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From  
Asphalt to  
*Oasis*

Turning one family's driveway  
into their urban escape p.8





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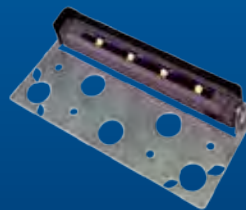
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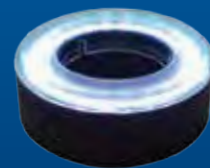
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## 2022

### November 15 - 17

International Pool | Spa | Patio Expo  
Las Vegas Convention Center  
Las Vegas, Nevada  
www.poolspapatio.com

## 2023

### January 11 - 13

MANTS  
Baltimore Convention Center  
Baltimore, Maryland  
www.mants.com

### January 31 - February 2

National Hardware Show  
Las Vegas Convention Center  
Las Vegas, Nevada  
www.nationalhardwareshow.com

### March 1 - 3

Water Garden Expo  
Grand Casino Hotel & Resort  
Shawnee, Oklahoma  
www.wgexpo.com

### March 10 - 12

Central Florida Koi and Goldfish Show  
Avanti Palms Resort  
Orlando, Florida  
www.cfks.org

### October 18 - 20

Hardscape North America  
Kentucky Exposition Center  
Louisville, Kentucky  
www.hardscapena.com

Are you attending an event that you think others should know about? Are you hosting an event and want more people to come? Send event information to [llgelles@pondtrademag.com](mailto:llgelles@pondtrademag.com).



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# Publisher's Perspective

## Taking it Down a Notch

If you live in a cooler climate like I do (the U.S. Midwest), perhaps you are experiencing a slowdown this time of year. It might be time to sit back and take a long-deserved break. You've worked hard all season, and it's time to take it down a notch.



Now is also a good time to start developing a game plan for the spring pond season. Catch up on your paperwork. Brush up on your skills, and perhaps you can learn a new thing or two. Down time doesn't have to mean idle time, after all.

Here's another idea. Sit down and kick back with all the issues of POND Trade you've put aside during the busy season. Now is the perfect time to sink your teeth into them and catch up on any articles you might've missed in print or on social media.

If you're all caught up, not to worry — we've got eight great new features in this issue to keep you informed and entertained. Speaking of the latter, I was particularly entertained by Paul Holdeman's article about his client from hell ("Get Out of My Way!" pg. 20). His unfortunate yet hysterical account of the quintessential micromanaging customer might hit pretty close to home for some of you.

I was also intrigued to read former Water Artisan of the Year winner Jonathan Marston's cover story ("From Asphalt to Oasis," pg. 8) about restoring an urban driveway back to its natural state, complete with koi pond and fire pit in a beautiful sunken patio. What a retransformation!

If you're looking for ways to improve your business acumen, check out Clay Graba's profile on customer experience (or CX) automation ("Go the Extra Mile," pg. 25). His high-touch customer outreach and follow-up policies are rather impressive, especially considering that he's the only human involved!

As you flip through this issue, pause on pg. 41 and think about which of your projects might be a good fit for our next Water Artisans of the Year contest. Enter them on our website by Dec. 15, 2022, and your craftsmanship could be gracing these pages in our March/April 2023 issue!

Happy PONDering!

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Contest deadline is December 15, 2022

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Auden enjoys her new pond (bottom, left) from one of the many destination boulders scattered throughout the feature. It's hard to imagine that only a few weeks before, she was standing alongside her mother Dina (bottom, right) and brother Wendell during a captivating driveway removal. In that same spot, now lies the bridge, where Dina can be seen (top) striking a yoga pose.

## | Pond Construction |

# From Asphalt to

# Oasis

Turning one family's driveway into their urban escape

by **Jonathan Marston,**  
FallingWater Scapes

As the chorus of the song “Big Yellow Taxi” by Joni Mitchell famously goes, “They paved paradise and put up a parking lot.” The lyric implies that urban development all too often swallows up what were once blissful green spaces.

While reclamation projects like the Highline Greenway in New York completed in 2014 have bucked that trend in recent years, once paradise is paved over, it usually stays that way. However, for clients Erik and Dina, they wanted paradise back and were ready to bust some asphalt to do so.

In spring 2021, Erik contacted us to put in the dream pond he'd wanted for years. As we spoke on the phone, I quickly learned that despite living 15 minutes from downtown Boston in a densely populated neighborhood, this was no city slicker on the other end of the line! Erik was very down to earth in both the figurative and literal sense. Having gone through farm school in Western Massachusetts, Erik had started a local crop-sharing agreement with his wife Dina several years earlier. Initially, the duo actually grew their own crops on leased farmland outside the city, with the dream of someday having their own slice in the countryside to move and tend to.

As the years passed by, though, they settled more into their city home and made a pivot. Rather than move, they began bringing the countryside to





The driveway came out without a fight! The ledge we discovered beneath it, however, was another story and required a creative workaround.

their own yard through a series of projects — most notably, a chicken coop behind the garage, a vegetable garden out front partially irrigated by rainwater barrels, beehives and even some fruit trees. Despite these efforts — and being the only lot with two towering Norway Spruces tucking them away — their yearning for more green space continued to grow and led them to set their sights on adding a pond somewhere on the property.

## Clearing the Way

With dwindling room in the yard, picking the right spot presented our first challenge. Since the family loves to host, replacing their little bit of lawn with a pond was out of the question. The front and sides of the house were off the table, too, as they were already put to good use and not the main hangout areas anyway.

Limited space left them with only one viable option: removing the driveway, which also happened to be in close

proximity to their much-frequented outdoor patio. This idea seemed a bit crazy at first, but it ultimately made the most sense given the availability of street parking and the family's lifestyle.

Under normal circumstances, we would try to avoid the inconvenience of a demolition project like this prior to any construction taking place, as it substantially affects the price. However, for this project, the constraints of the city acreage dictated otherwise. We decided to rip out 40 feet of driveway and leave 20 feet remaining by the street for utility purposes, like their weekly farm stand.

With the location decided, we turned our attention to the pond itself. As a designer who strives to make every water feature look and feel natural, I knew that this urban landscape would present another challenge: obscuring the manmade scenery in order to establish a more appropriate context for the pond.

## The Secret Garden Effect

First, we needed to focus on the broader scene and create separation from distracting elements permeating the space, like close neighbors, street noise and open sightlines. Screening trees were the obvious choice, so we left plenty of room along the property line for compact emerald-green arborvitae and a dwarf blue spruce, which shielded the pond area from the three-story house next door.

At the driveway's new endpoint, we continued that theme while varying the look with two dwarf oriental spruces and a Japanese maple. These additions enclosed the space completely from the two public-facing sides and added the privacy and softness needed to set the right tone for the water feature. It's hard to put that tone into words, but I like to think about it as the Secret Garden effect — a space that becomes its own secluded world, full of allure and mystery. Every

design choice made from here on out stemmed from a desire to accentuate those feelings.

We started by focusing on the entry to the pond area. Many places that leave a lasting impression have entrances with these magnetic characteristics — not just well-designed landscapes. Take Fenway Park, for example (since this is a pond in Boston, after all). Picture yourself stepping up the narrow, dimly lit stairs inside the park only to have a brilliant ballfield open up in front of you moments later. It's quite the sensation.

While Dina & Erik's yard didn't have a luminous stairwell beckoning people to walk up, it did have a stepping-stone walkway that cut through the lawn, which provided good bones for a dramatic entry. Building on this foundation, we expanded the pond into part of the walkway and took out several stone steppers. In their place, we added a sleek wooden bridge, otherwise known as the most powerful tool in a pond builder's arsenal.

For those who don't know, a bridge fosters the connection between people and water. It creates a powerful interaction point where one can sit, dip their feet in and watch the fish swimming, gracefully disappearing below the boards and re-emerging. While there's the obvious emotional connection here, a bridge also physically connects two spaces and creates a very defined point at its union. In our case, framed out by dense spruces on either side that hide the pond like a stage curtain, this point serves as the potent gateway to the garden we were hoping for. As one steps onto the bridge, a 25-foot-long pond water feature reveals itself from behind the trees.

## Setting the Ambiance

Now inside this newly created world, we wanted to make sure the experience felt immersive so that nothing in the background could shatter the illusion. In other words, we wanted to make the feature as big as possible to garner all of one's attention. While the limited height in the yard prevented us from creating a tall waterfall, we did use a large pump and split the stream to create more action. These decisions resulted in a lot of sound and eye-catching movement, which helped dampen the noise from neighbors and the street while enhancing one's own sense of audible privacy.

When it came to the pond itself, we opted for several vertical sections rather than gradual shelves.

A load of hand-picked boulders (top) arrives as we lay in the first course of wall block for the sunken patio. Auden (middle) helps stress test the boulders after I place them. Given the restriction on the supply chain, it's safe to assume her steel-toed boots were on back order. Head protection was not a problem, however. Complementing the seat wall on the far end of the pond (bottom), we opted for a section of vertical wall block inside the feature as well, which created a mirroring effect and allowed us to maximize the pond's footprint.







Using cedar slats on one end and narrow wall blocks on the other, we created substantial swaths of pond with minimal visual separation between the water and terrestrial planting zones (as tight as 4 to 8 inches).

Typically, an all-boulder pond may have sections of rock sticking out of the water that bump up the delineation width to several feet, which we simply didn't have room for. In addition to taking up more space, this style often makes a pond look more artificial, as the eye can see a continuous necklace of rocks circumscribing the water. However, we do love large boulders and couldn't refrain from using some on this feature — they just had to be the right ones and used sparingly. Some of our favorites were the flat destination stones that could be perfectly on level with the surrounding landscape. These are also favorites of Auden and Wendell, Dina and Erik's children, as they make for the perfect jumping rocks.

Speaking of the family, we couldn't build an awesome



pond without creating a dedicated space for them to all enjoy it from.

### The Sunken Patio

Originally, this concept was born from necessity as we encountered a ledge during the demolition of the driveway. Rather than fight granite, we opted to raise up the section with a seat wall and avoid it altogether, which was incredibly serendipitous. (Ledge? Serendipity? I know, I can't believe I'm using those two words in the same sentence, either.) But as you can see, isolated from the rest of the property and accessible via one small corridor, this space now oozes a sense of seclusion.

Deciduous trees bookend the patio on both sides, while the additional depth makes all of the surrounding plant material feel bigger and more encapsulating. The cedar slats tie into the seat wall on the water side, bringing the pond up close and personal in a way that's hard to rival. It doesn't take much to imagine all the ways this



The pond has become a part of everyday life for the family. Whether it's breakfast and books on the bridge or a gathering for an evening fire on the sunken patio, the feature continually provides opportunities for closeness, connection and escape.

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An inviting destination stone (left) was located right by the bridge. Erik dips his feet (right) into one of the best investments he's ever made.

space gets used. From Dina doing her weekend yoga to the entire family roasting marshmallows around the portable fire pit, it's truly an escape from city life.

As I write this article, it just so happens that I'm in one of the wildest cities in the world: Vancouver, British Columbia. Surrounded by skyscraping mountains and millions of people simultaneously, places like Stanley Park on the north side of town have old growth trees that have been around for hundreds of years, growing in a dense forest that completely transcends you. This juxtaposition is a rare find, especially coming from the east coast of the United States.

This prompts me to think about the fact that out here, you can just look out the window and put yourself on a mountain. Or you can walk a few minutes to The Hollow Tree, an 800-year-old stump bigger than an elephant, and be awestruck by nature.

While it may seem impossible to have this connection to the natural world in any other city, it's not. With a little creativity, we can all live a bit closer to the country no matter where we are, just like Erik and Dina are doing. ☘

### About the Author

**Jonathan Marston** built his first water feature at the age of 18 for his grandparents in Massachusetts. After high school, he moved to British Columbia for a unique undergraduate opportunity that allowed him to study water features in one of the most scenic parts of North America. Highlights of that degree included interning with Streamworks Designs in Vancouver and petitioning the university to have him build a koi pond on campus, which was completed in 2016 and doubled as his thesis project. Upon graduating, he moved back to Boston and officially opened FallingWater Scapes in 2017, which has since become a Master Certified Aquascape Contractor and an award-winning water-feature company. Today, some of his favorite projects are the ones that allow him to practice Frank Lloyd Wright's principle of organic architecture: bringing nature as close to his clients' homes as possible.

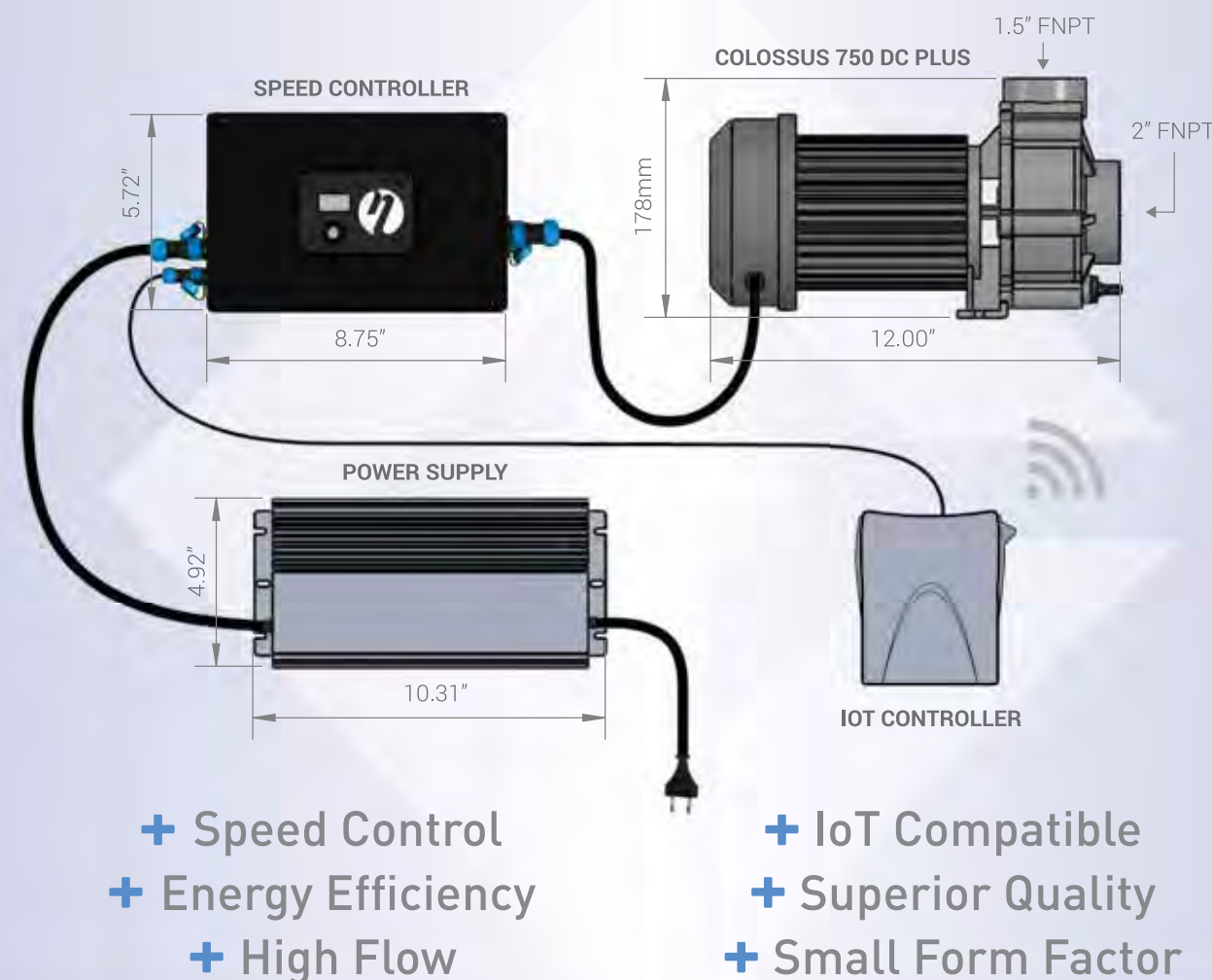


Traces of enjoyment (left) can be seen left on the bridge. Along with less driveway (right) comes less shoveling snow – and a winter wonderland too!



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## Aquatic Infiltrators

Slime, foam & cloudy water ... oh my!

A trifecta of problems could result if no action is taken.

**by Patrick Simmsgeiger,**  
Diversified Waterscapes Inc.

**M**aintaining a decorative waterscape is a byword for eternal vigilance. When it comes to caring for streams, ponds and lakes, it is as though each individual water feature has its own distinct personality. Some are easy-going and never seem to require anything more than simple preventive measures, while others are a real challenge, more resembling bratty children that can never be satisfied than straightforward inanimate bodies of water.

Despite this fact, the good news is that every “bratty” problem has a solution. However, be cautioned that the right solution done the wrong way is likely to create greater troubles than the one you began with. Water features are sensitive ecosystems teeming with life. In the world of aquatic management, mistakes can be costly and deadly. The use of blue-chip aquatic professionals really can't be understated.

So, now let's focus on the big three most common problems and bare-bones solutions to keep your water clean, clear and biologically healthy.

### **Surface Slime**

No matter how crystal clear the surface of the water may appear, assemblages of microorganisms such as bacteria, archaea and fungi are naturally building on the water's surface. They attract and concentrate nutrients and have the capacity to detect and move toward any high concentrations of nutrients — an ability called chemotaxis. They are one part of the recipe for the eventual growth of biofilm, slime, sludge or algae (different and dissimilar photosynthetic organisms).

In fact, they're not actually invisible, but they





A pond with algae buildup (left) contrasts starkly with a well maintained, crystal-clear pond (right).

can't necessarily be seen by the naked eye. The recipe starts to take shape when unchecked phosphates, nitrogen and other organic materials are allowed to proliferate in the water. They provide nutrition, contributing to the spread and growth of this unsightly stew, until the point that they have gone from invisible to the naked eye to an eyesore. The best approach to this problem is vigilant intervention, which requires understanding of how the cycle is fueled.

Basically, there are four main contributing factors to water features becoming fertile grounds for algae growth. The first is runoff from overwatering the adjacent fertilized turf. Nutrients in the fertilizer energize growth, thus lighting the algae powder keg. Next, trees in close proximity to the water are inevitably going to bestrew the water with leaves and other debris from the tree. (Again, this is another major source of nutrients.) Third, dumping grass clippings into the water or allowing grass-clipping piles to blow into the water is the quickest way to throw off the water's pH balance. Grass clippings

contain high levels of nitrogen and phosphorus, which are going to quickly stimulate the growth of slime. Finally, reclaimed water might be great for the environment, but it's not so great for water features. The nutrient load and high salt content of reclaimed water leads to color, odor and, of course, algae problems. This is an issue you cannot likely avoid — but be aware of it.

In many respects, this is all nature running amok in uncontrolled water features. Since the problem is the combination of organisms in the water building up on the surface and the uncurbed introduction of nutrients, the smartest approach is addressing each part of the recipe individually. As with all aquatic management, begin with ecosystem balance. Ensure that there is adequate circulation, manageable nutrient levels (there will always be some), proper aeration and use of equipment and approved chemicals to control contaminants.

The most common ways of restoring balance include introducing products that help slow down the rate of biological contamination; thoroughly cleaning filters

and replacing all filter media; running the water feature's filter around the clock (if possible, but no less than twelve hours a day) to ensure containments are being filtered out and oxygenation to the water is ample for healthier water; and blocking sunlight and turning off any light sources that contribute to the growth of undesirable organisms.

However, if you're already looking at algae, sludge, slime — whatever you want to call it — then it needs to be eradicated as soon as possible. It will not likely die of its own accord. In this case, apply a product to kill and control the algae. Remember not to overdo it or use a product that is essentially aquatic napalm! Unless the blooms are so out of the control that all you can see for miles is slimy green stuff, use a gentle but efficient product. Follow it with products that will slow the regrowth of algae.

### Pond Foam

Foam isn't the worst thing in the world, but it's certainly not pretty. Generally speaking, foam occurs when there is

an excess of proteins in the water. The additional proteins come from dissolved organic material, including fish food. As with slime, natural forces are running amok. The proteins in the water are a biological process. However, when they are not breaking down fast enough, they manifest into foam.

Before adding defoamer, be sure there is adequate filtration and aeration. Also, make sure any fish stock is in proportion to the size of the water feature. Too many fish will create more waste than a water feature, and the filtration system is designed to accommodate. Once those boxes are checked, using a defoamer is a smart and safe chemical ingredient to add to the water and resolve the immediate ugly mess.

### Clouded Over

A loss of water clarity invariably means there is a chemical imbalance in the water or turbidity, which is defined as the cloudiness or haziness of a fluid caused by individual particles (suspended solids) that

are generally invisible to the naked eye — similar to smoke in air.

Flocculants, clarifiers and other chemical additives attach like magnets to contaminants, with the resulting heavier particles falling to the bottom or getting clumped together. This helps them more efficiently run through the filter and become trapped in the media.

However, this is a short-term fix. In the long term, like always, you'll want to ensure that the filtration and aeration are at their peak. This should bring clarity to the water. In addition, adding certain bacteria will enhance the water quality and clarity and be helpful in the digestion of sludge at the bottom of any water feature.

So, these are the bare-bones solutions for the big three problems almost all water features face. Maintaining a decorative waterscape is a byword for eternal vigilance. These beautiful features are designed to be aesthetically pleasing. Unfortunately, when they get out of balance, they can suddenly have the opposite effect, looking sick (and kind of ugly).

Once again, there is no single, simple and easy solution. Water features can be a real headache. The best advice I can give is to call in the experts. It'll save time. Usually, when you save time, you save money.

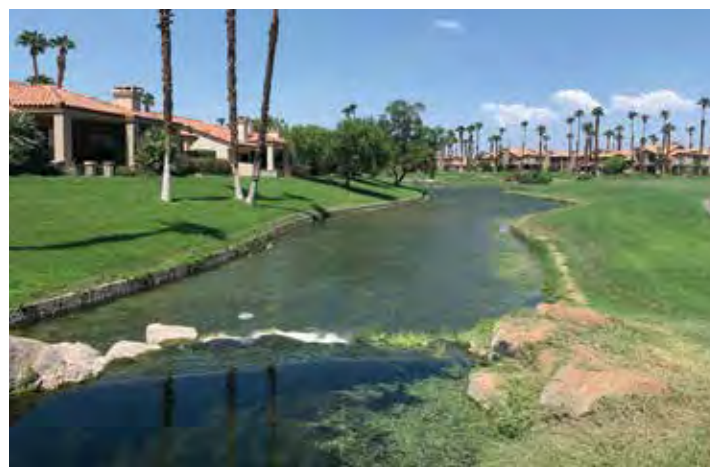
Either way, you'll certainly save any potential embarrassment! ☞

### About the Author

**Patrick Simmsgeiger** is the president of Diversified Waterscapes Inc. (DWI), a certified lake management company and manufacturer of aquatic



products for 35 years and counting. A vital supplier for the industry, DWI is maintaining service to its clients during the COVID-19 pandemic with modified work practices and procedures.



A chemical imbalance (left) can result into a cloudy lake. When treated (right), the transparency comes back..



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# GET OUT OF MY WAY!

Dealing with clients who nitpick, control & micromanage

**by Paul Holdeman,**  
The Pond Gnome

**I**t was early spring 2021 when the client first contacted us. She absolutely loved the pond we had built at a local nursery that she frequents. The nursery owner sent her our way to get one of her own. We love referral leads because they tend to be people who are already comfortable with our build style. Our credibility is solid with the reference, and that translates to a nice warm start to our relationship.

First, she visited our showroom with her husband, and they both loved our work. She asked us to convert her swimming pool into a water garden, which is a request we get a lot these days. We designed this pool-to-pond conversion with some quirky upgrade features, including two large tree trunks with water raceways carved into them — something she had seen at the local nursery. This nursery pond she had fallen in love with was a rebuild of an existing water feature. The nursery owner had asked us to leave and re-use the carved-out log that was already in place.

One of the cardinal rules of sales is, “Don’t show it if you are not willing to sell it.” This was built as a sales display for us. We must have done at least 30 home and garden shows in our first decade in this business, and I know this rule to be absolutely true. Yet I must apparently relearn it again and again, along with a related

rule — to charge accordingly for unusual requests.

## **A Sonoran Jungle?**

The on-site design consultation following the showroom visit went well. However, we found that access was going to be a major problem, especially considering the two large tree trunks that were to be included in the



Imagine the client jumping out in her nightgown and slippers trying to “help” balance this 1,100-pound log!

installation. The tree trunk theme from the nursery feature was expanded during the design phase to include installing a nearly 18-foot-tall tree trunk against the constructed wetland filter wall, which she would cover in a vine like King





Access was narrow (top), which restricted the boulder size. Client distractions (middle) sent us in an odd direction. Frustration was intensified (bottom) as she debated shelf size.

Kong, and later a fourth trunk to be used as a bench seat. She was looking for a jungle-like atmosphere in her Sonoran Desert garden. This is a typical track-

scramble to find something to put in its place because we were approaching the holiday season, and it gets tougher to fill the calendar during that time of year, when

**On the very first day of construction, she surprised us with a “friend” showing up on site shortly after we had started our morning. This “friend” was an interior designer who fancied herself a designer of all things, including landscape and, apparently now, ponds.**

home backyard, about 30 feet deep off the back patio. From contact to contract took about a month. And that was only the beginning.

As time went on after signing the contract (April) and awaiting the start date (October), several plan changes were made before we even began construction, including the addition of a third and fourth tree trunk to the order. I should have added more money to our transport and installation budget for that, but I failed to pick it up and account for it. So naturally, one ended up being very large and costly to move and secure into place.

### Hurry up & Wait

Multiple on-site meetings took place between the contract signing and the beginning of construction because the client kept changing the design, adding to it or wanting to discuss how to placate her homeowners’ association. Eventually, we completed this process via email. Whew!

However, adding insult to injury, two weeks before construction was set to finally begin, she backed out. Not permanently — she just needed to put the project on hold due to a family emergency back in India. She would be out of the country for an untold amount of time and would get back to us when she returned. We had to

no one wants their yard all torn up. She did come back, and we were finally able to begin construction about six months after the original start date had been set.

### Asking for a “Friend”

On the very first day of construction, she surprised us with a “friend” showing up on site shortly after we had started our morning. This “friend” was an interior designer who fancied herself a designer of all things, including landscape and, apparently now, ponds. It turned out that the client had hired this lady for the specific purpose of micromanaging our rock placement to suit her aesthetics, without any consideration given to functionality and stability. This is despite the fact that she had hired a professional pond builder whose work she had professed to respect.

This client was a micromanager from the start, but I didn’t really pick up on it until after the project construction had gotten under way. I should have noticed on the first day when, barefoot and wearing a house dress, she tried to “help” the crew move tree trunks into the yard. She would not listen to reason from our foreman, whom I had introduced as our construction supervisor with more than a decade of experience with our company. I had to drop my schedule and make a special trip out to the job site



The designer (left) is “out of bounds,” directing a 10-year team member on how to set a rock. The upsweep at the end of this log (right) created a debate about the physics of flowing water that will forever amaze us!



(one hour each way) to get her settled down and set boundaries for her and her designer friend.

I was able to control the situation while I was on site, but each time I left, these two ladies would set aside everything we had agreed upon and go right back to getting involved in the build, micromanaging every rock our team tried to set into place as if we didn’t know what we were doing. “A little to the left, a little to the right ... can you raise it up a couple of inches?” That kind of stuff. It was very frustrating for a crew that had been trained to follow the rule of “form follows function.” The rock substrate must be stable!

We had used, splintery plywood and rocks all over the backyard. This not-so-athletic, barefoot woman and her interior designer friend got right in the middle of the action, holding up our progress and causing our team all kinds of frustration. And talk about dangerous!

### Managing Micromanagement

We had never set up any kind of process or protocols for dealing with this kind of client. No one on our team was prepared, or willing at this point, to admonish the women to get off the project site and out of the danger zone. I had a verbal agreement with both

women that they would not leave the covered patio area. However, as soon as I left their sight, the deal was cast aside, and both women were right back in the middle of what our team was doing. In fact, one single 200-pound rock was moved eight times, taking more than 20 minutes of crew time to make the client happy before the ladies would allow the crew to move on.

I was furious when I heard this, and from that moment on, I spent way more time on this project site than I had intended. Our team is well trained and experienced, having more than 35 years

**I had a verbal agreement with both women that they would not leave the covered patio area. However, as soon as I left their sight, the deal was cast aside, and both women were right back in the middle of what our team was doing.**

of combined experience in water-garden construction among them. They do not need me on site to build. After all, my job is selling and lining up the next project for them — not daily supervision of the current project site.

Unfortunately, this client made it necessary for me to spend way more time there than I had anticipated just to play

referee. “Bleeeeeep! Offsides! Please get back to your patio, ma’am!”

I asked her at one point toward the end of the build, “Why did you hire us, one of the most expensive pond builders in this area, to build your pond if you were planning to direct the placement of each individual stone?”

“Well, I wanted the best people possible in my yard, and you guys, as well as my designer friend, are the best people I know for the job!” was her reply.

I know she meant this to be a compliment, but it didn’t come off that way to me. The whole experience felt insulting.

Her shenanigans added a couple of days to the project, so naturally we finished over budget, making it an almost break-even effort.

### Lessons Learned

We did become a little more educated on what can happen with certain types of clients, and we came up with a training



plan to deal with such people in the future.

Like all things, we needed a system. So, we set up our team members with some ground rules and a process for dealing with clients who want to “help.” We also addressed this in our start-date confirmation email that goes out several days before the crew shows up, just so it’s in writing.

The first time it happens, be polite. “Excuse me, we need you to stay out of the work area, please. The crew is focused on getting heavy materials moved without injury, and they cannot focus on their job if protecting you is a concern for them. If you need to discuss the design, please call your consultant.”

If it happens a second time, be direct. “Please stay out of the work areas. Our worker’s comp and liability insurance policies require that we keep all bystanders, including clients, out of the construction zone. Please stay on this side of the line. If you need to discuss the design, please call your consultant.”

If this doesn’t work, you have to get more specific. “This is the moment where we tell you straight up that if you insist on entering the work zone, we are required to stop work and leave the project, and you may incur a delay charge. There will be no more warnings. If you enter our work area again, we will be forced to pack up and leave. If you need to discuss the design, please call your consultant.”

If being specific doesn’t work, you have to pack up and leave. Let the client know that their consultant will be in touch to work out a plan and agreement for completing the project.

C.Y.A. or See Ya

During the entire construction process, we take pictures of job progress, so photos of client interference should be easy for someone on the crew to capture. There should be documentation if the client decides to fight about the extra charges incurred from project interference or delay. We have that language in our contract as well. (C.Y.A., folks!)

Ultimately, the project came out beautiful. I was not super pleased with some of the boulder placement, but our foreman refused to allow me to discuss it with the client. In his words, “We spent 20 minutes on that rock, and she is happy! We are not moving it again!” I can’t say I really blame him.

Hopefully this story will help you better prepare for the inevitable encounters with micromanaging clients. 🐸



Our relationship with the client (top) is improving at the speed the plants fill in. (Glad this one is behind us!) On completion day, the spillway logs, wetland trunk and pondering bench (bottom) created an "organic look" for her new mid-city oasis.

**About the Author**

**Paul and Barbi Holdeman** started The Pond Gnome in January 2000. Together, they began a journey that has made their company very popular with the local native plant and wildlife enthusiasts. The Pond Gnome’s mission, to change the way Arizonans build ponds, works to help replace the natural oases that once played a huge role in providing healthy water for native and migratory wildlife as they made their way through the pre-urbanized desert. The Pond Gnome mainly markets to people who want lush, riparian backyards and urban wildlife habitats.

A photograph of Paul and Barbi Holdeman in a pond. They are standing behind a large lily pad, and there are yellow flowers in the water.

Go the Extra  
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Automate Your Customer Experience



by Clayton Graba,  
A Frog's Dream Aquatic Services

How many times a week is a return phone call missed? A follow-up quote forgotten? A quick checkup on a client not completed? The list goes on. We’re all human, and quite frankly, running a business can be overwhelming sometimes. We forget to send that quote or email, to make that phone call to a great client to see how their pond or water feature is doing, or to follow up to see if a potential client has any questions.

These extremely important tasks are falling through the cracks — not purposefully, but because there is just no time (or, sometimes, we honestly just forget). Our clients and potential clients don’t know this; they’re just thinking, “This company must not care about me!”

For years, I found myself juggling many tasks day in and day out. My biggest hurdle was making sure they all got completed and no one was forgotten. Most days, someone or something slipped through the cracks. These tasks are typically repeatable, like following up on leads, quotes and existing clients.



Even though processes are implemented from lead acquisition all the way to post-job follow-ups, there are singular tasks being missed within these processes. At the end of the day, my company wasn't providing the consistent customer experience our clients deserved. This needed to change, and that's when I discovered automation six years ago.

## What is Automation?

Automation is a broad term that describes the use of technology to reduce human intervention to complete tasks or jobs. We can break this down to an extremely important automation type that should be used in every company.

Customer experience, or "CX" automation, is the use of technology to assist with repeatable tasks, sometimes replacing human involvement, to improve your company's overall customer experience.

A company can be elevated in the eyes of their clients with a consistent customer experience. When a company creates a



consistently flowing experience with each interaction, it keeps clients coming back year after year after year.

## Experience vs. Service

It's important to define the difference between customer service and customer experience.

A client's customer experience is the overall experience your customer has with your brand and the impression you leave throughout your client's entire buying journey. Customer service, on the other hand, is measured in the ability to help customers solve the problems they called you about, answer their specific questions, and even show them how to use something.

An example of customer experience would be a phone call or email the night before a service to remind them of the scheduled service. Kicking it up a notch or two would be a follow-up phone call two to three days after the service or sending them a thank-you card to show your appreciation. Kicking it up many notches, find out what their favorite wine is and gift them a bottle, just because you appreciate their loyalty to your business.

Creating an experience for your client is paramount in today's business climate. It allows your company to promote loyalty, helps with customer retention and creates brand advocacy within your client base.

## How Can CX Automation Help?

Implementing automation correctly will create a streamlined customer experience without adding more tasks to or taking tasks off your plate, should you already have processes in place.

CX automation can be implemented in many ways. It starts with the initial customer contact and tracks all the way through their journey with your company and beyond. The best way to describe how this works is to walk you through one of the automations set up for my company.

For many of us in the pond business, springtime is crazy busy. We're cleaning and opening numerous ponds, coming into contact with a few people each day. Quite a few years ago, we implemented something we called a 3-3-3. This is a blueprint for a follow-up sequence after a service or job has been completed. Initially it was a phone call three days, three weeks and three months after completion. Since then, we have tweaked it a little bit.

Here's what we do today. On the day of the service, we send a handwritten thank-you card. The day after the cleaning, we follow up with a phone call to make sure everything is running well. Four days later, we follow up with an email that contains a link to our blog about what to expect after a pond cleaning. Three weeks later, the client receives a follow-up email with maintenance tips, and three months later, they get a final follow-up email with a link about managing string algae.

How does this create a customer experience? Every email has a purpose; it's not just a check-in. We are providing our clients with valuable information pertaining to their specific situation. Our clients know what to expect and what they should be doing, and it shows them that we care about them and their pond.

## It's All Automated!

These actions and performing the above tasks on time and manually, while doable, could be extremely daunting. But here's the amazing thing — it's all automated! All of the above actions I've described are done without any human involvement — even the thank-you card and the phone call. We don't even manually trigger the automation to start. One

might call this magical!

So, how is it triggered? We use scheduling and invoicing software with a smartphone app out in the field. When the job is marked complete within our app, the automation is automatically triggered, and off it goes.

How does this actually work? The short and simple answer is software. We currently use a customer relationship management (CRM) based software that captures all our leads and provides us with the automation power. With the internet, we can allow different software platforms to communicate with each other and share information from one to the other. All this takes time to create, set up and test; however, once complete, it's done and triggers time and time again while creating an amazing customer experience for your clients.

## Why Should I Implement CX Automations?

This is a great question! Let's break this down into two categories.

The first category includes a business like my own. I have a small pond company and don't have office staff. Even though I am in the field quite a bit, I do all of it. Without the use of these automations, I would either be on the phone all day or manually sending out emails. This has allowed me to concentrate on other things. I can go on and on about how much time this saves me and how amazing it has been to follow up with emails, phone calls or even a text. The coolest part is, it just happens!

The second category would be larger companies that may already have these processes in place with an office team to complete them. Would your team's time be better spent doing something else? Larger companies that implement automation can free up their other main currency — time.

## What Do I Need to Get Started?









First, you'll need processes. Processes are a blueprint to creat-


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**Creating an experience for your client is paramount in today's business climate. It allows your company to promote loyalty, helps with customer retention and creates brand advocacy within your client base.**

ing automations for your company. Without them, you'll be going in circles, as if you were driving around without a destination. Write them down, brainstorm with your team and get them on paper.

Next, you'll need software. There are numerous software options out there, and the drawback is that there is no one-size-fits-all software that can do everything. We currently use four software programs to create and run all of our CX automations. While this may seem like a lot, once set up, only the CRM and invoicing and scheduling software are used daily.

You'll then begin the process of creating your automations and figuring

out what tasks can be automated. If a task within a process can't be automated, that's OK. You can set the automation to create a reminder, task or calendar event for the person who needs to complete that specific task.

Some software that can help you get started and has automation capabilities include Service Autopilot and Jobber. Most recently, Synked Up has added this as an integration to their platform. Dive in, research it and have fun. The possibilities are endless.

One piece of advice when implementing automations: Think of this as a marathon, not a sprint. ☞

### About the Author

**Clayton Graba**, otherwise known as "Clay," currently resides in New Jersey with his extremely supportive wife and amazing two sons. He owns A Frog's Dream Aquatic Services, which has been operating since 2006.



After diving into the automation and software world, he really wants to help other contractors realize the potential of embracing technology to help their company's grow.

Clay loves to travel with his family, play golf when he finds the time, and watch his sons on the ice hockey rink. He also loves the game cornhole. (Yes, Clay plays in a cornhole league and thinks he's pretty cool because of it.)

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*Lobelia cardinalis* (above) is a staple marginal plant in any form of water feature and attracts butterflies. Pre-grown planters (right) provide 3 to 6 plants in one compact container. Use the 8-inch version in a patio pond; use the 14-inch version in and around rain gardens and pondless waterfalls.

# Big Pond, Small Package

Botanic trends in smaller-scale waterscapes

by **Andy Pollock**,  
Netherland Bulb Company

**W**ouldn't we all love to see a large-scale pond in every yard in America? Unfortunately, not all potential customers have the space or budget for a gigantic, six-figure pond in their backyards.

We are well versed in all the reasons why large bodies of water are beneficial to the local ecosystem and create tranquil places to relax. Here are some ideas for achieving the same benefits of a large-scale waterscape on a smaller scale.

## Patio Ponds

The easiest solution of all is a patio pond. A simple 16-inch-diameter bowl can allow for plants and fish to happily live all summer long until the first hard frost. Installation is super easy, and so is the maintenance — no pumps required if you have the right combination of plants. With the right combination of plant life, you emulate a natural pond, and the results are beauty and harmony without all the gadgets.

Each pot needs an oxygenator to pump oxygen into the water during daylight hours and help control algae. Add a marginal plant; we suggest a mixed container for added interest. You can also use a pitcher plant (*sarracenia*) to serve double duty — one for interest and a second to eat bugs.

Lotus plants are hot right now and surging in demand. Another way to add interest to the patio with

aquatic plants is a mini lotus planter. The plant is still so unique and really provides that wow factor. Its portable size makes it much easier for the customer to bring it indoors to protect it from frost and animals after the blooming season.

Add a waterlily as the true centerpiece of the patio pond. Our new favorite introduction for 2023 is 'Aurora.' It is a changeable hardy waterlily that goes from apricot to orange and even burgundy. Lastly, add a floater to filter out sunlight, and supplies shade to keep the water cool. An optional element is a few tiny goldfish to entertain children and the household cat.

## Rain Gardens

Rain gardens are also gaining momentum. "No-mow May" is great, but what are you supposed to do for the rest of the summer? Whether you have a drainage issue, want to be more water-wise by managing rain runoff, or are simply tired of mowing your lawn for good, these are all perfectly valid reasons for ditching the lawn and creating a rain garden.

The ecological benefits are endless — no gas mower, no fertilizers, no watering and more time to do the fun gardening chores. To make a successful rain garden, we suggest picking the proper marginal aquatic plants that will keep your area weed-free and aesthetically pleasing. Select plants that have a clump-forming habit. These plants can stand the occasional standing water.

For example, cardinal flower (*Lobelia cardinalis*) is a staple marginal plant that is hardy in Zones 3 – 8 and can be a magnet for butterflies and hummingbirds. The Iris genus provides a lot of options to choose from — Louisiana, Blue Water and Japanese, to name a few. Our favorite at the moment is 'Ann Chowning,' which







has deep-red, velvety flowers with yellow highlights (Zones 4 – 9). Sweet flag (*Acorus*) is also a pond-edge staple, with its green and white vertically striped, sword-shaped leaves (Zones 3 – 8).

Blue or spiral rush (*Juncus*) produces a fascinating clump of twisted, dark-green, spaghetti-like leaves that deer tend to leave alone in Zones 4 – 9. Deer also avoid sedge (*Carex*), which thrives in shady areas as upright, glassy-looking clumps with glowing yellow leaves. Sedge can also produce greenish flowers in late spring, but it's generally grown for its showy foliage (Zones 5 – 9). If color is what you're looking for, pickerel rush (*Pontederia*) can produce intense blue flowers all summer long in the same hardiness zone.

We do generally recommend staying away from bottom terrestrial plants such as horsetail (*Equisetum*) and Cattails (*Typha*), as these plants tend to take over the rain garden and crowd out your other carefully selected plants.

The possibilities are endless in creating a space that attracts the right type of wildlife and makes any yard an ecological sanctuary; however,

we all can and should do our part to keep the ecosystem healthy. To maximize the ecological benefits of a rain garden, be sure to pick plants that are bee friendly and grown without the use of neonicotinoids. Reputable nurseries will be able to guide you to the plants that meet these criteria.

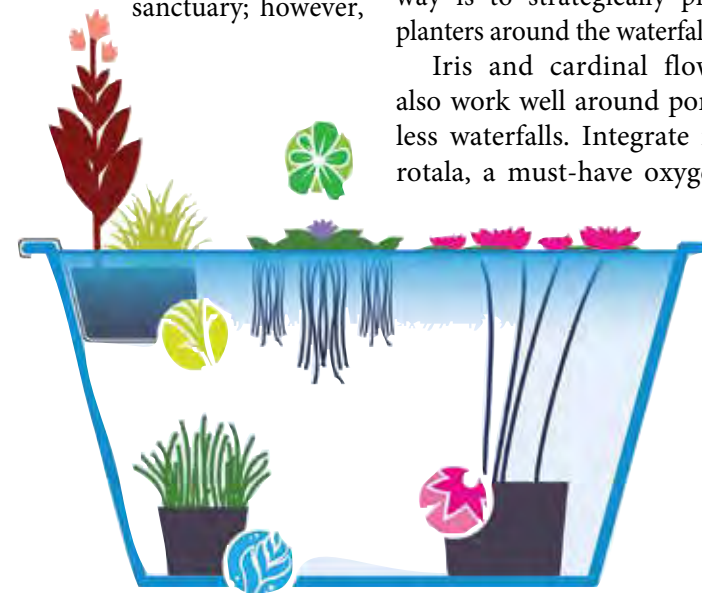
### Pondless Waterfalls

Another great way to deal with water runoff and keep it contained to your property is to direct water to a large, in-ground reservoir. Not only do pondless waterfalls promote wildlife, but they also provide a peaceful and relaxing focal point in your yard.

Pondless waterfalls are easier to maintain than a pond. As there is no pond, you can't keep fish, which means you will spend less time cleaning fish waste and more time appreciating the beauty of your water feature.

While fish need aquatic plants to survive, aquatic plants do not need fish. So, you can still add aquatic plants to this feature and achieve the same ecological benefits. The simplest way is to strategically place planters around the waterfall.

Iris and cardinal flower also work well around pondless waterfalls. Integrate red rotala, a must-have oxygen-



Iris Louisiana 'Ann Chowning' (top) is a standout in any water feature. Place planters with sedge and spiral rush in a rain garden (bottom) for easy installation and maintenance. This illustration (right) provides a visual explanation of the key elements needed for a thriving pond in a patio pot. Each pot requires a combination of a marginal and floater at the top of the pot, and then an oxygenator and waterlily placed at the bottom of the pot.



A mini lotus planter can be set anywhere for maximum enjoyment all summer long.

ator for Zones 9 – 11, which can keep the plant environment healthy and still provide beauty with its blue-flower spikes and waxy-green foliage. Canna, especially the CannaSol series, is a compact, well managed plant that still

shines in the garden and provides room for other plants (Zones 7 – 10).

In Zones 8 – 10, use elephant ears (*Colocasia*) and lemon bacopa to fill out the water garden. Our new favorite variety of elephant ears is 'Diamond Head,' which

has dark, shiny, black leaves with black stems instead of the traditional green color. The lemon bacopa provides fragrant, violet-blue flowers that bloom all summer long. Water wisteria (*Hygrophila difformis*) is also a great option for these hardy zones and doubles as an oxygenator. It produces clouds of finely cut, graceful foliage below and above the water line. Small flowers emerge where the leaves join the coppery colored stems.

For more information on how to use aquatic plants in your landscape projects, we have a national sales group at Netherland Bulb Company to help guide you through the plant-selection process. Email us at [contactus@netherlandbulb.com](mailto:contactus@netherlandbulb.com) or call us at 800/788.8547. 

### About the Author

**Andy Pollock,**

formerly of Black Bear Nursery in Clearfield, Pennsylvania, has more than 35 years of aquatic plant-growing experience. Andy is now primarily focused on advising customers on how to be successful with water plants. He provides quality assurance during the growing season and seeks out new selections to carry for the following season. He loves to share his knowledge of all things related to plants, including perennials and bulbs — but water plants are his true passion.





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## POND TRADE FLASHBACK!

From the Archives.  
This article originally ran in the March/April 2017 issue.



## A Split Decision

Do-it-yourself circulation and oxygenation in a formal pond

**by Kent Wallace,**  
Living Water Solutions

**C**reating an airlift system to both circulate water and oxygenate a system at the same time is one of my favorite pond-construction techniques. Almost any pond can be built using an airlift system in some fashion, but formal designs lend themselves to airlifts more often than garden designs. Formal ponds are generally located in courtyards or implanted in hardscape with a small spill or no water feature at all. Using airlift circulation can be an important asset, allowing full oxygen-

ation without the use of a waterfall or the constant visual appearance of a column of bubbles in the water.

Recently I received a call from a new client who wanted a small koi pond at the entrance of her home. She was remodeling her home in a very contemporary style and wanted to manage and construct as much of the pond as she could by herself, just as she had done with the rest of the remodel. The only water feature was a small spill against the wall. I supplied a basic plumbing layout along with the parts, equipment and installation instructions, and she ended up doing an excellent job. Even though she didn't completely understand how the airlift system could work without a mechanical pump, she went along with it. I promised her that if she were to construct it just as I had proposed, all she needed to do was to plug it in, and it would work.

### SERIES: Best Pond Practices

*This is an installment of an ongoing, multi-part series. Be sure to watch for further installments in future issues!*





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Prefilter and aerated biofilter with airlift (left); vertical pond return with air ring (middle); prefilter with static basket and outlet valve assembly (right).

## Splitting up the Work

There were two issues to deal with: first, the lack of any space out of plain view to place equipment, and second, the above-water spill feature. The spill was to be approximately 24 inches wide and about 18 inches above water level. A living water feature with the still-pond, formal look needs both oxygenated filtration and fine particle removal, so I proposed a split system.

The bottom drain would connect via a 3-inch, gravity flow pipe to a 55-gallon drum prefilter. From the prefilter, the water would flow into an airlift-operated, downflow biofilter and back to the pond. The media in the downflow biofilter was to be oxygenated, which makes it difficult to trap fine particles, so I proposed an upflow sand and gravel filter system for the spill operated from a submersible pump in the skimmer. With only 18 inches of room between the wall and pond shell, there wasn't much space for the filtration against the wall and nowhere else to hide an above-ground filter. A skimmer needs a minimum of approximately 1,500 to 2,000 gph to operate well, which is fine for a 55-gallon drum-sized filter, but one 30-gallon drum wouldn't flow enough to work. Thus, I went with a pair of 30-gallon drums at 18 inches in diameter.

I provided the upflow sand and gravel filters built using a pair of 30-gallon drums and connected the spill to the front of each. Finding a stainless spill that would work proved difficult, because most stainless spills come with

a 1-inch inlet that is too restrictive for a gravity-flow system. The client ended up ordering a spill that I modified by blocking the 1-inch inlet and adding two 1 1/2-inch bulkheads that barely fit.

I have cut up my share of spills over the years to adapt them to gravity flow. It would be helpful if one of the manufacturers would make a stainless spill series with inlets large enough for gravity flow. A pair of 1 1/2 or 2-inch threaded bungs would be perfect, as they easily can be bushed down or blocked if necessary.

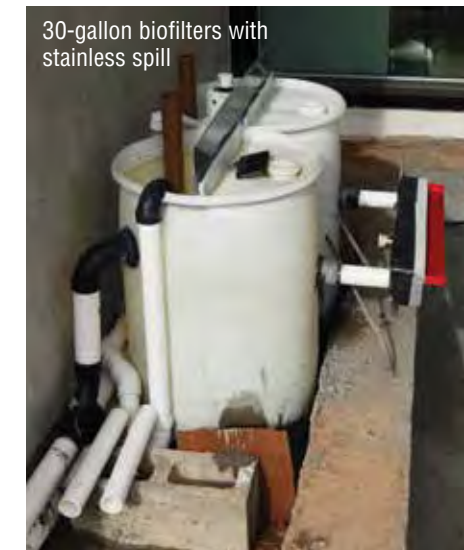
## Operation DIY

The customer used her landscape crew to dig and trench for the pond, filtration and plumbing. They hired a concrete company to do the rebar and shell and managed the inspections without a hitch. I gave them a list of things the inspectors would be looking for. The pond was to be fairly square, so steps for egress were formed in one corner, and the existing courtyard lighting proved enough to pass the lighting requirement. They coated the surface with Herco rubberized pond coating, because they could do that themselves. The drain, skimmer face and returns were all mechanically clamped, as you would do for liner or polyurea.

Water from the airlift biofilter returned to the pond in two ways: one 3-inch line that returned through a vertical pond return through the center of the drain, and a 2-inch line split into two 1.5-inch returns in opposite

corners. This allows most of the water to return up through the center of the pond with just enough coming in through the corner returns to create a slow rotation.

The upflow sand and gravel filters and spill assembly were encased in a cube of concrete with just enough of an opening in the top to access the filters.



A 40-watt ultraviolet light assembly of my own design was installed in a downflow configuration in one of the sand and gravel filters to keep it out of view. I like hiding UV lights inside biofilters because it makes mounting and hiding them much easier. When installing a UV light in a downflow configuration, it is important to drill a small vent hole at the top to allow air along with a small amount of water to escape back into the system. The small vent hole prevents the entrapment of air, which can gradually

form an air space that displaces water in the housing.

## Air Traffic Control

The prefilter is one of my 55-gallon drum, static prefilter kits modified slightly for an airlift. While the inlet line from the bottom drain is 3 inches, the outflow from the prefilter basket and the connecting pipe between the prefilter and biofilter are 4 inches to promote better flow and lower pipe friction between the prefilter and airlift. The upflow airlift pipe is also 4 inches, so it makes sense to keep them all 4 inches. The basket screen outlet in the center of the prefilter has a valve made into it to isolate the tank when cleaning. This eliminates the burying of a 4-inch knife valve between the filters along with the expense of the valve. Water travels from the prefilter through the side of the biofilter tank at its base directly into the airlift. At the top of the 4-inch airlift upflow pipe sits a horizontal diffuser, which pushes the water out in all directions over the media in the filter.

The air coming from the air pump is split into two lines, one for the airlift and one for an air ring around the outside of the airlift upflow pipe. This air ring oxygenates the media and creates an upward and downward flowing motion in the tank, acting much like a moving bed with no floating media. I've called this system an Air-Driven Dilution Reactor, or ADDR. My media of choice for these is Bacti-twist because of its free-




**This may sound complicated, but the end result is a small, formal pond in a courtyard with no visible equipment except for two small air pumps and the power supply for the UV light against a separate wall.**

flowing nature and ease of maintenance, but many different media types can be used. I've built several with moving bed media, and moving beds are much more manageable in a downflow configuration.

No matter the media choice, water travels up through it, around the center and down through the media along the outside in a continuous cycle. The water exiting from the top of the airlift diffuser mixes with the water coming up the center of the filter and flows across to the outside, where it flows to the bottom. The cycle continues with the volume of water generated by the airlift exiting through the lower support plate and back to the pond. The air bubbles in the airlift and the ADDR are purged in the biofilter, with the water

returning to the pond stripped of bubbles.

The only other accessory for the pond is an aeration ring on top of the bottom drain cover. This diffuser ring is operated by a small air pump on a timer to come on occasionally, or to be used as a backup in case of emergency.

This may sound complicated, but the end result is a small, formal pond in a courtyard with no visible equipment except for two small air pumps and the power supply for the UV light against a separate wall. At 9 by 8 feet and just under 4 feet deep, this pond is 2,100 gallons, with the only motion a small spill at one end. It's very much a still-pond experience, and my do-it-yourself clients did an excellent job. 

## About the Author

**Kent Wallace** was born and raised in Las Vegas. Kent spent

most of his adult life in the automobile industry at independent shops and dealerships, including his



own shop as a racecar fabricator at age 24. Then, in 2001, a neighbor asked Kent if he could build her a koi pond like the one Kent's father had.

From that point on, pond building became his new passion. That first pond he built was submitted to Better Homes & Gardens magazine and won Best Courtyard Nationwide in their special-interest publication.

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Contest deadline is  
December 15, 2022





Fish care specialist Mike Milazzo tests the salinity of the water in the tank.

| Language of **Koi** |

# Clear Water, **Healthy Koi**

Water quality plays lead role in koi health

**by Brian Fitzsimmons,**  
Fitz’s Fish Ponds

**M**ost pond owners come to have a passion not only for the aesthetic of their pond, but also for the aquatic life that inhabits it. At Fitz’s Fish Ponds, our passion lies with Japanese koi.

Over the past decade, we have learned a lot about the optimal ways to keep koi healthy. Everything heavily relies on maintaining an ideal environment for the koi.

### Water Quality

Our team, which includes our retail managers and a fish care specialist, believe that pond owners and koi keepers should make the water quality of the pond one of their main focus points when caring for koi.

At the farm, we house thousands of koi in a variety of tanks. We have two 20,000-gallon tanks, six 10,000-gallon tanks, four 4,000-gallon tanks and eighteen 1,500-gallon tanks all inhabited with koi imported from Japan. That’s a lot of water to maintain, which is why we have a water testing system in place.

According to one of our retail managers, Ryan Cardillo, “Water quality should be any pond owner’s top priority. This is why we do water testing so frequently.”

“If the water quality isn’t up to par, and if a fish is sick and needs specific treatment, nothing will work if there are issues with the water,” he continues. “This is the environment the fish are living in, which is why having a good filtration system and a good aeration system is essential to maintaining water quality and keeping fish healthy.”



### Filtration Tips

While most pond owners know the importance of filtration, what role does the filtration system play in actually keeping the fish healthy? The filter acts as a collector that cleans the pond while collecting the fish waste. This is why it is essential that the filter be maintained and backwashed on a regular basis, especially if the pond is holding a high stock of fish. The more fish that are held in the pond, the more waste that is produced. If a filter is not backwashed often enough and too much waste is accumulating, this is when koi health issues



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such as bacterial infections and ulcers — both related to too much anaerobic bacteria in the pond environment — begin to emerge.

So, how often should one back wash

**In a natural pond that has a river rock or pebble bottom, there are many gaps and holes that can create pockets of stagnant water. Although this can provide a beautiful appearance in the pond, they can act as traps for fish waste.**

their filter? This depends on so many factors that it is difficult to put an exact number on it. Essentially, with a higher fish load, a filter will need to be cleaned more frequently.

In a natural pond that has a river rock or pebble bottom, there are many gaps and holes that can create pockets of stagnant water. Although this can provide a beautiful appearance in the pond, they can act as traps for fish waste. This is why bottom drains are often utilized, as they suck down larger waste and help move this stagnant water.

If too much waste builds up, it can generate a thick muck at the bottom of the pond, trapping pockets of methane and sulfur gas, eliminating oxygen from the water, and causing serious health issues for the fish. When this happens, not only do pond owners notice bacterial infections in their fish, but they also report fish literally gasping for air. These issues can cause a major loss and fish death in the pond. This is why a high-quality aeration system is so important for your aquatic life.

### Aeration Nation

Aeration has a number of benefits for the pond and aquatic life that inhabits it. An aerator pumps oxygen through the air stone and creates

surface tension while also stirring the water around and keeping the particles moving. This process ensures that any waste in the pond makes its way to the filter and helps to avoid bacterial collection on the bottom of a pond.

Mike Milazzo, also known as “Fish Mike,” is our fish care specialist. He knows just how much koi love the flow of water.

“At the farm, I keep water flowing within the tanks at all times,” he says. “In addition to the aeration systems in the tanks, I make sure there is a constant drip of fresh water going into the tanks.”

Fish Mike recommends that pond owners have multiple aerators in their pond to keep fish at stagnant water. This is why we recommend doing periodic water testing to avoid potential health issues for your fish that could be related to water quality.

### Water Testing and Temperature

Fish Mike tests the water quality in all the tanks at our farm every other day to keep it in check. We use a kit that tests for ammonia, nitrite, carbonate hardness (KH), salinity, nitrate and pH in the water. The results of the water test may give an indication of what needs to be done or added to the water.

Ideal levels for ammonia and nitrite are 0. If either of those approach 0.50, this is when we start to become alarmed. In order to rectify a problem like this, we would do a larger backwash and add salt. For salinity, we are looking for levels that are between

In this natural pond, you can see water gaining movement from the waterfall. In the formal pond in the background, the aeration is clear. You can actually see the oxygen that is being provided to the koi.



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Here is a preview of just one of our greenhouses. You can see the aeration coming from the bottom of the tank as well as the constant flow of fresh water coming into each tank. The water is moving, and the koi are happy.

0.10 and 0.30. In order to measure the salinity, a salt test meter should be used. It is also important to note that if salt levels are too high, it can kill plants in the pond. Low levels of salinity should not impact the plant life too much.

The pH of well water, which is what runs in our tanks throughout the day, is generally around 8, and koi can live in water like this. However, we like to keep our pH range between 7.5 and 7.7. Getting fresh water into the tanks also helps balance out the nitrite levels; therefore, adding fresh water into your pond can also balance nitrite levels if other methods of getting it down are problematic.

“It is extremely important for pond owners to do periodic water testing,” explains retail manager Tom Swinarsky. “There are water-testing kits available for pond owners to purchase and complete at their own leisure. Some pond stores, like ours, will take a sample of the water a customer brings in and test it. Then we are able to provide advice based on the results.”

Pond owners should also be aware of whether their water is city water or well water. If city water is being used to fill a pond, the pond owner can add an in-line detox dechlorinator, which is the popular first option. A second option would be to physically attach a chlorine filter to the hose. Without eliminating the chlorine from the water, fish may begin to die.

The temperature of the water also matters significantly for the koi. The most active time for koi is when the temperature is between 68 – 85 degrees Fahrenheit. Cold water temperatures slow down their digestive system; therefore, when the water reaches below 68, the koi keeper should limit feeding and switch to cold-weather food. This is why having a thermometer for your pond is essential.

### Salt Care

Fish Mike has researched the use of salt in fish care and how it can act as a treatment for sick fish. It has made a huge difference in how he approaches

caring for a koi that is showing signs of stress in our greenhouse.


“When you notice a fish showing signs of stress — which could include going into a certain part of the pond, showing lack of movement, or perhaps developing an ulcer — one option is raising the salt levels in the tank,” Fish Mike says.

“You can raise the salt level to 0.6 to help the fish heal more quickly than it normally would,” he continues. “Salt assists in the healing of injuries, promotes the formation of slime coating, improves gill function, reduces the uptake of nitrite and decreases osmotic stress.”

It is important to note that raising salt levels should be done only as a temporary treatment. It would not be safe to keep the salt levels this high in the tank at all times. While salt is a huge help and works well for our tank systems, it is not a cure-all. In many cases, other treatments or medications are necessary, depending on the disease. If you have a water garden filled with

plants, you may have to set up a separate quarantine tank to treat the fish with salt water.

While it is possible to quarantine a sick fish so that the issues don’t spread to others in the tank or pond, koi don’t like to be isolated. Be sure to re-integrate it into the tank or pond with the others immediately following treatment.

At Fitz’s Fish Ponds, we strive to educate our koi keepers and pond owners to ensure they get to enjoy their pond and fish to the best of their potential. By maintaining and keeping a regular backwashing cycle on the filtration system, ensuring the pond avoids stagnant water with an aeration system, adding fresh water and salt to the pond as needed and doing frequent water checks, pond owners should be able to avoid most health issues with their koi and watch them live long and healthy lives. 

### About the Author

**Brian Fitzsimmons** built his first pond at age 13 in his parents’ backyard while they were away on vacation. In 2008, he started Fitz’s Fish Ponds and has been growing the company



ever since. He has a retail store and multiple crews building and servicing water features daily. They design, build and service ponds, waterfalls and all other water features. The crew is experienced, educated and, most importantly, creative. Brian believes no two ponds or water features should be the same, and no idea is too farfetched. By working closely with their clients and listening to their needs, they aim to create a finished product beyond all expectations. [www.fitzfishponds.com](http://www.fitzfishponds.com)

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| **Pondemonium** Wrap-up |

## Back to Normal

Pondemonium 2022 returns live & in-person

**by Jennifer Zuri,**  
Aquascape Inc.

from Aug. 27 – 30, 2022.

### Rising Tribe

Pondemonium 2022 returned live and in-person at the Q Center in St. Charles, Illinois, after the pandemic had forced the popular pond training event to be hosted online for two consecutive years. Aquascape excitedly welcomed and hosted hundreds of contractors, retailers and distributors from around the world

The event theme was "Rising Tribe" to honor the spirit and camaraderie of water professionals everywhere who contribute to the trend of ponds, waterfalls and fountains in landscapes, from residential to commercial locations. Pondemonium 2022 included numerous networking opportunities, hands-on training sessions, small-group discussions





and workshop classrooms for everyone from the novice to the advanced water-feature professional.

Pondemonium opened with both VIP and self-guided pond tours throughout the Chicagoland area on Saturday and Sunday. Those not attending the tours could participate in the full-day “Content Creation Best Practices” course that featured popular digital influencers Kenan Harkin of Kamp Kenan, Luke Hagopian of Luke’s Goldies, Stanley Genadek of Landscape Disruptors, and Justin Fox of Foxterra Designs. The day wrapped up with an inspirational keynote given by retired Wheaton College football coach Mike Swider.

Attendees were transported from the Q Center to Aquascape headquarters on Monday for a day of hands-on training. Certified Aquascape Contractors were taught advanced principles and construction techniques for wetland filtration, while foremen and those new to the industry participated in hands-on waterfall building exercises that concluded with a waterfall contest. In addition, Brian Helfrich gave two presentations on the increasing popularity of recreation ponds while highlighting design and construction techniques of the new recreation pond at Aquascape’s AquaGardens.

Tuesday activities returned to the Q Center for early-morning educational and networking discussions, known as Cup of Coffee roundtables. A variety of topics were led by industry experts from around the world. Presentations and discussions included water-feature construction, marketing techniques, bidding and selling principles, staff retention and more. Sessions were moderated by Aquascape staff and Certified Aquascape Contractors who are experts in their featured topic.

Directly after roundtable discussions, Greg Wittstock, owner and CEO of Aquascape, presented his annual state-of-the-industry keynote address to a packed room of water-feature professionals. Classroom sessions followed the keynote and focused on construction, business operations, maintenance procedures and an overview of new Aquascape products





## And the Award Goes to...

for 2023. The evening came to a close with the popular Blow Out Bash.

### Award Presentations

Awards were presented throughout Pondemonium, with Aquascape top 20 contractors and top 20 retailers awarded “Top Frogs.” The inaugural Rookie of the Year award was given to regional up-and-coming contractors. As in years past, top honors were awarded in six categories:

- Certified Aquascape Contractor of the Year – Jay Duke of Rivercrest Water Gardens in Coward, South Carolina
- Business Persons of the Year – Net and Charlie Ross of Virginia Water Gardens in Fredericksburg, Virginia
- Artist of the Year – Ralph Biezad of Pondscapes AZ in Queen Creek, Arizona
- Conservationist of the Year – Cory Mann of Poseidon Ponds & Landscaping in Dexter, Michigan
- Digital Influencer of the Year – Scott McIlwee of Ponds by Bee Landscaping in Boonsboro, Maryland
- Chris Baker Spirit Award – Alan Decker of Decker’s Pondscapes in Pattersonville, New York

The next Pondemonium event is slated for 2024. In the interim, Aquascape is offering various hands-on training and regional events. For information on Pondemonium and Aquascape training opportunities, visit [www.aquascapetraining.com](http://www.aquascapetraining.com).



Ralph Biezad, Artist of the Year



Jay Duke, Certified Aquascape Contractor of the Year



Net and Charlie Ross, Business Persons of the Year



Cory Mann, Conservationist of the Year



Alan Decker, Chris Baker Spirit Award



Scott McIlwee, Digital Influencer of the Year

To see full press releases and additional news items, visit [www.pondtrademag.com/category/trade-news](http://www.pondtrademag.com/category/trade-news)

Trade News

### Hector Mardueño Acquires W. Lim Corporation, Will Retain Original Brand

In 2021, the year of the Ox, Hector Mardueño, owner of Stonewall Creek, acquired W. Lim Corporation, one the leading distributors of high-end koi-pond, swimming-pool, and aquaponics pumps and filtration equipment. To celebrate the one-year anniversary, we’d like to officially reintroduce the company and its new owner. Through the name W. Lim Corporation, Mardueño hopes to share the beauty of natural koi ponds and natural swimming pools in a way that is clean and safe for pets, friends, and family.

The story begins in June of 2020 in Mardueño’s own natural pool. His three kids went for a swim in the pool he’d built for their home, where the water was crystal clear and showed no signs of danger. But Mardueño and his wife Tamara learned quickly that clear water is not necessarily a sign of safe water when their oldest daughter came down with a terrible headache. The headache grew worse over the course of three days until finally, on Tamara’s birthday, they took her to the hospital. She was diagnosed with a bacterial infection from a species found in their natural pool. Thankfully, they were able to successfully treat the infection, and the young girl was back up and running in no time.

It was evident that one could not rely upon the look of water to gauge its cleanliness and safety. Bacteria, amoebas and parasites can hide deep in corners and crevices, especially in the sand, and all they need to strike is for the water to be disrupted by fish or a swimming child. With this scare hitting right at home, Mardueño was prompted to find a better way to build natural pools.

Mardueño has been building ponds for five years and started his company, Stonewall Creek, in 2018. After his daughter’s infection, he researched and tested all the equipment on the market to find the tools that would withstand the Las Vegas heat, handle the biohazard loads of natural swim pools and koi ponds and ultimately create ponds that were pristine in both color and safety. That’s how he discovered W. Lim Corp.

The ox is the strongest animal of the 12 Chinese zodiacs. Also known as “the good helper,” the ox is a symbol of dedication, honor and prosperity. Founder William Lim, who was born in the year of the ox, first conceived W. Lim Corp in 1980 at first as a koi wholesaler. Over the course of 30 years, he implemented the Chinese values of the ox and

grew the company into a top-tier, internationally recognized dealer of pond-building and maintenance supplies, from their trademarked and super-efficient Wave and Dragon series pumps to their patented high-output UV sterilizers. After using their equipment to build several successful ponds for Stonewall Creek, Mardueño became W. Lim’s biggest and most loyal customer. After three months of negotiations, as good fortune would have it, Mardueño acquired the company in September 2021, the year of the ox.

Mardueño promised to keep the company name and continue William’s legacy in the water pump and filtration industry. All that was left was to take the company to Las Vegas, Nevada. The entire endeavor took 10 semis, nine 40-yard dumpsters, and three weeks of labor all while the Stonewall Creek business was still functioning back at home. In the months that followed, they continued to learn about the clients and the market and began preparing to restructure their marketing to show the efficiency and quality of their products to consumers worldwide.

Under the ownership of Hector Mardueño, the W. Lim mission is to achieve superior efficiency, quality and performance in natural pools, koi ponds aquaculture and aquaponics. They adhere to the traditional Chinese values of integrity, diligence and dependability incorporated by Mr. Lim and strive to provide professional, one-stop-shop solutions for all aquatic needs while reducing operating costs. From 10-gallon aquariums to multi-million gallon lakes, W. Lim Corp can help bring a beautiful piece of aquatic nature to your own backyard with crystal-clear water you and your family can safely enjoy for years to come!



### Aquascape Launches New Advanced Water Feature Design & Construction Course

Aquascape, Inc. has launched a new advanced class for experienced pond contractors. Led by Ed Beaulieu, vice president of field research and contractor development, Advanced Water Feature Design and Construction is designed for pond builders who have a solid grasp of Aquascape ecosystem pond construction methodology and are looking to take their skill set to the next level. Topics during the two-day course include intake bays, negative edges, constructed wetlands, recreation ponds and estimating and managing large projects.

Classes are held January through February 2023. Visit our seasonal product resource page for everything you need to keep your pond healthy during the fall season. Visit [www.aquascapetraining.com](http://www.aquascapetraining.com) for dates, details and registration information.



### New Pro-Clear Air Aeration Compressors

Designed for the demanding job of 24-hour operation, these dual linear-diaphragm air compressors provide maximum air flow while being quiet and energy efficient. The simple, no-oil design features few moving parts and makes maintenance easy.

To request your full color catalog or for more information on EasyPro products, call 800/448-3873 or visit [www.easypro.com](http://www.easypro.com).





### POND Trade Introduces New Digital Editor

POND Trade is pleased to introduce our new digital editor, Joanne Costin. She will be responsible for updating our online content, overseeing social media and ensuring the marketing success of our online advertisers.

Joanne is an award-winning journalist, content writer and data journalist for leading publications in the construction, food service, meat processing and unmanned systems industries. She co-founded Content for Biz in 2011 to provide integrated content marketing and content writing services to B2B marketers and her clients include MTG Media Group, Idaho Potato Commission, MULTIVAC, Alaska Seafood, and the Association of Equipment Manufacturers. She holds a degree in advertising from University of Illinois and an MBA in marketing from DePaul University. When Joanne's not working, you can find her tending to plants on her Chicago rooftop, trying new restaurants or cheering on her favorite local sports teams. "I'm excited to learn more about the people, business and technology behind the beautiful ponds featured in POND Trade."



Top row, left to right: Chris Hanson, Ellen Kloubec and Tim Wood. Bottom row, left to right: Chad Smith, Steve Sandalis and Larry Carnes.

### Judges Selected for 2022 Water Artisans of the Year Contest

POND Trade magazine has selected an esteemed panel of six industry experts to judge entries in our 2022 Water Artisans of the Year contest. With the Dec. 15, 2022 deadline approaching, it's time to select your best photos and projects to enter.

Known informally as the "Supreme Stream Court," this year's judges represent a true cross section of the industry, featuring a past winner, master pond builders, a wholesale distributor and koi farmer. "Our judges take their roles seriously," says POND Trade publisher, Lora Lee Gelles. "For this year's contest, they will review the blind entries and select a winner and runner-up in each of five categories — Best Pondless, Most Naturalistic, Best Water Feature Under \$20,000, Fountains and Formal Features and Rock Artisans."

**Tim Wood**, a Water Artisan of the Year award recipient in 2016, 2017 and 2021, will give up an opportunity to be the only four-time winner of the contest, and instead offer his expertise as judge. Known for his naturally-inspired designs, Tim is a Master Certified Aquascape contractor and founder of Aquatic Edge, a full-service water garden design, repair and installation company serving Western Pennsylvania.

As someone who raises and supplies koi throughout the United States and Canada, **Ellen Kloubec** knows the pond industry inside and out. Together with her husband and son, she operates Kloubec Koi Farm, one of the largest and most trusted koi farms in the United States.

**Steve Sandalis**, owner of Mystic Water Gardens, is a Master Certified Aquascape Contractor with more than 17 years of experience creating innovative and eco-friendly water gardens in the Los Angeles area. In crafting designs for some of the biggest names in Hollywood, Steve gets

inspiration from his travels to national parks and tropical islands.

**Chad Smith** is the owner/operator of WIM Supply, formerly known as Water in Motion, a wholesale distributor in Houston, Texas. The company provides both expertise and high-quality landscape lighting, outdoor sound equipment and pond and water feature installation products to landscapers and pond contractors. Since he built his first water feature in 1998, ponds have been his favorite part of any landscape project.

Known for his artistic ponds, **Larry Carnes** is the president of Reflections Water Gardens in West Dundee, Illinois, where he specializes in high-end residential and commercial projects with naturalistic watershaping. Larry is a student of Genesis 3 and Anthony Archer-Wills, one of the most foremost authorities in designing natural looking ponds and water features.

**Chris Hanson** is head foreman at Aquascape Construction, the largest water feature design and installation company in the world, based in Chicagoland. Chris takes a holistic approach to water feature design, using his landscape background to ensure the water and surrounding landscape interact perfectly with each other.

A \$25 fee is required with each entry, with all proceeds benefiting St. Jude Children's Research Hospital. Eligible projects must be completed between Nov. 1, 2021 and Nov. 15, 2022. Contractors may submit as many entries as they would like; however, each project may only be submitted in one category. Winners will be featured in the March/April 2023 issue of POND Trade magazine.

For more information or to enter, visit [www.pondtrademag.com/entry-form-2022-water-artisans-of-the-year-awards-2/](http://www.pondtrademag.com/entry-form-2022-water-artisans-of-the-year-awards-2/).



### Fitz Fish Ponds Hosts First Annual Koi Fest

On Saturday, Sept. 3, Fitz's Fish Ponds hosted one of the largest events in the industry, the first annual Koi Fest! Koi Fest was designed to provide a day where koi hobbyists could receive the best prices and deals on koi at the end of the season, while also enjoying some great prizes and giveaways, live entertainment, food trucks and vendors. The event was a huge success, and FFP plans to continue it annually!

Throughout the day, approximately 800 people attended the event. The entire FFP team was all on hands on deck, preparing for the event and helping the event run smoothly. Throughout the day, team members worked various stands, checked in customers and, most importantly, caught and bagged koi for customers. It was a true team effort all around.



Underneath the fish tent were approximately 20 large bowls of different varieties of Japanese imported koi of various ages and sizes. Koi from many breeders, including Shintaro, Hiroi, Yamasan, Aokiya, Kase, Marusei, Ikarashi, Otsuka and many more, were available on display and on sale. Plants were also for sale at a discounted price. Vendor tables were set up throughout the event as well.

FFP was fortunate to host some very special guests for this event — Tim Waddington of Quality Nishikigoi and Masaru Saito of Shintaro Koi Farm. Waddington, Saito and Fitz provided Koi Talks, where they discussed the different trips they make to Japan and can offer to interested hobbyists. They discussed the spring buying trip, when we get premier access to some of the best quality tosa, and the fall harvest trip, when we help the breeders extract the koi from the mud ponds, and the Japan koi show trip.

Some of the highlights of the day were the incredible giveaways that were won. Not only did people win some amazing Japanese imported koi, but Fitz also gave away a free trip to Japan! This was a fun and thrilling experience, and it was enjoyed by all.

More than 600 koi were sold during Koi Fest! FFP plans to continue Koi Fest annually and expand to an even wider audience of koi hobbyists so more can come and enjoy the day! Be sure to follow @fitzfishponds and join our mailing list to find out more about upcoming events. We hope to see you at Koi Fest 2023!



### OASE ProfiClear Premium Compact L - Gravity Fed

The OASE ProfiClear Compact L – Gravity Fed is a flow-through pond filter, set down level with the pond and connected to a separate pump module, that removes suspended solids and toxins such as ammonium, ammonia, nitrite and nitrate. The ProfiClear filter module sits outside the pond and connects to a separate pump module, so the pump is also outside the pond. This guarantees both excellent water quality and unsurpassed safety, especially when used with OASE 12-volt Aquamax Eco Expert pumps, suitable for recreational pond use. Water first passes through a drum covered by screens that filter out particles down to 80 microns, then through a moving-bed section, where floating media covered with biofilm polish the water. Additional moving-bed modules may be added to handle recreational and koi ponds of any size.

This is the most sophisticated, lowest-maintenance filter ever designed. The drum filter cleans itself by flushing debris off the screens and down a drain whenever a sensor detects a backup. It can be also be set for timed cleanings, or you can fully control and monitor your ProfiClear Compact-L Gravity Fed filter via Wi-Fi with the Easy Garden Control (EGC) system from anywhere in the world (not included). A digital temperature display keeps you informed of water temperatures on a built-in display or via Wi-Fi. When temperatures drop, a slide valve easily drains the filter for winterizing.



For more information:  
[www.ATLANTIC-OASE.com](http://www.ATLANTIC-OASE.com)  
[info@atlantic-oase.com](mailto:info@atlantic-oase.com)





**Tim Jennings Awarded the IWGS Hall of Fame Award**

The International Waterlily and Water Gardening Society (IWGS) Hall of Fame award is presented to those who have made significant contributions to the field of water gardening, aquatic plants and the furtherance of the Society's purposes. We are proud to announce that the 2022 inductee is Tim Jennings, senior gardener, Longwood Gardens, Pennsylvania.

Jennings is a 1988 graduate of Longwood Gardens' Professional Horticulture Program and joined Longwood's full-time staff in 1989. After a brief stint in the topiary and rose gardens, he moved to oversee the Waterlily Display, where he found a passion for aquatic plants that today, 31 years later, remains as strong as ever.

He has spent his career advancing the enjoyment and appreciation of aquatic plants on a global scale. Jennings is an expert in the care and culture of aquatics and readily shares that expertise with fellow professionals, students, enthusiasts and everyday guests at Longwood Gardens. An award-winning instructor, his popular aquatic plant classes and workshops have ignited a passion in the thousands of students who have been lucky enough to experience one of his classes in the last three decades.

Jennings' enthusiasm for his work is evident in all he does, but it is never more apparent than when he is giving one of his infamous "Waterlily Talks" on a summer evening in the waterlily display at Longwood. Surrounded by a few hundred guests, Tim captivates and seduces his audience by revealing the amazing world of aquatics, including snipping waterlilies for guests to smell their intoxicating fragrance, showing the thorny underbelly of a Victoria leaf or demonstrating the water-repellent qualities of a lotus leaf. He is nothing short of a showman, much to the delight of the millions of guests who have visited Longwood's waterlily display.

A frequent speaker, Jennings has shared his expertise at numerous national and international conferences. He has served as a judge and site grower for the New Waterlily Competition, is a member of the IWGS Victoria Conservancy, which distributes seeds to members, and also oversees Longwood's seed distribution program to gardens around the world. He is also proud to currently serve on the Board of the IWGS. It is with deep appreciation that Tim Jennings has been inducted into the IWGS Hall of Fame.



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FINAL THOUGHT...

Autumn Splendor!

Photo courtesy of Anthony Albright



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