other action can sometimes disrupt it, mixing it into your water column via your pump or aeration system.

To determine what's causing brown or cloudy pond water, grab a glass or jar from your

DISCLAIMER: While the information contained in this newsletter was carefully collected and compiled to be as accurate as possible, there are no expressed or implied warranties that the information contained herein, including paid advertisements, is correct, of any value, or suitable for any purpose. If you use this information in any way, you assume full responsibility for the results of your actions. In no event will the author or others be liable for any results or the lack thereof

#### Volume 16 issue 2

#### Happy Valentines Day!

February 2024

kitchen, fill it with water from your pond, and let it sit for 24 hours. Once that time has passed, look at the water to determine the underlying issue. If the water is still brown, you have tannin-colored debris tea. If the water is clear with some particulates at the bottom of the glass, you have sediment stew.

#### **Treating Brown Pond Water**

Once you pinpoint what's causing the discoloration, here's how to clear brown pond water:

#### Clean It Up:

Because both causes start with an abundance of organics in the water, your first course of action is to clean the bottom of your pond to remove any muck, leaves and remaining debris with a Pond Vacuum or Pond Skimmer Net.

Water Change: Next, do a partial (10 to 25 percent) water change, which will freshen things up and clear the water. Don't forget to add a Pond Water Conditioner to help support fish wellness.

**Add Beneficial Bacteria:** If you have sediment in your pond, add some Nature's Defense (if water temperatures are above 50°F) or Seasonal Defense (if water temperatures are below 50°F). The beneficial bacteria will digest any accumulated organic debris and help eliminate brown pond water.

Use Activated Carbon: If you have debris tea, toss a media bag filled with Activated Carbon into your pond. The carbon will absorb the tannins, leaving behind clear water.

#### **Ongoing Maintenance**

To prevent the discoloration from returning, keep organic material out of your pond. Clean up muck regularly with a skimmer net or vacuum, and when leaves or pine needles start falling, cover the water with pond netting like The Pond Guy PondShelter or Premium Pond Netting. If you have any questions or need help, our customer service team will be happy to assist you.

Editors note: The best way I know of to prevent the brown water from occurring is to cover the pond with nets in the fall before the trees start dropping their leaves and keep it covered until the late "polluters (Live Oak)" have dropped their old leaves in the spring. A side benefit of the netting is to provide protection from most predators (otters are an exception as they can wiggle their way under the net! I have seen them doing just that in my pond!!!)



DISCLAIMER: While the information contained in this newsletter was carefully collected and compiled to be as accurate as possible, there are no expressed or implied warranties that the information contained herein, including paid advertisements, is correct, of any value, or suitable for any purpose. If you use this information in any way, you assume full responsibility for the results of your actions. In no event will the author or others be liable for any results or the lack thereof

Volume 16 issue 2

**Happy Valentines Day!** 

February 2024

#### **Overwintering Koi and Goldfish in** Your Pond

During the winter months when the water temperatures are 45 to 50 degrees Fahrenheit and below, hardy koi and goldfish will go into their annual torpor, or dormancy. The fish's metabolism and activity slows, they become very lethargic, and they require little nourishment. If you don't have the means to keep them indoors or simply prefer to let them stay in the natural environment, you can keep them in your pond throughout the winter with a little bit of thought and preparation. Follow these tips below to be sure you keep them as safe as possible.

#### **Should Your Fish Stay or Go**

The first rule of thumb when deciding to overwinter fish in your pond is to check the depth. Your water garden should have a depth of at least 18" to overwinter hardy fish. This is very important as water can easily freeze 18" to 24" deep depending on weather conditions. If your pond is not quite deep enough to beat out the ice then an indoor home for the winter is the better bet.

Also consider the type of fish in your pond. Just as with plants, some fish species can be "hardy" in some climates and not in others. An Orinda, for instance, might do just fine overwintering in a pond in Orlando, Fla., but up in Fargo, N.D., that same fish would turn into a popsicle--even with an aeration system and de-icer. Fish like Plecostomus, Oranda, Telescope goldfish and Black Moors need to be moved indoors for the winter months when water temperatures start dropping into the 60's.

If these situations apply to your pond check out our article for overwintering your fish indoors.

#### **Prep Before the ice forms**

So you've decided to winter your fish over in your pond, following these steps will help ensure your fish get that life-sustaining oxygen they will need.

Remove debris from the pond. In the fall, before ice forms, give your pond or water feature a good cleaning. Remove debris, trim dead leaves off plants, net floating leaves and remove as much detritus as possible so very little will be decomposing - and releasing harmful gasses - through the cold months.

Add some beneficial bacteria. In the fall, you will want to add some beneficial bacteria, like The Pond Guy Seasonal Defense. When your water temperatures are between 50-40 degrees. It accelerates the decomposition of leaves, scum and sediment that build up in your pond. If left untreated the sediment will continue to decay during the fall and winter months. During this process the debris will release gas which can build up under the ice taking the place of vital oxygen for your fish.

Hook up a de-Icer and aerator. Colder water holds more oxygen than warmer water, but you'll still want to keep an area open in the ice to release toxic gas and bring in fresh oxygen. When a small waterbody is covered for long periods of time with ice, gases build up and can become so toxic that it can rob oxygen from the fish in your water garden. The best thing to do in this situation is to keep a hole open in the ice to allow for these toxic gases to escape. This is actually very easy to accomplish with a de-icer and aerator. De-

DISCLAIMER: While the information contained in this newsletter was carefully collected and compiled to be as accurate as possible, there are no expressed or implied warranties that the information contained herein, including paid advertisements, is correct, of any value, or suitable for any purpose. If you use this information in any way, you assume full responsibility for the results of your actions. In no event will the author or others be liable for any results or the lack thereof

#### Volume 16 issue 2

#### Happy Valentines Day!

February 2024

Icers aren't intended to turn up the heat in your pond's water but simply melt a hole in the ice, which allows the toxic gas to escape. Pairing your de-icer with an aerator will further push out gas while pulling in fresh, life-sustaining oxygen.

Let the fish be. Because fish are coldblooded, their metabolism reacts to the external environment. In most cases, your fish will be just fine through the winter months. You'll know when your fish go dormant. They won't lie down on the pond's bottom or curl up in their cozy Koi Kastle, but they will float upright, tuck in their fins and remain suspended in the water. As the fish hover there, you may still see some super slow movement, and they may also wind up facing in the same direction as if they were heading somewhere at less than a snail's speed. Don't try to get them to move or swim or wake up from their slumber. Keep an eye on them but leave them alone until they wake up on their own when temperatures warm back up. Then when the water warms, you can begin feeding them again and enjoying them for yet another year!



On the lighter side

My friend took her teenage daughter to the doctor for a checkup. The nurse asked the usual questions, including if she had an STD. "No" said the teen. "We have a Toyota"



After purchasing lumber, I read the warning on the receipt. It confirmed what I already knew – I was happy to be married. The receipt read: "handling may cause spinsters".



My neighbor texted me, "I just made synonym buns!"

I texted back "You mean like grammar used to make?"

I haven't heard from her since.



Like many people, I have an e-mail box that fills with junk I quickly delete. But this past May, one subject line piqued my interest: "Father's Day deals for the man that gave birth to you."



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



DISCLAIMER: While the information contained in this newsletter was carefully collected and compiled to be as accurate as possible, there are no expressed or implied warranties that the information contained herein, including paid advertisements, is correct, of any value, or suitable for any purpose. If you use this information in any way, you assume full responsibility for the results of your actions. In no event will the author or others be liable for any results or the lack thereof

Volume 16 issue 2

RobinsonGreenhouse@gmail.com • Fax 254.666.0919

**Happy Valentines Day!** 

February 2024



DISCLAIMER: While the information contained in this newsletter was carefully collected and compiled to be as accurate as possible, there are no expressed or implied warranties that the information contained herein, including paid advertisements, is correct, of any value, or suitable for any purpose. If you use this information in any way, you assume full responsibility for the results of your actions. In no event will the author or others be liable for any results or the lack thereof