



Summer's Here

Finally, it feels like summer is here! Trees are in leaf, flowers are blooming, lawns have greened up, and ponds are cycling. What a great time of year. We hope you're enjoying the sun and your yard.

We've decided not to host a pond tour this year, but instead to move to a biennial (every other year) approach. While we love the tour, we've struggled to get enough ponds to join the tour the past couple of years (we've only found a couple willing to commit so far for this year). We get it — everyone is busy, we're still recovering from the pandemic, and the economy is scary. So we will not have a tour in 2023. We hope this new approach will fit your schedules and work for all. Think about next year, the fun of visiting each other's ponds and yards, and consider helping with and being on the 2024 tour.

Here's to a great summer! We hope you enjoy our newsletters. In this issue, we discuss water features and mosquitoes, the beauty of shubunkin goldfish, the benefits of pond aeration, and the delights of parrot feather.

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Will a Water Feature Bring Mosquitoes?

If pondkeeping were simply a recipe for multiplying mosquitoes, it would be tough to justify having a pond at all. While the same things that make a pond attractive to you make it an unwelcome spot for mosquitoes looking to settle down and start a family, there are ways to discourage mosquitoes while increasing your enjoyment of your pond or water feature

Keep Water Moving

Mosquitoes, it seems, prefer to lay their larva in stagnant water. Ponds are much cleaner and more attractive when they're well aerated. The benefits of aeration are twofold. First, aeration helps gases produced by the breakdown of organic matter to dissipate naturally — which in turn eliminates the potential for unpleasant pond odor. Second — and very importantly — a well-aerated pond is a lousy place for mosquito larvae.

Mosquito Fish

Mosquitofish (Gambusia affinis) eat mosquito larvae, and have been used more than any other fishes for the biological control of mosquitoes. Many mosquito abatement districts, including the Salt Lake City and the South Salt Lake Valley districts, distribute mosquitofish at no charge to residents with human-made fish ponds and pools as part of their mosquito abatement programs. Misquitofish rarely survive our zone 6 winters, so you'll need to restart each year. Take a look at our April 2023 issue for more info on mosquitofish.

When Stagnant Water Forms

Under some circumstances, aeration isn't a viable alternative. In those cases, mosquito dunks (sole under a variety of brand names)

offer a safe, EPAapproved means to kill mosquito larva for up to 30 days.

So don't let the threat of mosquitoes stand between you and your pond. Give them the fight of their lives!



2023 Meeting Schedule

• June 15 – Stokes' pond (watch for an email/text and our website for details)

July 20 – Cobbleys' pond

♦ August 17 – Horrocks' Pond – Annual
BBQ and Plant Exchange.

- September 21 Larson's pond
- ♦ October 19 Annual Banquet!

If you'd like to host a meeting, please let any us know! Call, text or email any pond club officer.

2023 Pond Tour

Beginning this year, we're moving to a biennial (every other year) tour, and there will not be a tour in 2023. If you'd like to be involved in planning or be on the 2024 tour, please let us know! Future tours can only happen with your participation!

2023 Membership

We've simplified our membership. 2023 dues are \$15 per person.

Get Involved

We'd love for each of you to get move involved in the Pond Club. We *always* need more help. Opportunities are endless, and include recruiting new members, coordinating the Pond Tour, coordinating monthly meetings, helping with food, helping with our website and other publicity, and much more!

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Adapted from thepondguy.com

Know Your Fish: Shubunkin Goldfish

Shubunkin Goldfish are a popular and interesting fish that have earned the attention of fishkeepers all over the world. It's not hard to see why when you consider their attractive colors, lively personality, and ease of care!

Sometimes referred to as the Calico or Speckled Goldfish, Shubunkin Goldfish make beautiful additions

to both tanks and outdoor ponds. Known for their intense coloration and flowing fins, they're a sight to behold. Pair that with their active nature and you have a fish that

never gets boring!

As a type of Goldfish, the Shubunkin is a product of selective breeding. The fish of today are descendants of the Prussian Carp. While history is still a bit hazy about how these fish came to be, it's believed that Shubunkins were first developed in Japan around the year 1900.

Today, Shubunkin Goldfish are a staple in fish stores across the world! They're readily available to add some colorful life to your pond.

Like other goldfish species, Shubunkins will grow based on their environment. In a standard aquarium, with high -quality food, clean water and enough room, you can expect the average Shubunkin Goldfish size to reach

four or five inches (including tail) when fully grown. However, when they have access to a spacious pond, they can grow to lengths of 12 to 14 inches. Some Shubunkin Goldfish have even surpassed that,



measuring upwards of 18 inches long!

With proper care, the typical Shubunkin Goldfish lifespan is 10 to 15 years. That's assuming they're kept in a habitat with proper water conditions and a good diet. If you're lucky, your Shubunkin Goldfish could have a lifespan that's even longer. It's not uncommon to see

these fish living for more than two decades in well-maintained ponds.

Like other types of goldfish, Shubunkins generally need cooler waters than They prefer to live in oxygenated waters with a relatively neutral pH.

The interesting thing about Shubunkins is that they can tolerate a few degrees above freezing temperatures. That's why they're such a good choice for ponds. Of course, we always recommend using a heater to avoid those extreme temperatures. But if a temperature shift is gradual and drops only a few degrees per day, they shouldn't suffer any ill-effects. Here in Utah, they seem to overwinter just fine.

The most important thing you'll need in the tank or pond is a good biological filtration system.

Shubunkins can produce a lot of waste, which will quickly increase ammonia and nitrate levels if you don't

have filtration. The system should be powerful enough to cycle the entire tank or pond.

Despite their overall hardiness, Shubunkin Goldfish are not immune to diseases. They can experience many of the same common health issues that other freshwater suffer from.

The most common is Ich (which is the case for most freshwater fish). This parasitic disease is highly contagious and can result in white spots over the entire body. If not treated, it can ravage an entire tank and kill fish.

External parasites and infections can affect Shubunkins too. Skin flukes, fin rot, and fungal diseases are all possible. Internally, Shubunkin Goldfish can also suffer from problems like dropsy and swim bladder disease.

Adapted from aquariumsource.com



The Benefits of Aeration

Do all ponds need an aerator? The simple answer is no. But we think the benefits are truly worth it. Do keep in mind that some aeration occurs naturally through any moving water such as fountains, waterfalls and even your pond pumps. However, aerators are added to a pond for the sole purpose of increasing oxygen in the water — to ensure enough aeration is occurring.

Benefits of pond aeration

We're going to cover 4 major benefits of adding a pond aerator to your setup.

1. Aeration improves dissolved oxygen levels

An aerator increases the dissolved oxygen levels in a pond. Why does this matter?

The organics on the bottom of a pond (plant matter, fish waste, uneaten fish food) break down by beneficial bacteria or sludge removers. This breakdown is going to occur one of two ways: either with oxygen (aerobically) or without oxygen (anaerobically). If oxygen levels are thriving the breakdown can occur aerobically and will work much faster. Oxygen improves how the bacteria

function and how fast the muck and sludge breakdown. During this process most of the available dissolved oxygen lessens and may not replenish in a timely manner. Once oxygen is run-down, the decomposition process converts to anaerobic - and without oxygen, fish and other pond inhabitants may begin to die. Aeration helps ensure there's enough dissolved oxygen it the pond to go around and keeps sludge breakdown happening aerobically!

Bottom organics also feed algae blooms, so by using aeration and excelling the breakdown of the debris you'll also reduce the chance for algae blooms in the pond.

Dissolved oxygen is not only important for these reasons, but it's also imperative if you have fish. Keeping an ample supply of oxygen in the water will ensure they can breathe easy.

Overall, increased levels of dissolved oxygen will improve the general quality and clarity of a pond.

2. Aeration helps limit the mosquito population

Mosquitos love stagnant areas of ponds because they need stationary water to lay their eggs. If you have areas

of your water feature that are stagnant, an aerator can help limit the mosquito population. Simply place diffusers in areas that need movement and prevent those pesky insects from multiplying and taking up residence in and around your pond.

3. Aeration evens out pond temperature

In the spring and summer an aerator can help balance the temperature in your pond. By default, deeper water will be cooler than surface water because of less direct exposure to sunlight. When placed on the bottom of the pond a diffuser will push bottom water up to the top of the pond and circulate the water. This will result in a more even, consistent pond temperature throughout.

Important note: If you decide to use your aerator in the winter months AND you have fish you'll need to reverse your diffuser strategy. In the winter the water temperature towards the bottom of the pond actually stays warmer which provides a place for fish to overwinter. We don't want to disturb this bottom zone of warmer water with aeration, so pull your diffusers from the bottom and place them near the surface area of the pond.

4. Aeration can be used to keep an opening in surface ice during winter

So why would you want to use aeration in the winter? Aeration can be used as a means to maintain an opening in the surface ice. With diffusers near the surface of the pond, they can help keep an opening in any ice that may form. The opening prevents toxic gasses from building up in the pond by ensuring they always have a place to escape.

How to aerate a pond

Aerating a pond is simple. You'll mainly just need to purchase an aerator, tubing, and diffuser(s). Complete aeration systems, that include everything, are also available.

The pump itself is external, so set it up outside of your

pond in a covered, protected location. They're weather proof for the most part, but under extreme weather you'll want to keep the pump covered so it will last longer. Just make sure the cover has proper ventilation. The pump has to have access to air so it can pull air in and push it out. You'll also want to make sure the pump is elevated—safe from pooling water during heavy rains.

Install the tubing which will run from your pump to a diffuser or multiple diffusers. If you have multiple diffusers, use a valved manifold. Generally, you want to place your diffusers at the bottom of the pond to push bottom water up with air (except in the winter as noted above).

With linear diaphragm pumps make sure that the tubing has a gradual downhill to level fall to each diffuser and keep the line as short as possible. Doing so will limit the amount of back pressure on the rubber diaphragm, prolonging life.

Once you have the aerator installed, turn it on and reap the benefits of added aeration. Keep your aerator running 24/7 for best results.

How much aeration does a pond need?

Most air pumps are rated for handling up to so many gallons and at specific depths.

A couple of things to keep in mind: if you have a lot of lilies you may want to go with a lower amount of aeration as they don't like a lot of moving water. Also, if you already have a waterfall or fountain keep in mind that these features are adding some aeration, so you may not have to go as big with your aerator.

Aeration is worth the effort!

There are a lot of benefits to adding diffused aeration to a pond—generally speaking it will lead to better water quality and clarity. They're certainly worth the addition. And with how easy they are to install, you can get one up and running in no time and cash in on the benefits.

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Adapted from webbsonline.com

Our May Meeting

Thanks for the Pfafflins for hosting our May meeting, and for all who came out. We look forward to seeing you at our next meeting on June 15 at the Stokes' pond.











Thank you sponsors!



























Know Your Water Plants: Parrot Feather

Parrot's feather is a versatile plant for ponds and water gardens. Grow it underwater to oxygenate water, provide fish a place to hide, and reduce on algae. Or let parrot's feather float on the water to provide shade. It can also be grown in wet soil at the water's edge. It earned its moniker from its dense plumes of fine-texture foliage. Parrot's Feather has both submerged and emergent foliage. The emergent stems may root near the pond's edge via rhizomes.

Its fine, almost fernlike texture makes parrot's feather er a beautiful contrast to lotus, water lily, and other big-leaf water-garden plants. It grows equally well in ponds and container water gardens.

Plant parrot's feather with papyrus; its upright growing habit looks good with a carpet of low-growing parrot's feather at the base. Or place parrot's feather near water lily's big, flat pads and attractive blooms to contrast with the fine texture of parrot's feather.

The plant is especially useful for improving water quality: It efficiently absorbs excess nutrients, ensuring water purity and helping reduce the growth of unsightly algae. Unfortunately, it's also valued by mosquitoes, who like to lay eggs around the plant as





it floats in shallow water.

Parrot's feather grows fastest in full sun (6 to 8 hours of direct light per day), but it tolerates sites with only morning sun. The less sun it gets, the slower it grows and the less efficiently it improves water quality.

In water gardens, plant its delicate rhizomes in soil in shallow water. It will quickly root and begin to spread. Its ability to root also makes parrot's feather a good transitional plant for shorelines.

In cold-winter areas, parrot's feather dies back to the rhizomes, so it should be pruned to the ground or water level after hard frost so the dead foliage doesn't decompose over winter. Floating in a Utah pond, it will die at the first hard feeze and should be considered an annual.

Note that it is considered an invasive species in some areas (but not Utah). It can reproduce rapidly in natural areas, clogging waterways and crowding out native species.

Adapted from Better Homes & Gardens (BHG.com)



Who we are

The Utah Water Garden Club is a non-profit organization serving the greater Wasatch Front. We strive to foster an appreciation for and interest in the use of water in the landscape, through monthly meetings, educational programs, a pond tour, and sharing our water gardening experiences. We are a group of volunteers dedicated to water gardening, pond keeping, koi and other pond fish. Our members range from novices to commercial professionals.

Historically, we have sponsored an annual Water Garden Tour – a self-guided tour of outstanding local ponds, water features and gardens. Beginning this year, we're moving to a biennial (every other year) tour, and there will not be a tour in 2023. If you'd like to be involved in planning or be on the 2024 tour, please let us know! Future tours can only happen with your participation!

Check out the Club's website at <u>UtahWaterGardenClub.org</u>.

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