

# PONDTRADE™

Serving Professionals in the Pond and Water Feature Industry

## To **Drone** or Not to Drone?

Aerial vehicles elevate water  
feature design and construction p.32



[www.pondtrademag.com](http://www.pondtrademag.com)



**S A V I O**  
EXCELLENCE

# NEW! 1/2 HP EcoFountain



Includes 3 Spray Pattern Nozzles

Anjon's EcoFountain adds elegance to your pond, oxygen for your fish, all while preventing algae growth.



Classic V

Trumpet

Lily

## Big Frog Eco Drive Pumps



- Engineered for 24 hour continuous use
- Full 2-year warranty
- Fish safe – Contains no oil
- Designed for low head applications to work with 90% of all ponds
- Overload sensor shut-off protection to keep pump from overheating or burning out

## Professional Bottom Aeration Kits

- Two 10" diffuser plates with ultra-fine bubbles
- Secure cabinet for pump storage
- Reliable rocking piston air compressors
- Self-sinking and weighted diffuser and tubing



NEW!

Anjon Manufacturing Serves Irrigation & Landscape Suppliers, Garden Centers & Nurseries, Pond & Water Feature Distributors with More Product Lines than Any Manufacturer.

sales@anjonponds.com

www.savioeng.com & www.anjonmfg.com

800-553-5605

# WGGE 2022

MARCH 2ND-4TH



## WATER GARDEN EXPO

# IT'S BACK!

- SEMINARS TAUGHT BY LEADING INDUSTRY EXPERTS
- HANDS-ON CONTRACTOR TRAINING
- MINI TRADE SHOW FEATURING THE INDUSTRY'S TOP MANUFACTURERS
- NETWORK WITH THE MOST SUCCESSFUL INDUSTRY PROFESSIONALS
- SHOW SPECIALS WITH UNBEATABLE PRICING



## LEARN • NETWORK • RE-ENERGIZE

HEART OF OKLAHOMA EXPOSITION CENTER • SHAWNEE, OK

ADMISSION IS FREE!! REGISTER TODAY!!

# WGEXPO.COM

## OR (866) 219-3561

INDUSTRY PROFESSIONALS ONLY!



## FEATURES

### 8 Two Ponds Bond POND CONSTRUCTION

When the pond bug bites a client, the sky is often the limit. In this case, **Brian Fitzsimmons** and his team at Fitz's Fish Ponds convinced their client to merge two ponds together before embarking on yet another aquatic project in the backyard.

### 14 Can You Hear Me Now?

So, you need to reach out to a client. Do you open up your email or pull out your phone to call (or text) them? **Laura Reale** presents a variety of communication tools (from blogs and vlogs to email and social media) and discusses when you should consider using them.

### 18 Rocky Mountain Roots

Do the winter doldrums have you dreaming of bright, beautiful aquatic blooms? Let **Tamara Kilbane** take you on a walking tour of Denver Botanic Gardens to explore the award-winning facility's displays and get your springtime fix!



### 27 Rare Living Jewels LANGUAGE OF KOI

**Taro Kodama** was thrilled to visit Japan during the 2021 koi harvest to share some of the beautifully unusual varieties he encountered during his trip.

### 32 To Drone or Not to Drone? COVER STORY

It's a bird! It's a plane! It's a ... drone? Take flight with **David Duensing** as he highlights all the ways drone technology and aerial imagery have impacted his pond-construction business. The sky's the limit!

### 40 POND college

**Mark M.J. Wilson** is back with an open invitation for you to attend POND college (Pc), a novel pond-building training center based in the United Kingdom. Check out the all the perks of enrolling.

### 48 Holiday on the Half Shell

When two turtles and a pondful of koi become displaced by their owners in a desert climate, what is one to do? **Kent Wallace** saved the day by upgrading his own existing quarantine system to accommodate all the pond residents as they await introduction to their new home.

### 52 Have a Backup Plan

It's a topic nobody likes to think about — what would happen to your business if you suddenly were unable to work? **Tom Grandy** helps you prepare for the unexpected with some key strategies on maintaining business as usual if you were to step away.

## DEPARTMENTS

- 6 Upcoming Events
- 53 Trade News
- 56 Marketplace
- 57 Advertisers' Index

## COLUMNS

- 7 Publisher's Perspective



# Upcoming Events

2022

January 5 - 7

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

March 2 - 4

**Water Garden Expo**  
Heart of Oklahoma Expo Center  
Shawnee, Oklahoma  
www.wgexpo.com

March 4 - 6

**San Diego Koi Show**  
Location TBA  
San Diego, California  
www.koiclubofsandiego.org

March 11 - 13

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

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).

March 19 - 20

**46th Annual Koi show, ZHA So Cal Chapter**  
Garden Civic Center  
Gardena, California  
www.znaamerica.org/koi\_shows

April 5 - 7

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

August 27 - 30

**Pondemonium**  
Q Center  
St Charles, Illinois  
www.aquascapeinc.com



## Moving? Let Us Know

If you are moving, please update your address with us so we can update our records.

Use the forms from the post office, or drop us an email at [llgelles@pondtrademag.com](mailto:llgelles@pondtrademag.com) with your old and new contact information.

**POND Trade Magazine, ISSN 1949-0585** is a trade publication of LG Publishing, Inc. Material is selected for its interest to the koi, water feature and pond industries, and the publishers accept no responsibility for the accuracy of content. Reproduction rights by written permission only.

**POND Trade Magazine** is published bi-monthly, starting in January, for \$41.70 per year by LG Publishing, Inc., POND Trade Magazine, PO BOX 2721, Orland Park, IL 60462. Qualified applicants may subscribe at no cost at [www.pondtrademag.com](http://www.pondtrademag.com). Postage is paid at Orland Park, IL and additional offices. For new subscriptions, additional copies and address changes, please call 708/873-1921 or email [llgelles@pondtrademag.com](mailto:llgelles@pondtrademag.com).

**POSTMASTER:** Send address changes to POND Trade Magazine, PO BOX 2721, Orland Park, IL 60462 © Lora Lee Gelles, 2022

**Advertising Policies:** LG Publishing, Inc. reserves the right to refuse to publish any ad. Submission of an ad to LG Publishing does not constitute a commitment by LG Publishing, Inc. to publish it. Publication of an ad does not constitute an agreement for continued publication. LG Publishing, Inc. will not be liable for failure to publish an ad as requested or for more than one incorrect insertion of an ad. In the event of an error or omission in printing or publication of an ad, LG Publishing, Inc.'s liability shall be limited to an adjustment for the cost of the space occupied by the error, with maximum liability being cancellation of the cost of the first incorrect advertisement or republication of the correct advertisement. Under no circumstances shall LG Publishing be liable for consequential damages of any kind.

# PONDTRADE™

## STAFF

### Publisher

Lora Lee Gelles 708/873-1921  
[llgelles@pondtrademag.com](mailto:llgelles@pondtrademag.com)

### Editor

Jordan Morris  
[jmorris@pondtrademag.com](mailto:jmorris@pondtrademag.com)

### Advertising Sales

Lora Lee Gelles 708/873-1921  
[llgelles@pondtrademag.com](mailto:llgelles@pondtrademag.com)

### Graphic Design

Gelles Graphics  
[llgelles@comcast.net](mailto:llgelles@comcast.net)

### Accounts Receivable

Lois Spano  
[lspano@pondtrademag.com](mailto:lspano@pondtrademag.com)

### Web Editor

Grant Gerke  
[ggerke@acceleratedcontent.com](mailto:ggerke@acceleratedcontent.com)

### Printer

Sutherland Printing  
Montezuma, Iowa

For your  
**Free Subscription**

see our  
website [www.pondtrademag.com](http://www.pondtrademag.com)

or call **708/873-1921**

## Contact Info

**POND Trade Magazine**  
P.O. Box 2721  
Orland Park, IL 60462  
708/873-1921

[www.pondtrademag.com](http://www.pondtrademag.com)

# Publisher's Perspective

## That's a Wrap!

Another year, come and gone. Instead of thinking ahead about New Year's resolutions, I'd like to take some time and reflect on 2021 ...

It was certainly a better year than 2020! I think most people can say that. It's hard to believe that after almost two years, we are still in a worldwide pandemic. As we continue to live, learn and grow together, it has its ups and downs, but we are definitely dealing with it better today than when the initial lockdowns started.



I'm thankful that the internet has kept a lot of pond businesses going, from providing new advertising and sales opportunities to hosting trade shows and conferences. If we couldn't be together in person, at least we could see each other virtually. As

2022 kicks off, it's encouraging to see some companies starting to hold events in person again. Everybody continue to stay safe out there — here's hoping for a return to normalcy right around the corner!

For this first issue of 2022, one word stands out in my mind — DRONES. We're happy to have Dave Duensing back with a bird's-eye view of drone technology's role in designing and building ponds (pg. 32, "To Drone or Not to Drone?"). Drones have been popular for a few years now, but did you know how handy they can be in your day-to-day construction operations? Whether you're building a small feature or a large-scale pond-scape, hover over to Dave's article and check out how these devices can up your game.

In the age of all this new technology, how can you be sure you're using it correctly, especially when it comes to communicating with your customers? Laura Reale outlines some useful pointers for knowing when to use email, text, social media, or (gasp!) even the telephone! (pg. 14, "Can You Hear Me Now?")

Finally, if you're a fan of unusual or exotic koi, you'll want to check out Taro Kodama's trip report and photos from the 2021 Japanese koi harvest (pg. 27, "Rare Living Jewels"). As you ponder your 2022 plans, Taro might give you a few travel ideas!

Happy PONDering!

# Great Opportunity! Business for Sale

## Patio Ponds Ltd

Building America's Best Pond Filters since 1987

- 70,000+ satisfied customers
- View all 14 models at: [www.patioponds.com/pdfs/catalog.pdf](http://www.patioponds.com/pdfs/catalog.pdf)
- Made with pride in the USA
- Complete listing at [www.patioponds.com](http://www.patioponds.com)
- Business can be operated from anywhere
- No physical contact needed
- Interested persons email [patiopondsltd@aol.com](mailto:patiopondsltd@aol.com)



## Double Deep 6 Pond Skimmer



[www.aqua-nicheusa.com](http://www.aqua-nicheusa.com)  
[info@aqua-nicheusa.com](mailto:info@aqua-nicheusa.com)  
Instagram/FB: @aquanicheusa



After combining the two ponds, we added a bluestone bridge to walk over the pond.

# Two Ponds Bond

Pond & patio upgrade converge in large-scale waterscape build

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

**M**y team and I have been building beautiful water features all over the tri-state area of New Jersey, New York and Pennsylvania for almost 10 years now. It has been amazing to introduce the aquaculture hobby to so many incredible people. Over the years, some projects have stood out a bit more than others for many different reasons, and this project in Bridgewater, New Jersey, is one of those projects.

When we were first contacted by this client back in 2018, they already had a pond in their backyard and wanted us to rebuild their main waterfall. This was the start of a wonderful relationship with this client. We are always honored to be able to build beautiful water features and landscapes for our clients, but it is especially rewarding when they are as kind, caring and compassionate as the family lucky enough to live in this beautiful home in Bridgewater.

## The Pond Bug Bites!

After we finished the waterfall rebuild, they asked us to build a small water garden on the other side of their backyard. Once we were done, they were so thrilled with all the work we did that they wanted another pond!

Instead, we suggested that they hold off on building yet another pond. Why not first connect the two ponds to create one large water feature that encompassed the entire

back side of the yard?

This past spring, while our team was servicing the pond, the client approached us about connecting the two ponds and adding a custom bridge over the top to be able to have access to their shed. About a month later, we broke ground.

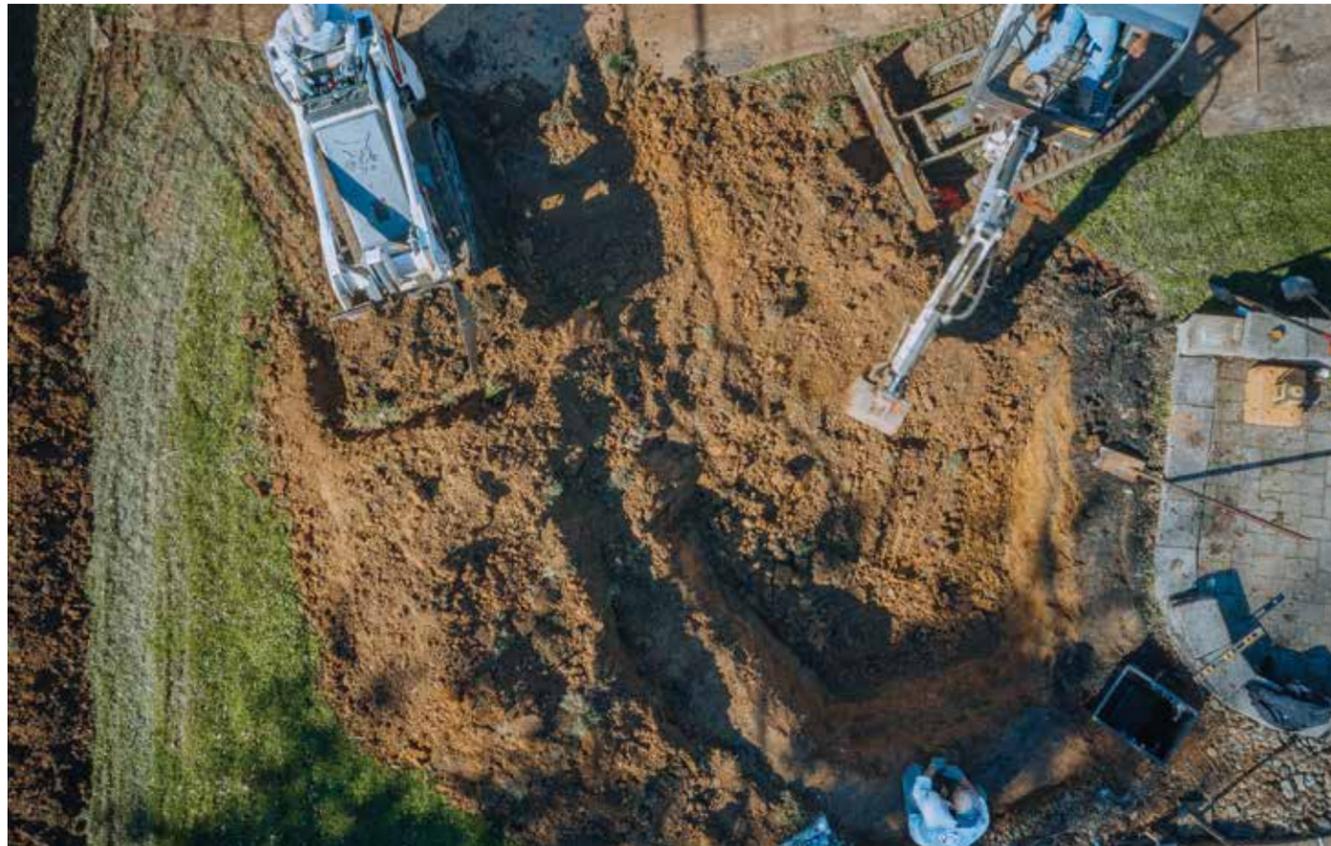
We drained both ponds, took out all

**After we finished the waterfall rebuild, they asked us to build a small water garden on the other side of their backyard. Once we were done, they were so thrilled with all the work we did that they wanted another pond!**

the koi fish and put them in an oxygenated holding tank. We took out the old liner, replaced it with a new liner and added fresh moss rock for coping the edge of the pond.

This rebuild only took two days, and it came out incredible. As soon as we finished rebuilding the pond, we installed flowers and plants all around the perimeter to add color and vibrance to the area. The client loves sunflowers, so we planted a mixed variety of pink and yellow sunflowers around the pond.

One of the best things about this landscape is the deck we built on the edge of the pond. The client set up three wooden beach chairs, creating an amazing spot to relax, read



a book, listen to music and watch the Japanese koi glide through the water, all with the peaceful sound of the waterfall in the background.

### Filtration Upgrade

When we combined the two ponds, we needed to upgrade the original filtration system, since there would be double the amount of water flowing through the filters. The first thing we did was install an under-gravel grid filtration system. The purpose of this type of system is to pull debris down to the bottom of the pond and pump it into the mechanical filtration system, which in this case included an Evolution Aqua K1 Micro Bead Filter, an EVO 110W UV and an Artesian PerformancePro Pump. The filtered water is then returned via the waterfall and continuously cycles through to maintain water quality and clarity.

Having an advanced filtration system, whether it is natural or mechanical, is crucial for all pond owners, especially for those who have fish in their ponds. The quality of the water has a direct correlation with the health of the fish swimming in it. We typically recommend that our clients install a grid system, as they take the pressure off the filters. The filters tend to last longer, as they are not constantly being pushed to their limits.

### Hardscaping

A few months after completing this pond renovation, our client inquired about adding some hardscaping. Our landscape designer Judd Mandell worked with this

client to rebuild the backyard patio, install a fireplace and add some custom wood posts for hanging lights.

With more than 30 years of experience, Mandell brings a vast knowledge of landscape design and building. His specialties range from rock walkways and patios with expert drainage to epic wood and concrete structures. He uses a variety of plants and rocks to add color and texture to projects, creating art using every resource possible. For larger-scale projects like this one, Mandell draws his concepts by hand to outline and show the vision for the project. Every aspect is taken care of with great detail, ensuring the final product is exactly what the client is looking for. He often brings his dog Lilly with him as he scopes out new projects and checks in on his teams in the construction phase. Lilly has become Fitz's Fish Ponds' unofficial mascot.

Rebuilding a patio is a labor-intensive process, and our team sticks to very strict guidelines. For every patio we build, we excavate a minimum of 8 inches into the ground. We install and compact a base using 2-inch clean gravel on the bottom. Then we install a woven geotextile fabric underlayment and staple it to the subbase.

After that, we add ¾-inch clean gravel foundation and compact that as well. Then we put another layer of the geotextile fabric underlayment on top of the second base level. Next, we add a 1-inch layer of ¾-inch clean gravel as a bedding layer on top of the pavers.

A common practice in build-

We built a fireplace and patio (top, left) for this client once the pond construction was completed. We planted a variety of the customer's favorite flowers (top, right) around the perimeter of the pond. The crew (bottom, left) is shaping the pond right after tearing out the existing liner and rocks. The addition of the bluestone bridge (bottom, right) allows the client to walk across the pond and provides direct access to their deck and shed.

# POND MICROBE-LIFT®

**FRESH NEW LOOK!** **MADE IN THE USA**   
**SAME TOP QUALITY PRODUCTS!**



We are very excited to announce that our re-branding of our Microbe-Lift/Pond, Birdbaths & Fountain Products is complete. We started two years ago with the Re-Brand of our Microbe-Lift/Legacy Koi & Goldfish food and haven't stopped since!

After almost two decades of having the #1 requested brand name of Pond and Water Gardens products it was time for a FRESH NEW LOOK!

This project is over 2 years in the making from conceptualizing to finalizing the artwork for all of our products in each of their sizes. The new look will modernize our footprint for all Microbe-Lift customers. The best technology in the business now has the best look in the business!

**Microbe-Lift Products are now Enforced by Our MAP Policy!**



Ecological Laboratories, Inc. Actual Lab

 **Ecological Laboratories INC.**  
 Providing Aquatic Solutions Since 1976



[www.MicrobeLift.com](http://www.MicrobeLift.com)



Our crew (above) creates different levels so they can stack a variety of boulders and rocks. Judd often brings his dog Lilly (left) with him as he scopes out new projects and checks in on his teams. Lilly has become Fitz's Fish Ponds unofficial mascot.

construction teams collaborate on projects, it almost always ends up as a beautiful, natural work of art that our clients get to enjoy with their families for years to come! It was a pleasure working with this client, and they are so very happy with the end result. ☺

ing patios is to use the quarry process and stone dust, but in our experience in fixing messed-up patios, we have learned that stone dust is not the best material to use for this purpose. Stone dust does not drain well, so water is able to build up under the patio, leading to potential shifting.

To stabilize the pavers once they are laid out, we use polymeric locking sand in the joints. We spray a little bit of water on top of the entire patio once the sand is in place. This acts as a glue to keep the pavers locked in where we want them. Another stabilization tool we use is Belgium Block. We pour in concrete on the edge to keep the patio as a whole in place. Oftentimes, contractors will use plastic edging to save time and money, but it does not keep the patio in place for the long term. We always try and follow best practices when installing pavers to ensure our customer is getting great craftsmanship that will last for years to come.

When our landscaping and pond

## 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 our clients and listening to their needs, we aim to leave them with a finished product beyond their expectations.



[www.fitzfishponds.com](http://www.fitzfishponds.com)

## Bassinger Fisheries Koi & Goldfish Farm



**Healthiest Koi and Goldfish in the USA!**

- 100% Ulcer Free Farm
  - 100% Virus Free Farm
  - No New Fish Introduced in 17 years
- 100% Satisfaction Guarantee**



**Rated Best All Around American Koi by International Koi Judge**

- Brilliant Colors
- Stunning Patterns
- Great Selection of Different Koi and Butterfly Koi



One of two locations

Visit our new website at:

[www.BassingerKoiFarm.com](http://www.BassingerKoiFarm.com)

**817-366-1746**

**325-728-4237 Fax**

**thekoiman@sbcglobal.net**

**New Customer Special!**

**50% off**

(on first \$500 order)



## | Effective **Communications** |

# Can You Hear Me Now?

How to communicate effectively with your clients

by **Laura Reale,**  
Pondtrent

The answer is text — now, what is the question? That's what I'm hearing when it comes to younger contractors these days. And pond builders who are a bit older? It's all about email.

I'll admit it. I'm guilty of this at times as well. But there is no one-stop solution for communication, unfortunately. Different messages call for different ways to communicate. Here are a few of the most popular forms of communication and why some may be better than

others, depending on the situation.

### The Telephone

Nobody likes delivering bad news, whether it's concerning a delay in a customer's build or having to report a problem you've found. This is when we often turn to email or text to avoid confrontation. Before the advent of texts and emails, we had no choice! We had to become skilled at talking on the phone.

It's a whole new world now, but the telephone is still a hugely important piece of how we communicate. The one major advantage that phone

calls have over emails and texts is the ability to hear someone's tone. When talking on the phone, it's a two-way conversation, and usually you can tell where it is going. This is truly a game changer. Things written down can be perceived in many ways, especially if either side is emotional or upset. A phone call allows for a give-and-take conversation.

Don't hide behind emails and texts! Pick up the phone and confront the issues head on. While it might seem easier (and safer) to just send an email, in the long run, you will save time and maybe even clients by picking up the phone and facing

up to your fears. The funny thing is, people are often more understanding by phone than email anyway! It's easier to be cranky or rude behind a keyboard than it is while talking to someone.

### Email

Email has a time and place to be a very useful communication tool. Our pond company, AquaReale, made \$322,000 in 2021 from email marketing. It's the No. 1 way the company gets business.

The secret to a good email campaign? Make sure your emails are not sales oriented, but rather have information and relevance. Instead of directly advertising a sale on cold weather fish food, send a tip about what fish do in the winter in the colder regions. Which email would you click to read?

It's a hard lesson to learn at times, but the adage is true: People buy when they are ready to buy — not

when you are ready to sell. AquaReale has some clients who got our tips for years before actually hiring us. One woman mentioned meeting us at a local event — one we had not been to in more than four years. She kept getting our pond tips and newsletters all that time before she decided to purchase a water feature!

Consider keeping all your emails and storing them in your customer relationship management (CRM) software. And yes, this means every single person who reaches out to you — not just those who buy. This also includes those who haven't bought yet. If you keep giving them valuable information, they will remember you. When done correctly, email marketing can be a highly effective way to communicate with customers and should be a staple of almost any small-business marketing strategy.

### Vlogs

Video blogs are huge for the pond

industry, in no small part thanks to influencers like Jaak Harju and Greg Wittstock. Vlogs are the No. 1 way some of my colleagues get business. It's a lot of work, but it can be hugely worth it.

The best part about vlogs? You become known to people before they even meet you. Vlogs help you sell your work before you are even in front of a customer and are a great way to emphasize the work you want. Vlogs are great for YouTube, but you can also repurpose them. They can be made into tips for your website alongside the blog section and can also be emailed to your clients for maximum exposure.

### Blogs

Do these still exist? Are they necessary? Yes, and yes! Blogs are great for two main reasons. First, they are searchable on the main search engines. While you don't need to inundate your blog with keywords, some can help elevate your

# yes you can

Control your waterfall from the comfort of your home with the **Aquascape SLD Adjustable Flow Pond Pump** and the Aquascape Smart Control App



**The Aquascape SLD Adjustable Flow Pond Pump is the ONLY pump of its kind!** You'll enjoy superior reliability that comes from pairing an asynchronous motor with solids-handling capabilities. The included Smart Control Receiver makes it easy to perform wireless control functions from your smartphone or tablet, including flow adjustment, customized scheduling, and monitoring of energy consumption.



[aquascapeinc.com](http://aquascapeinc.com)



AVAILABLE IN THREE MODELS:  
SLD 2000-5000 Adjustable Flow Pond Pump  
SLD 4000-7000 Adjustable Flow Pond Pump  
SLD 5000-9000 Adjustable Flow Pond Pump



position in organic search results.

Secondly, blogs are very informative. Like Marcus Sheridan says in his 2019 book "They Ask, You Answer," answer the questions people ask. For example, how much does a basic pond cost?

Your goal here is to educate your customers, meet a need and solve their problems. In addition, much like vlogs, blogs can be used as content in a variety of different media, including Facebook and email marketing. If you are looking for good blog topics, just answer the questions you get asked the most.

## Videos

There are quite a few different video options, but remember, these are all pushing content at people —not allowing for conversation. Some examples of video include private videos you shoot for clients, YouTube videos and Facebook Live. Some pond contractors love making videos for their clients to introduce themselves and their foreman. It's a great way to communicate trust to clients and to introduce team members.

However, even video has its limitations. Never send a private video to answer a question. That's when the phone still wins. Facebook Live videos are a great way for instant communication, but these are not searchable on major search engines like YouTube videos. Plus, you can't reuse Facebook Live videos for other communications.

The top video choice? YouTube! It's searchable and can be used in a variety

of communication vehicles. Again, as Sheridan suggests in his book, focus on answering the popular questions people have. Even make some short videos for your website.

**Some examples of video include private videos you shoot for clients, YouTube videos and Facebook Live. Some pond contractors love making videos for their clients to introduce themselves and their foreman.**

## Social Media

This is another key way to communicate your messaging and your brand. Does everything have the same feel and look? Is your logo and a nice picture visible?

Here is where you tell stories, show your brand and get people interested in your company and its day-to-day activities. People love to see who they are hiring and what they stand for. Examples of social media include Facebook, Twitter, Instagram and TikTok.

Which one should you focus on? Know your audience and don't limit yourself! It is easy to post on Facebook, Instagram and Twitter at the same time using linked social media tools.

## One Final Not(e)

Or should that be "one final note?"

What is one requirement that all forms of communication have in common? Punctuation and grammar! As autocorrect may try to rewrite words and spell them incorrectly, read your emails and social media posts and even texts

out loud before sending or posting them. You will be surprised by how many spelling and grammar issues can be fixed just by reading before sending.

I get it — you're (not your) pond contractors, but still, you can try. You can also try a program like Grammarly, which helps clean up and check your grammar. Along these same lines, don't abbreviate when texting a client. No one wants to hear from you "B4" you come over! ☘

## About the Author

**Laura Reale** is a seasoned marketing professional and co-owner of a successful water features company. After leaving the marketing world for water features, Laura combined her interests to develop successful marketing plans for their company. She turned those efforts into a company called Pondtent ([www.mypondtent.com](http://www.mypondtent.com)), which provides automated marketing communication solutions to those who want to gain the benefits from these services but don't have time or staffing to support doing it on their own.





*Victoria 'Longwood Hybrid' is displayed with Canna 'Bengal Tiger' and a variety of waterlilies at the Monet pool.*

| **Aquatic** Displays |

# Rocky Mountain Roots

A tour of displays at  
Denver Botanic Gardens

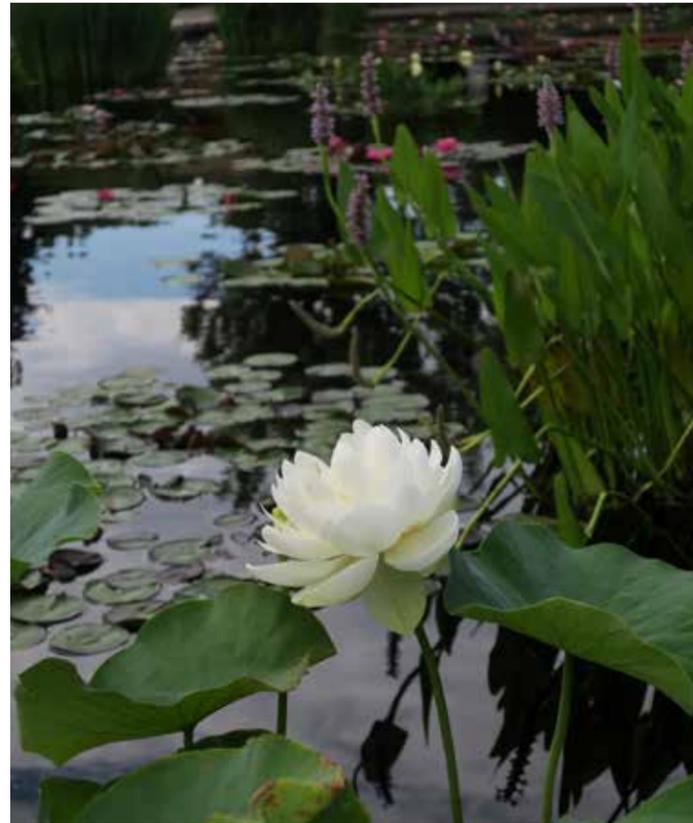
**by Tamara Kilbane,**  
Denver Botanic Gardens, Aquatic Curator

**A**s the horticulturist who cares for the aquatic plants here at Denver Botanic Gardens, I am lucky to have a large variety of ponds to work in. More than half a million gallons of water recirculate through the main waterway at DBG, connecting a wide array of terrestrial gardens throughout our 24-acre property. In addition, smaller stand-alone water features can be discovered tucked away in other areas of the gardens, ensuring that visitors are never far from the soothing splash of a waterfall or the sight of a pond brimming with colorful waterlily blooms.

During these colder winter months, much of my time is spent designing the aquatic plant displays for the coming season. Part of that process for me is looking at photos of previous years' displays to evaluate what did well, what could be improved and which new plants should be added to the collection. Each pond's



*Nymphaea* 'Manee Red' (left) is a hardy waterlily from hybridizer Pairat Songpanich of Thailand. *Nelumbo* 'High Cotton' (top, right) is a lotus cultivar from Ten Mile Creek nursery and grows in the Monet pool. *Nymphaea* 'Tuonta' (bottom, right) is an intersubgeneric tropical waterlily from Nopchai Chansilpa of Thailand.



display is created to not only highlight specific aquatic plants, but also to blend with the gardens surrounding that particular pond.

If you're like me, looking at photos of plants in all their summer glory also provides a dose of horticultural therapy that is much needed during this time of year. So, I invite you to join me on a photographic walking tour of the water gardens at DBG to look back on displays of years past — and to plan for the coming season!

### Ellipse Garden Pool

Beginning at the entrance to the gardens and strolling south through our perennial walk, Chihuly's "Colorado" sculpture can be seen towering in the distance. This piece of art was created with orange, red and yellow pieces of glass and sits in the center of a small ellipse-shaped pond.

I like to use shorter marginal plants in this pond to avoid taking away from the sculpture's impressive height and structure. Petite plants such as *Canna*

'Chiquita Punch' or *Canna* 'Lemon Punch' and *Colocasia* 'Black Magic' complement the sunset shades of the glasswork nicely. I also love the foliage of *Canna* 'Bengal Tiger' but found that it got a bit too tall for the space.

Mosaic plant (*Ludwigia sedoides*) thrives in the warmer water of a small pool and fits into the color palette with its tiny green leaves and bright-yellow blooms. Hardy waterlilies such as *Nymphaea* 'Wanvisa', 'Joey Tomocik' and 'Manee Red' are also favorites, along with a tropical waterlily with



*Canna* 'Tony' makes a bold and colorful statement in the Monet pool.

blooms that blend well with the color scheme (such as 'Stan Skinger' or 'Tropic Sunset').

### Romantic Garden Pool

Continuing west from the Ellipse Garden, we arrive at the Romantic Garden, where a formal round pool displayed a colorful array of "star waterlilies" this past summer. These tropical day-bloomers boast star-shaped flowers that are held high above the water's surface. Hybrids displayed included *Nymphaea* 'Rhonda Kay', 'Carnea' (syn. 'Orchid Star'), and 'Rhapsody in White'. Night-blooming water platters (*Victoria* 'Longwood Hybrid') surrounded a recirculating fountain in the center of this pond and were

a hit with visitors.

This year, I would like to swap in *Victoria cruziana* for the center of the pond and display an assortment of Australian waterlilies around the perimeter. Since the pond is smaller in volume, the water stays an average of 8 to 10 degrees warmer than it does in our large waterway, making it an ideal spot to grow these often finicky waterlilies. I also hope to get this pond heated in the future, with the goal of growing the heat-loving *Victoria amazonica* to blooming size.

### Four Towers Pond

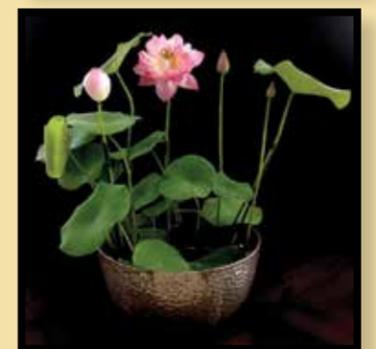
Directly west of the Romantic Garden, the Four Towers Pond borders our Science Pyramid on two



The Monet pool features a wide variety of waterlilies and marginal plants.

# LOTUS

More than 400 varieties,  
proudly grown, harvested,  
and packed in the United States.



#### RETAIL

To The Public  
www.tenmilecreeknursery.com

#### WHOLESALE

To Licensed Vendors  
Contact Laura Bancroft  
laura@tenmilecreeknursery.com  
334-726-2492





For more information & informative videos.



Grown in our state of the art nursery in southern New Jersey.

We have an extensive selection of plants ready to plant or market.

- Marginals
- Water Lilies
- Lotus
- Floaters & Oxygenators
- Combination Planters



Whether you have a retail store or do installations exclusively, we have solutions for both. From pre-planned assortments to customizable solutions, we can help take the guess work out of assembling a healthy balanced mix. Contact us for a catalog or to schedule a salesman visit.



1.800.788.8547 • www.netherlandbulb.com • contactus@netherlandbulb.com

sides. Intersubgeneric hardy x tropical waterlilies were displayed at the east end of this pond last summer. Once thought to be an impossible cross, multiple hybridizers have now successfully created these hybrids, which boast purple or bright magenta flowers on winter-hardy plants. Many of the cultivars in our collection, including 'Detective Erika', 'Purple Fantasy' and 'Siam Purple 1', were donated to us by hybridizers after the conclusion of the International Waterlily and Water Gardening Society's New Waterlily Competitions when we served as the growing site from 2012 to 2015.

Continuing around to the west side of the pond, I like to use a variety of taller marginal aquatic plants in the center portion of the pond running in a line from north to south. A mix of hardy and tropical waterlilies are placed to the east and west of these taller plants, allowing for visitors to enjoy them from the sidewalk and

**A display dedicated to taro (*Colocasia esculenta* and hybrids) has been featured the past few summers in the next small pond downstream and to the west of our Steppe Garden. These water-loving marginal plants are commonly grown for their starchy edible corms.**

the windows of the Science Pyramid. I usually also include *Victoria* 'Longwood Hybrid' plants in this display.

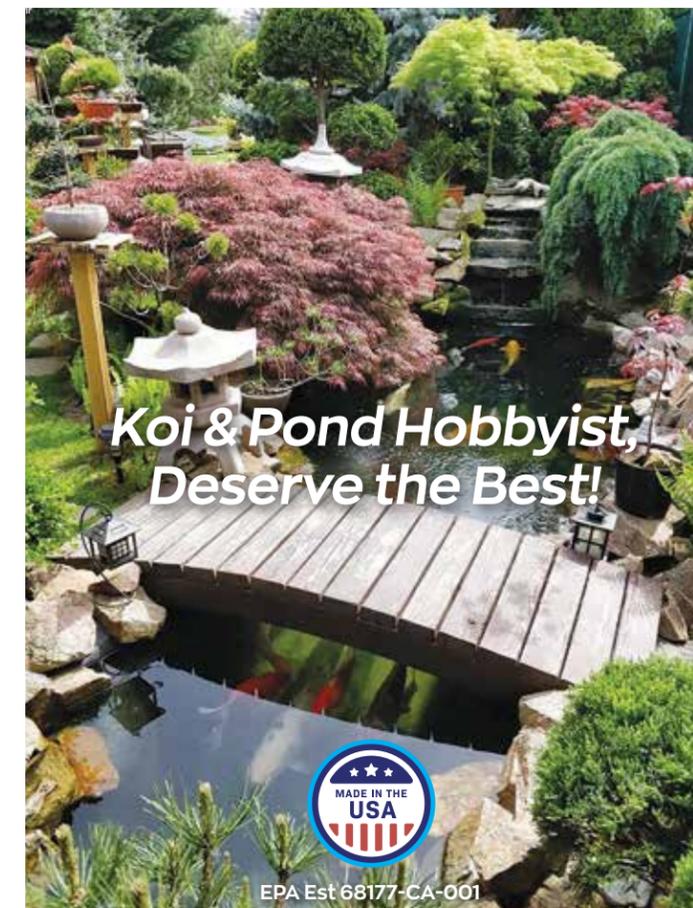
Last summer, I used marginal plants, including *Canna* 'Blueberry Sparkler', *Thalia geniculata* and *Hibiscus moscheutos* hybrids along with the fine texture and bright varie-

gated foliage of *Phragmites australis* 'Aurea'. This year, I plan to change the design and use *Thalia geniculata* f. *ruminoides* along with *Canna* 'Tony' and some groupings of *Cyperus prolifer* and *Acorus gramineus* 'Aurea'. It's always fun to play with new plant combinations!

### Reflections Pool

A display dedicated to taro (*Colocasia esculenta* and hybrids) has been featured the past few summers in the next small pond downstream and to the west of our Steppe Garden. These water-loving marginal plants are commonly grown for their starchy edible corms. Many hybrids have also been developed for ornamental use and have leaves that range from deep, glossy black (such as 'Diamond Head') to chartreuse with splashes of deep purple (like 'Mojito').

Last summer, I also used a mix of hardy waterlilies in this pool



EPA Est 68177-CA-001



For four decades, Aqua Ultraviolet has been the premier manufacturer of ultraviolet sterilizers and bio-mechanical filtration.



(800) 454-2725 | AquaUV.com

@AquaUV @aquauv AquaUltraviolet



*Nymphaea* 'Detective Erika' is an intersubgeneric hardy x tropical cross from Zijun Li of China.

surrounding the stone sculpture titled "Reflections." This year, a few tropical lilies will be added to the display to prolong the bloom season in this feature.

### Annuals Garden

Hardy and tropical waterlilies in the Rocky Mountain Legacy Collection (RMLC) are displayed in the pools downstream and adjacent to our Annuals Garden. This waterlily collection includes cultivars such as 'Joey Tomocik', 'Colorado', 'Denver's Delight' and 'Denver', which were all tested for hardiness and performance in Denver's unique climate and named by DBG's former curator of aquatics, Joe Tomocik. Tropical lilies including 'Stan Skinger' and 'William McLane' round out this collection. I added marginal plants including White Rush (*Schoenoplectus* 'Albescens'), *Canna* 'Belinda', *Canna* 'Summer Breeze', *Lobelia* 'Pacific Beauty' and *Hibiscus*

*moscheutos* 'Cherry Cheesecake' to these ponds last season.

This year, I would like to keep the RMLC in these ponds, but I would like to swap in different marginal plants after consulting with our horticulturist who maintains the annuals garden. I like to coordinate with the colors she's chosen, since the annual beds provide the backdrop to these displays. Another consideration that is fun to design around is the "Zen Doorway" sculpture located in the east pool. I often use marginal plants on each side of this sculpture and a waterlily centered in front of and a few feet behind the opening so that they appear to be framed when viewed from a distance.

### Monet Pool

Heading west from the Annuals Garden, we arrive at our largest display pond, the Monet Pool. *Victoria* 'Longwood Hybrid' waterlil-



ies encircled a large red-stemmed *Thalia* in the center of the pond in previous years. I like to keep the *Victoria* plants on this east side of the pond in the center of the display, mostly to avoid the inevitable shower of gravel on the pads that occurs if they are placed too close to the edge. I've learned that rocks and water are an irresistible combination for kids, and our adjacent Plant Select Garden uses fine gravel as mulch. I usually display a couple of *Victoria* plants on the far west side of this pond, where rocks and gravel are harder to find nearby.

A wide variety of hardy and tropical waterlilies and marginal plants, including lotus (*Nelumbo* hybrids), are displayed in this pond each year as well. The lotus are located near the entrance walk to our Japanese Garden, and one large grouping is placed right at

the pond's edge for visitors to get up close to admire the impressive blooms, seed pods and leaves. We often also move hardy or tropical waterlilies closer to the edges of the pond as they come into peak



*Nelumbo* 'Aoyun Lian' (Olympic Lotus) bloom

bloom. Hardy waterlilies are highlighted earlier in the season (June and July) and tropical waterlilies in August and September. We have made hooks out of modified irrigation keys that make it easy

# HANDS DOWN HEALTHIEST KOI



## Our Koi Care Facility Works!

Here's The Proof:



- \*ZERO health issues since 2018
- \*Year round availability of retail ready fish
- \* Beautiful fish that sell fast

## Kloubec Koi Farm

North America's Premier Breeder of Champion Koi

319.846.2077

Your best source for wholesale koi and goldfish!

www.kloubekoi.com

## ShinMaywa

Brighten Your Future

- ✓ Widest Operating Range
- ✓ Highest Overall Efficiency
- ✓ Lowest Lifetime Cost

ShinMaywa pumps deliver best in class performance for your water garden project. Visit [www.Shinmaywasales.com](http://www.Shinmaywasales.com) and see how.

Distributed Exclusively By  
**FieldingPump**

[www.ShinMaywaSales.com](http://www.ShinMaywaSales.com)

pondtent

AQUAREALE  
MADE

\$320,000

LAST YEAR  
USING

EMAIL  
MARKETING.

WHAT CAN  
I DO  
FOR YOU?

text  
215.805.8257

email  
Laura@mypondtent.com



A display of taro (*Colocasia esculenta* and hybrids) in the Reflections pool

for us to drag the planting containers wherever we want without straining our backs.

I also enjoy creating small groupings of plants in this pond to play with color, height and texture combinations. One of my favorite combinations this past summer in the Monet Pool had *Cyperus papyrus* at the back of the grouping with *Canna* 'Bengal Tiger' beside it and *Colocasia* 'Diamond Head' in front, and finished off with the tropical waterlily *Nymphaea* 'Foxfire' in the foreground.

### Le Potager Pool

Our tour comes to an end at a small pond that sits in the middle of our Le Potager (kitchen) garden. Edible aquatic plants are displayed

in this pool to fit with the theme of this area. Lotus (*Nelumbo nucifera*), water chestnut (*Eleocharis dulcis*), gorgon plant (*Euryale ferox*), Santa Cruz waterlily (*Victoria cruziana*), ornamental rice (*Oryza sativa* 'Black Madras') and taro (*Colocasia esculenta*) have been highlighted in this pond. This year, I plan to expand this collection to include our North American native lotus, *Nelumbo lutea*, as well as our native Rocky Mountain pond lily, *Nuphar lutea* ssp. *polysepala*.

I hope this tour through our water gardens at DBG has you looking forward to the summer months ahead. And once they arrive, I hope that you will have the opportunity to visit us in person to see all our aquatic plants and planting designs in their full glory! ☘

### About the Author

**Tamara Kilbane** is the curator of the aquatic plant collection at Denver Botanic Gardens in Denver, Colorado. A graduate of Oregon State University, Tamara worked for Hughes Water Gardens in Tualatin, Oregon, before moving to North Carolina in 2005 to oversee the aquatic plant displays at Sarah P. Duke Gardens in Durham. She has been in her current role at DBG since 2011. Tamara also serves as the International Registrar for plants in the Nymphaeaceae (waterlily) family. For more information about Denver Botanic Gardens, visit [www.botanicgardens.org](http://www.botanicgardens.org).



| Language of **Koi** |

## Rare Living Jewels

Highlights of the 2021 Japanese koi harvest

by Taro Kodama,  
Kodama Koi Farm

October is the most exciting time of the year for all koi dealers and hobbyists. It is also the time of the koi harvests in Japan. Every day in October, breeders harvest so many living jewels. Before COVID-19, buyers from all over the world came to the small towns of Ojiya and Nagaoka in Niigata, Japan.

I go back to Japan every year to buy koi for my customers. Fortunately, I am a Japanese citizen, so I am permitted to go back to Japan even during the pandemic. I love visiting and buying koi from breeders. Buying beautiful

koi is fun and exciting.

Sometimes I get lucky and find a rare type of koi swimming in a pond with all the others. That is one of my favorite moments. I feel thankful that nobody had found the koi until I did. In this article, I would like to share some of the rare living jewels I found during my most recent trip to Japan.

### Akame Ginrin Platinum

Since the last KHV outbreak in Niigata several years ago, it has been very difficult to find a good source of platinum koi in Niigata. Sakazume Koi Farm became one of the few breeders with this variety.

When I visited this farm this year,



Red eyes on platinum koi are very rare.

I found very unusual ones. I thought they were regular platinum, but after a closer look, I saw that they had red eyes. I had seen many platinum koi, but never before with red eyes.

Ki Asagi



### Ki Asagi

Asagi is a koi with indigo scales with red marking on its side. It is the first variety of koi in history. Ikarashi Koi Farm is a breeder of this variety.

This koi has beautiful indigo scales like regular Asagi. However, the koi has yellow markings instead of red markings. It is not flashy, but it is still quite rare.

### Doitsu Koromo Showa

When I go to Japan, I take requests from my customers. Doitsu Showa always ends up being atop the list. Along with Shinoda Koi Farm, Hiroi Koi Farm is a good place to find nice ones.



Doitsu Koromo Showa

During this year's visit to Hiroi Koi Farm, I noticed a koi that had a very balanced Kohaku pattern on clean, scale-less Doitsu skin. *Sumi* came in beautifully, and we know more *sumi* development will make her even more beautiful.

The shadow on the *hi* plates is what makes this koi special. It is not *sumi* patches. It spreads evenly only on the *hi* plates. I did not buy this koi because she was expensive, but I should have. I regret that I did not pull the trigger!

### Kirin

Kirin is a relatively new variety. Mr. Wada, owner of Wada Koi Farm, introduced this variety himself about five years ago. He initially wanted to breed Kujyaku that can grow big, so he crossed Nezu Ogon with Kujyaku. At first he thought it was a total failure, because most of fry were black. (Kujyaku fry is supposedly pink.)

But when he harvested them in fall, surprisingly, a beautiful collection of koi

came out. When I asked him the difference between Kujyaku and Kirin, he said that Kujyaku has a *hi* pattern on a Gin Matsuba body. Kirin has the pattern on Mukashi Ogon.

I appreciate his efforts to develop new varieties. If you have a chance to get Kirin from Wada Koi Farm, I would highly recommend it. Of course, I bought some for my own stock.

### Ginrin Aragoke

Aragoke means oddly large scales. In the old days, when koi were born with Aragoke, they were considered poor quality and got eliminated first. These larger scales tend to appear on Doitsu varieties.

I was trained to pay attention to the scale sizes and not to buy koi that has Aragoke. It was common sense among breeders and dealers at the time.

Mr. Ikarashi challenged this common sense, however. At Ikarashi Koi Farm, he bred koi that featured Aragoke (large scales) with *ginrin*. His Ginrin Aragoke is very popular. It comes with many different color variations.

I bought a handful of very beautiful Ginrin Aragoke from him this year. With a golden body, each scale is evenly large and shines with *ginrin*. The symmetrical markings on the base of its pectoral fins elevates its beauty.

### Kouyo

This is a relatively new, two-year-old variety called Kouyo. Mr. Kawakami crossed Doitsu Chagoi and Doitsu Ochibashigure. Because they are still in the first generation, there were

many different types with yellow or brown.

My father always said, "Support breeders if they are challenging new varieties. For the first several years, breeders cannot breed enough beautiful ones. They lose money. During their challenge, dealers should buy these koi and support their efforts."

We do not know how these koi will turn out, but I appreciate his challenge and decided to pick two from Kawakami Koi Farm. Please support your dealers who are supporting these adventurous breeders.

### Kanoko Showa

*Kanoko* means fawn in Japanese. A fawn has polka dots on its body, so in relation to koi, *kanoko* means a polka-dot pattern. The one I found at Isa Koi Farm is definitely one of the best Kanoko Showa I found on this year's trip.

Needless to say, the Kanoko pattern on her back is perfect. As a normal Showa, she is gorgeous: its body confirmation, *sumi* quality and the powerful presence with the *sumi*, *hi* and *kanoko*. She is definitely one of a kind.

These are just some of the fantastic, unusual koi that I found on my 2021 trip to Japan. Whether breeders planned to breed them or not, it is such a surprise to find these rare and beautiful living jewels.

I hope that Japan will open the border before next year's harvest. If you have a chance to go to Niigata, Japan, I strongly recommend you do, especially if you are in the market for rare and beautiful Japanese koi. ☺



Kirin



Kouyo



Ginrin Aragoke



Kanoko Showa

## When you need tanks call the experts at Polytank

- Numerous shapes and sizes
- In stock and custom molded
- Economical and self supporting



62824 250th St, Litchfield, MN 55355  
(320)693-8370 (800) 328-7659  
www.polytankco.com

### About the Author

**Taro Kodama** is the president of Kodama Koi Farm, the largest importer and distributor of quality Japanese koi in the United States. With locations in Japan, Hawaii, New York and New Jersey, Kodama Koi Farm carries more than 35,000 Japanese koi from the top breeders in Japan. Taro, along with his father, Mamoru, not only provide show-winning koi, but they also conduct many koi seminars.





# Innovation,

# Quality, Experience

800-448-3873  
www.easypro.com  
info@easypro.com



## Don't Let Your Hard Work Fall Through the Cracks

### Black Waterfall Foam

- Improves water flow visually
- Minimal expanding foam - better density, better control and less waste
- Black color hides foam in the shadows of the rocks
- Uses carbon black for inherent color rather than black dye that fades
- Fish safe, non-toxic formula
- Patented trigger system dispenses foam in any position.
- Patented 'stow straw' allows multiple uses for up to two weeks.



See how our black waterfall foam can improve your water features at [www.easypro.com](http://www.easypro.com)

## H2O'h Yeah!

*Viantifalls* Turn any block wall into a work of art



### Stainless Steel Spillways

A stylish highlight for any patio, entry way or stand-alone feature. Add EasyPro Cabrio Lighting for a stunning night time display.



- High quality stainless steel construction resists corrosion.
- Internal baffles create the smooth sheet of water that cascades to the basin below
- Open flow design prevents clogging from debris or hard water
- Available in three lip styles and 2", 6" and 15" widths

### Wall Scuppers

A classic stand-alone feature or use as a tasteful accent in any formal water feature.



- Ideal for formal water features
- 5 - 20 gpm flow rates
- Four styles in stainless steel
- Three styles in antique brass



**New!**



### Starburst Mini Floating Pond Fountain with Super Bright LED Lights

Super easy installation!

Simply set the float on top of the motor, hand-tighten the 3 thumb bolts and you're ready to go!

- Powered by an energy-efficient asynchronous mag drive pump
- Six super bright, cool white LED lights embedded in float
- Choose from continuous or gradient operating modes
- Spray pattern: 2.5' tall x 6' diameter
- Minimum required pond depth: 18"
- Minimum recommended pond diameter: 18'



### New Models! EXP Series External Pumps The all-in one!

The EXP Series integrates a basket-type pre-filter and self-priming capabilities into one efficient package for trouble free operation.

Three new models for 2022! 3200 gph and 5000 gph low head pumps, 6000 gph high head pump

- Rugged, weatherproof motors are energy efficient and long lasting
- Self-priming capabilities
- Integrated 90 cubic inch strainer basket helps protect the internal rotating parts of the pump from damage due to external debris
- Simple cover allows for quick cleaning and replacement.
- Very quiet operation. Motor is totally enclosed and fan cooled for durability.

We have a huge variety of pumps for any water feature



<b>Low Head</b>	3200 gph	6800 gph
	5000 gph	7800 gph
<b>High Head</b>	6000 gph	

### Get Your 2022 Catalogs Today!

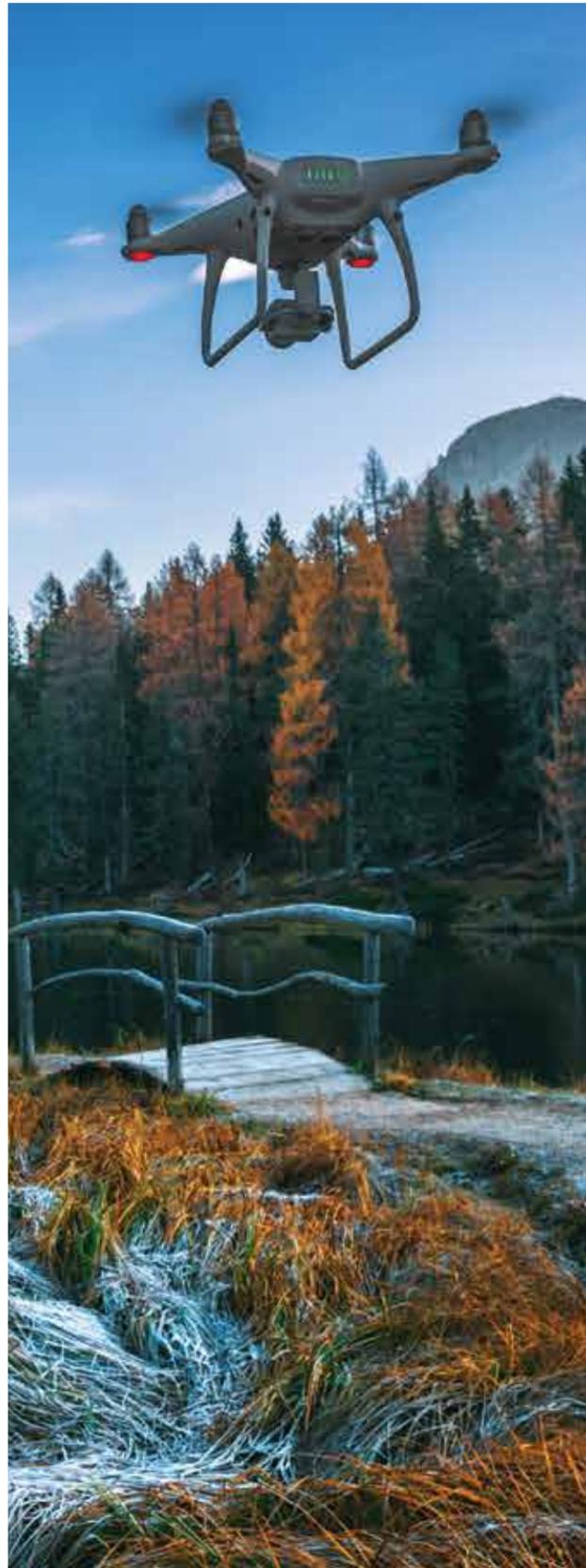
Visit our website to find a distributor near you & to request our catalogs. 800-448-3873 [easypro.com](http://easypro.com)



Let our decades of experience help you sell your next project!



NEW FOR 2022



| Cover Story |

# To Drone or Not to Drone?

Aerial vehicles elevate water feature design and construction

by David Duensing,  
Aquatic Construction Services

Over the last several decades of designing and building water features, it has been my observation that the water feature profession is heavily weighted on the artistic side, with minimal advanced tools, technology and specialized equipment being applied. Granted, the majority of water features and garden fountains are relatively small, but at what point should a professional water feature builder look outside their normal operations for ideas that could improve their business?

Perhaps we should occasionally step back from our normal business approach and see if some of the available advanced tools could help us be more creative, efficient, effective and profitable with our time.

## Drone Imagery

It was not until 2014 during the filming of the Pool Master TV series that I realized I was being naive in my thinking regarding the value of drone technology and the ease of taking high-quality images and video from unique and very important vantage points. Once I experienced this firsthand, I quickly realized the benefits of being able to view properties and projects from a different perspective, and I embraced the aerial option — drone imagery.

This is certainly not to say that one cannot succeed without aerial imagery, but I am a strong believer that the more complete and accurate data I have going into a meeting or a project, the greater the chance I have of success. Also, as my projects grew in magnitude, and accessibility to walk the site was challenging, I found that drone images helped me gather critical data that I could use in many areas of my work, including:

1. Designing and preparing information for client meetings.
2. Producing images that can be marked up for the client, other professionals involved in the project, my project manager and the construction crew — so that key details are accurately and efficiently passed forward.
3. Confirming that the project layout is correct and actual construction details are properly covered to ensure the work is progressing correctly.
4. Documenting critical details as they progress, such as utilities, vaults, valve boxes, structures, plumbing, conduits, etc., before they are covered and out of sight.

Obviously there is a financial cost to purchasing and operating a quality drone — perhaps \$1,500 to more than \$3,000 for a complete kit and carrying case — as well as the learning curve everyone must pass through. On the other hand, I have never questioned the acquisition costs of other quality tools in my profession, like a gas-powered Stihl or ICS stone-cutting saws, diamond blades, etc. The true value comes from having and using the correct tool in the correct manner for which it was designed and at the correct time to increase efficiency, reduce risk and costs, and improve profitability.

With that being said, I can ensure you that along with the awe and enjoyment of the flying and filming experience will come anguish, embarrassment and complete frustration

when your drone disappears never to return, or when you witness it crash (which I have, more than once). With the expectations clearly defined, in this article, I hope to be able to share with you several practical uses of a drone in the design, project management, construction and documentation phases of water-feature projects.

## Design Phase

In most initial contacts with a prospective client, they do their best to describe their goals and the environment where they would like some type of water feature. Since most clients — whether homeowners, general contractors, landscape designers, landscape architects, etc. — are not typically experienced in many critical details involved with properly laying out and constructing ponds, streams and waterfalls, there is usually considerable information missing from the conversation.

At this point in the process, we typically schedule a site visit, where we



will use both a drone and a handheld camera (or camera phone) to capture detailed images of the entire property and proposed work areas. These images include not only the immediate area where the water feature is to be placed, but they also identify property lines, possible equipment pad locations, utilities, wells, septic fields, access points for deliveries of material and equipment, material staging areas, and so forth.

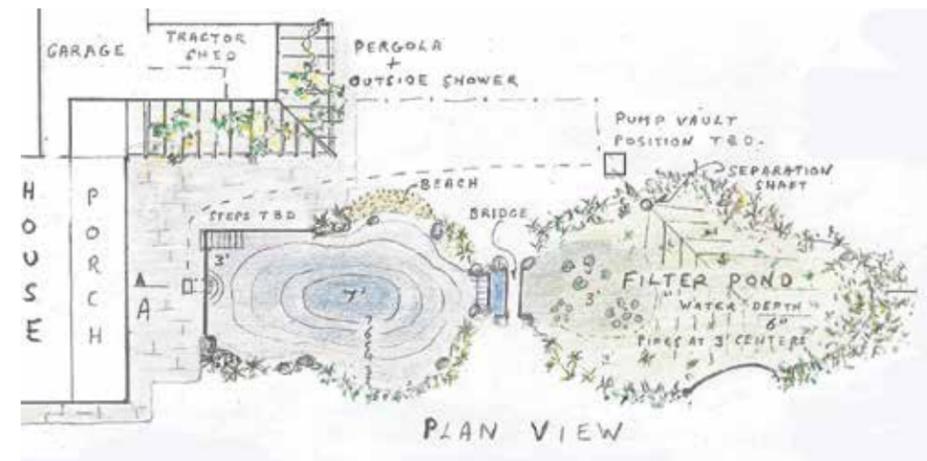
These images are immensely helpful when you're back in the office and miles away from the project, as there is generally an overload of information discussed and collected during the initial site visit. By having these images available while reviewing surveys or



An aerial image of the property is overlaid onto a CAD plan of the proposed trout pond.



The Phantom 4 Pro (above, left) is certainly the workhorse for most of my aerial imagery due to its power and ability to resist movement in windy conditions. I also like that the tall legs help to keep it clear of debris on rough job sites. The Mavic Pro Platinum, (above, right) even with a dedicated screen, is quite compactible, and an excellent back-up drone. Later models of this drone have taller legs, which may be a benefit to the user.



The conceptual plan (top) of a naturally filtered swim pond designed by Anthony Archer-Wills provides scale and the relationship of the water feature to the proposed home. The back porch of the house (bottom) was surveyed and staked out, along with the outline of the proposed water feature. As is quite common, some slight adjustments to the shape of the water feature were discussed to account for some existing trees that were to remain and to better work with the natural slope of the land.

construction plans of the project, you can develop more accurate options, formulate questions to research and refine the proposal and estimates for your next meeting.

When asked to build a water feature that a landscape architect or designer has produced, we often overlay the design on top of an aerial image or mark out the pond with paint to see how well it fits into the existing space. It is not uncommon for there to be some changes made to the design shape or orientation so that it properly fits the space. On the other hand, we may determine that it is better to clear objects like trees, existing rocks and structures. Sometimes we level it all or a portion of a steep grade to make the design comfortably fit within the space.

For more expansive projects — those that extend out of sight from any one vantage point — I find that overhead images are the most effective way to evaluate the existing conditions (including trees, grades, etc.). This allows the design team, to consider, develop and present the best design options.

As the design develops and the layout effort begins, drone images also help to ensure that the shape, placement and orientation of the main bodies of water, along with all the key details, such as beaches, boardwalks, jumping rocks, etc., are

properly located, scaled and integrated seamlessly together.

### Preconstruction

Once the design is approved, but before initiating construction, several important determinations

greater the sun angle, the longer the shadow line. Once you know what to look for in the drone image — the beginning point of the shadow at the base of the stake — it is easier to create an accurate outline of the water feature and

### If you can fly the drone high enough to capture an image of the entire portion of the property that pertains to your work area, also try to photograph the likely access points for delivery vehicles and material-staging areas.

must be made. The use of a drone expedites and adds precision to:

1. Confirming project layout to ensure the correct size, shape and orientation of the overall water feature and grades that exist in the immediate area.

2. Identifying possible issues and challenges to the progress of work, such as utilities, trees, rocks or foundations that need to be modified, removed or avoided.

3. Defining the volume of material that will need to be removed during excavation, the quantity of various materials that need to be installed during the build and the project access points and staging areas.

4. Locating, identifying and securing the specific rock needed for the project.

One technique used on projects that have been surveyed with the perimeter staked out is to spray paint a white or yellow dashed line at the base of each stake for enhanced overhead visibility. With this on-the-ground highlighting completed, we proceed with another drone flight to capture the overall outline of the project.

One trick I learned was that on bright days when the sun is at an angle relative to the project, the survey stakes tend to cast long, thin, straight shadows. The

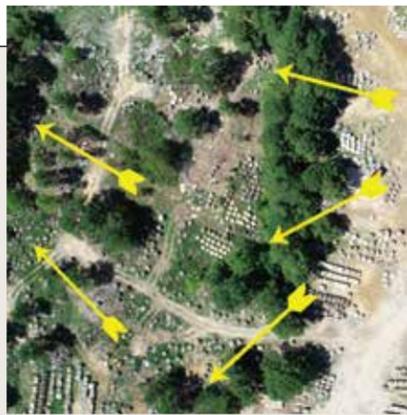
save the step of paint marking. Unfortunately, if a portion of the project is in the shade, you may still need to highlight the stake location.

Identifying overhead and underground utilities and possible site challenges early in the effort is of utmost importance. During the site visit and photo and data collection effort, it is an opportune time to look for the existing utilities, wells, buildings, old building foundations, property drain systems, septic fields, living or dead trees and any other items that may need to be worked around or removed before construction starts. Oftentimes, if the ground by these objects is relatively flat and clear of overhead obstructions, we will identify with paint what that object is (e.g., a well, utility, etc.), and aerial imagery will capture the location of the item and the identifier.

If you can fly the drone high enough to capture an image of the entire portion of the property that pertains to your work area, also try to photograph the likely access points for delivery vehicles and material-staging areas. To be efficient and effective on a job site, it is important to confirm a good flow of traffic with easy access during construction. What



A CAD rendering (top) of a 4-acre pond has color highlights to define the various features. The same CAD plan is shown with an aerial photo overlaid (bottom) and the pond perimeter highlighted with yellow dots. Using this technique, one can see where additional trees may need to be removed and how close the pond is to a wetland buffer (indicated by the black line in the bottom left).



A portion of the stone yard (above, left) is highlighted with yellow arrows to indicate where I have tagged individual or palletized rocks for a current project. Shown here is one of several groupings of rock (above, right) for the Arkansas State University football stadium project. They are arranged so that each rock is quickly accessible, because every day a large number of these rocks is tagged and transported to one of the two waterfall sites.

## ROCK SOURCING & MANAGEMENT

I have learned over the years that for projects to look their best and move forward with good efficiency, I need to hand-select almost all my rocks for the project. On the smaller projects where we may be using only three to five semi loads, these rocks can normally be selected by walking around the stone yard or quarry, identifying the specific rocks we want and tagging them in a way that the vendor can easily identify them.

On larger projects where the rock is spread over a large supply yard, is scattered over multiple yards, or is still sitting in its original location in a field or woods, overhead images are immeasurably useful in quickly and accurately conveying essential details, like which specific rocks are desired and their location.

In the case of a large and expansive stone yard, I normally take aerial images of the entire yard or large portions of it. Then, I indicate with bright-colored arrows on the photos where the tagged rocks are located. I also supply images of the specific rocks or groups of rocks that I would like to set aside for my project. Keep in mind that

when you are looking for a large number of specific rocks scattered over a large stone yard or area, you must allow time for the vendor to access them, collect, stage and



The bright-yellow ribbon clearly identifies this rock as one I've selected.

ship them. This does take time, and you will need to plan ahead.

At the point in the project when truckloads of rock are being delivered, being efficient demands that you keep track of specific character rocks as well as the various types of rocks you have on site. Once rock delivery trucks are unloaded and out of the staging area, we segregate the rocks into types and character and place them on wooden dunnage (e.g.,

pallets, 4x4s, etc.) to allow us to easily sling or forklift the rocks when needed. This minimizes wasted time and potential damage. We also orient the face of the rock all in the same direction. This process allows for more efficient imaging and evaluation of the inventory, rather than having to repeatedly circle around each rock before making a selection.

Depending on the scale of the project and the variety of the rock you have purchased, your material-staging areas could be quite spread out. As an example, on a project for the Arkansas State University football stadium, we needed to use several different rock storage areas that were spread over a couple of acres and a good distance from the actual waterfall locations. So, we segregated the rocks by length and general thickness, and within those groups, we organized them by the degree of their unique weathered character. We also took time to stage the best of the best rocks in the position we intended to install them, such as vertically, paired up with another rock, laid flat, and so forth.

This grouping of rock is considered "large and blocky" boulders. Other groups are identified as "extreme character," "large slabs" (7 to 14 feet), "small slabs" (2 to 4 feet), etc. The grouping and management of inventory is important on large projects because it will help ensure that proper quantities and varieties of the inventory are being properly distributed throughout the project.



better way to confirm this ahead of time than with an aerial image of the site? For contractual clarity, I submit as an addendum to the contract an aerial image that includes the outline of the proposed project, all known and identifiable construction obstacles and the access and staging points.

### Construction

Once construction begins, the value of documenting the process cannot be overemphasized. The frequency of the documentation will be dictated by the pace of the work in progress. Aerial photos that depict a critical stage or clarify an area of potential concern have proven to be worthy of the effort, so make sure your drone is always charged and easy to get quickly in the air.

As construction proceeds and interior shapes are being defined, such as pond perimeter, side slopes and contours, plant shelves, islands, peninsulas, and underliner drainage, we have found it beneficial to document the work with images to confirm it is in the correct location and shaped, sized and oriented properly. I also make sure to document all underground utilities, such as plumbing and conduit runs, pump, electrical and drainage vaults that we or another contractor on the project is installing, before allowing them to be backfilled or covered.

Depending on the specific project and contract payment terms, there

**Depending on the specific project and contract payment terms, there is once again value to providing the client aerial photo documentation of specific details and overall progress being made at invoice milestones.**



This 12-by-7-by-7-foot precast concrete vault will be one of several pump vaults. As you can see, there are numerous pipes and conduits running to and from the vault, and all have to be accounted for. An image taken from higher elevations will provide details for the actual location of each vault and valve box within the project.

is once again value to providing the client aerial photo documentation of specific details and overall progress being made at invoice milestones. This documentation allows the client to see and acknowledge the progress of the construction details and to confirm they were completed in accordance with the contract terms. This ability to have regular confirmation from the client that the work is being accomplished properly and on time, especially when the client is not local to the project, builds trust and better relationships. Most importantly, at the time of final payment, it leaves no question as to whether all construction details and design elements were included and properly completed.

### Aerial Advice

With a few years of (both tragic and joyful) drone experiences behind me, I

have few recommendations and tips I'd like to pass along.

1. Size your drone for the environment and how it will be used. I use two different styles of drones: a DJI Phantom 4, which is my primary workhorse due to size and power, and a DJI Mavic for a backup, which is compact, capable and very portable. In general, drones will have approximately 20 minutes of flight time in a low-wind condition. In windy conditions, a drone will use a considerable amount of battery power just to

In the image below, one can see the property boundaries outlined by roads to the north and west and a fence line to the south. Vehicle access to the property is from the west, and a material-staging area is proposed for the west end of the lot. To the right of the black truck is the old house foundation that runs north and south, and along the fence is an old well and concrete tank. Out of view to the east, the ground drops off and becomes wetland.



hover in a stable location. When trying to get the entire property into a single photo, you may need to get above the trees and quite elevated. This is very important to be aware of and considered ahead of time, because winds tend to be stronger above the trees than where you might be standing.

I have experienced some very uneasy times when I had the drone above the tops of the trees and the winds began to carry it out of view. I had to very carefully fly the drone down to just above the treetops and hope I could get it back before the battery reserve ran out — which was a very real concern.

**Buy the insurance package and keep it in force each year. When buying a drone, whether it is your first one or not, I highly recommend buying the extended warranty and repair or replacement insurance package right away and renewing it annually.**

2. Buy the accessories that make the drone most useful for your application. I chose to have a dedicated screen (DJI Crystal Sky) for each of my two drones rather than use my phone as the screen. For me, I wanted a larger and brighter screen so I could see more of the details on the ground that I wanted to document. This does add several hundreds of dollars to the overall price, so you need to decide what works best for your application and budget.

Extra batteries and a portable charger were a very simple decision. When gathering details for a new project or flying in windy or cold weather, I find that I often will use two to three batteries, so I own four batteries for each unit. I typically have a spare SIM card for each drone so that once the flight is completed, or at end of the

day, I can remove the current onboard SIM card, replace it with a clean spare and download the recently recorded flight images onto a remote hard drive. SIM cards come in many sizes, and since I download them often, I don't typically use more than a 16 or 32 MB SIM card. Even when shooting video, these sizes



The southern portion of this project (top) is the main pond, which at this stage is lined, with the two islands under development. The aerial image (bottom) with the project outlined in white, shows the general outline of the upper and lower pond. Because this was a design-in-progress project, there were constant changes taking place, and it was critical to make sure all the potential design changes would fit properly into place and look and feel right.

are more than adequate.

3. Buy the insurance package and keep it in force each year. When buying a drone, whether it is your first one or not, I highly recommend buying the extended warranty and repair or

replacement insurance package right away and renewing it annually. I have had a few crashes, and some were my fault — one where the drone just stopped flying, and another where the drone began circling out of control and eventually impacted a structure. In all but one of these crashes — the last one

two-day grace period once you receive the drone, and after that period, your drone will not be eligible for the coverage — ever. Depending on the insurance you purchase, you could enjoy full drone replacement if the drone cannot be repaired, regardless of what occurred. Replacement is commonly limited to two events per year, and the insurance policy is only good for a year, but as long as you keep renewing the coverage without a gap, the coverage will stay in force.

### Take Flight!

In retrospect, I wish I had embraced this technology sooner! The ease and value of aerial photography have allowed me to better manage several aspects of my business. If you are not already familiar

with drones, I encourage you to test the waters, even if only to add a different dimension or viewing angle to the photos for your portfolio. I do believe that you will find it remarkable what is revealed in a photo with a slight elevation change.

Hopefully after you have read this article, you may find value in adding a drone to your water feature design-and-build tool chest. As I mentioned very early on, there is a learning curve in both the actual flying and applying the images to your business. For me, the drone has proven its usefulness in so many ways that it has become a tool I use on almost every design-and-build project I am involved in. If that's not enough, it's also a lot of fun! Happy flying! ☺

### About the Author



**David B. Duensing**, a longtime industry expert and educator, specializes in combining natural stone, living water and his clients' dreams to build unique and exceptional aquatic features throughout all the Americas, the Caribbean and abroad.

With the creation of David B. Duensing & Associates Inc in 1989, Duensing has focused his efforts on learning and perfecting the design and construction techniques required to perform at the top of the industry internationally. In 2006 Duensing formed Aquatic Construction Services which specializes in the construction aspect of natural rock formations and living water features, leaving David B. Duensing & Associates free to focus on providing design and consulting services to professionals and landowners.

In 2020 Duensing became the first pond professional to earn the designation "Society of Watershape Designers (SWD) Registered." In addition to having won the Master of Design Award for his work, Duensing also teaches accredited college-level courses on the many aspects of water-feature design and construction..

## Your one stop solution for clear, healthy water and Great Profits



Our line of upper end filtration products is designed to give your customers clear, healthy water while using a minimal amount of electricity. You'll love the profits that can be generated with our line of products.



### Grand Champion Technologies

GC Tek  
302 S. Sandy Lane  
Chandler, Okla. 74834  
866-712-7007 405-258-5551 Fax 866-728-0678  
www.gctek.com info@gctek.com

The Sand Pit at POND college expanded into the adjacent farmland in October 2020.



| Aquatic Training |

# POND college

Get your degree  
in water-feature  
construction

by **Mark (M.J.) Wilson,**  
Any Pond Limited

**P**OND college (Pc) is the home of Any Pond Limited, a marketing company that educates and inspires the British public. Our focus is to help others dream, plan and enjoy ponds and water features.

### Core Curriculum

Pc is in an ideal central location in the United Kingdom and is open for the citizens of the British Isles and Europe. We teach via video and hands-on classes and workshops. We charge for the use of the facility or invite our customers to Pc after purchasing products from our retail e-commerce site ([www.waterfeature.shop](http://www.waterfeature.shop)). TEAM anypond (our local marketing side of

the business) helps build and maintain the ponds and water features in the college gardens.

We have created a very safe place for people to come and learn about ponds and water features, and we lure them in with valuable hands-on experience. Not everyone is so keen to start with, so we encourage people to simply watch and learn about the systems.

### Est. 2014

I first came up with the idea of a U.K.-based pond training center in 2014 at an Aquascape event in the U.S. Everyone else at the time was building prototype systems that would sometimes work and sometimes not. I also found that ponds were being pigeonholed into one style.

To start with, I set up the first training area in a

fenced-off part of my 6-by-6-foot back garden — a very small space for a single person to explore what they could achieve with rocks and water. The success of the training area led to the establishment of the first facility at Pc — a set of three purposely designed waterfall training boxes fully intended for waterfall building. (I thought about running a competition when designing the facility. Perhaps an invitational event with three group stages, and the three winners build off in a final?)

This almost brand-new hands-on training facility is a perfect stage to showcase the procedures of building with pond kits. We cover all aspects of water-feature building, from our own mini pondless kit using the small basin from Aquascape, to larger, more advanced pond packages. We provide individ-



## A PUMP THAT PUTS YOUR POND AT A HIGHER LEVEL



While there are multiple elements that make up a pond, one of the most foundational is the pump. After all, it's essential for the health of your fish and overall pond performance. Nitto Kohki LA Series blowers provide unparalleled performance for koi pond and water garden applications. This is why they're the professional choice:

**They last longer, especially in hot, humid climates.**

Nitto Kohki aerators have one moving part per piston. Properly installed and maintained, they have an expected service life of 6+ years.

**They run quieter, supporting the natural design of ponds.**

Listened to a diaphragm pump lately? In contrast, linear-piston LA aerators have about as much ambient noise as a light ballast.

**Their cost-of-ownership is lower.**

LA Series blowers consume far less energy— have only 50-60% of the line current requirements of diaphragm pumps.

Nitto Kohki aerators better leverage filtration capability, increase the fish handling capability of existing ponds, and minimize the risk to valuable koi collections. They're the ideal selection when building a new pond – as well as when you're looking to add quality and reliability to your existing pond.

Call **800 843 6336**, e-mail [info@NittoKohki.com](mailto:info@NittoKohki.com), or visit [NittoKohki.com](http://NittoKohki.com) for more on LA Series blowers.



M.J. Wilson (above) was proud of the construction team (wearing red) teaching a pond-building class. In this photo, they were just finishing up the final edge treatment stage. Andras and M.J. (right) finish installing a medium fountain kit. George and Kenny (below) from TEAM anypond build pondless waterfalls in the sandboxes.



ual technical product installation training, like fitting faceplates to skimmers and biofalls. The whole idea behind the in-house training is that it's designed to allow people to make mistakes, as they can be rectified and fixed while being in a teaching moment. Even watching others making mistakes helps engage students build better water features

My main aim was to provide training opportunities for anyone interested in investing their own time. 2021 saw the main doors open with a number of events scheduled, from private sandbox hires to one-to-one sessions and group learnings.

Today, the training boxes are continually changing as students come through Pc doors. These three main waterfall boxes hold enough sand for one builder (8 by 8 feet). This normally entails the student installing one of our 3-foot-long fairy fall kits. This is a good teaching practice, as in a very short window of time (maximum of 6 hours for one person), the students take away the knowledge that they can do it. They follow a recipe card to produce a small running water feature and even grade their own work by using our waterfall

ranking sheet. Watching the little light bulbs going off throughout the day is what really makes teaching others at POND college so worthwhile.



### Classrooms

I first started out with a small bone yard mainly used for storing rock and building materials. In early 2020, I decided I wanted to build a sand pit (15 by 20 feet and 3 feet deep) for pond building. The sand pit can be used for multiple features or one medium-sized

pond if needed. We covered the sand pit with a roof and walls, as contractors like to photograph or video their work without distracting the viewer.

Later that year, I was able to afford more space, so I managed to convince my mate to rent out his adjoining farm-land, which today is shaping our college gardens, where we showcase ponds and water features. Designed for inspiration and education, the main garden is split into many different sections, creating a variety of areas and feelings.

The inspiration gardens are designed for guided and self-guided walks. People often comment that it's a completely different experience in person as opposed to watching the videos online. The gardens are intended to leave you inspired and motivated. The water features on display are all mainly based on prepackaged kits with a couple of our own custom creations. We provide Aquascape products via our e-commerce site and offer a "try before you buy" deal on lots of the fountains and smaller features.

We continue to add to the college gardens with many exciting new features. Wherever you are worldwide,



Beautifully simple water gardening



To learn more, contact our Dealer Support Team at 800-353-3444 or email us at newcustomers@rchagen.com

HAGEN GROUP © 2022 by Rolf C. Hagen Inc. Laguna is a registered trademark of Rolf C. Hagen Inc.

you can follow along with our updates on our YouTube channel.

Team Building

One of the biggest successes of Pc to date has been with staff training. In February 2021, I had to stop doing manual work under doctor's orders due to a back problem. This has been quite hard for me, just like a star striker having to step into retirement and start a new brand-new position of building a soccer team.

Thankfully, Pc helped me very quickly hunt for three full-time staff to run the local market and teach the students coming up. This was difficult to start out with, as the team was still learning how to think through problems and come up with solutions. However, Pc provided a fast track for learning with a big safety net, providing video links for instruction and then the actual space to carry out the implementation.

Today, members of TEAM anypond are running the building events. Even though the team is less than a year old, they are starting to video most of the projects and share teaching moments with our viewers. We all stand by the saying, "Don't blame the pond; blame the pond designer."

Student Body

Here at POND college we have a strong passion for helping others reach their fullest potential. We actively invite people to come to Pc to participate in organized training workshops and one-to-one tutorials tailored to the individual's or business' needs. We have had people down from Scotland and up from Cornwall and Devon in England. More and more conversations are developing with people interested from Europe. We hope to host our first European clients in late 2021.

My wife Charlotte even built her very own pondless feature for everyone to watch. Charlotte is not a pond builder or even an avid DIYer, and she is not someone who enjoys the camera. However, she found she could help people in her same shoes via video —



Handpainted Fiberglass Koi

Now available in the US!

- 6 inch
12 inch
20 inch
39 inch
79 inch

Retail and Wholesale Pricing



PONDS • WATERFALLS • FOUNTAINS

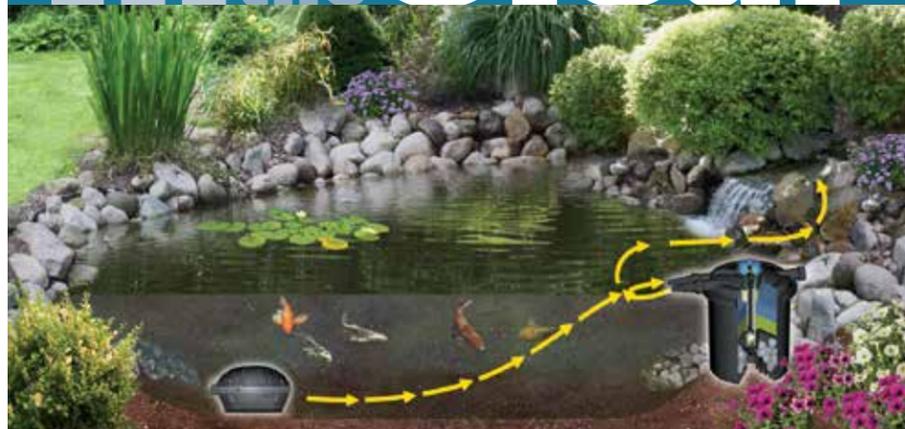
215-244-4300

email: sales@underwaterwarehouse.com

www.underwaterwarehouse.com

Advertisement for koismart.com featuring a koi wearing a graduation cap, social media icons, and text: koismart.com (561)408-2739, LARGE INVENTORY FULL WAREHOUSE, POND DESIGN TECHNICAL QUESTIONS COMPETITIVE PRICING, SAME DAY SHIPPING, West Palm Beach, FL

# In the Clear



## Eco-Clear Pond Filtration

**WHY IT WORKS SO WELL**

The Eco-Clear Pump sends the dirty pond water to the Eco-Clear pressurized filter.

The dirty water passes through multiple densities of foam filters and is cleaned of solid debris. Water then passes through bio-media for excellent biological filtration.

Filters have high-intensity UV lights that destroy algae cells, eliminating green water. Cleaned water is returned to your pond.



### Eco-Clear Kits Include:

- Eco-Clear Submersible Pond Pump
- Eco-Clear Pressurized Pond Filter with built-in UV clarifier
- Kink free tubing and clamps

**2021 Catalogs are Available!**

Call or visit [easypro.com](http://easypro.com) to request your catalogs today!

**800-448-3873 EASYPRO.COM**



**kelly billing**  
design | supply | consulting  
443.504.2345  
nelumbo22@gmail.com  
[www.waterbecomesagarden.com](http://www.waterbecomesagarden.com)

changing the way Water Becomes a Garden

even if it's helping someone think it's better to hire a professional for certain jobs.

In November 2020, one of the sandboxes was used as a film set for Charlotte's first hands-on build. Not only did this video help connect our DIY YouTube fans, but it also inspired a number of other women to buy kits from us. The main idea is to help people dream, plan and enjoy ponds and water features.

### Course Catalog

As social media has become the main access point for gaining knowledge around the world, we now have hundreds of YouTube videos to promote and document our findings here at POND college. Our staff documents lots of construction work with video, teaching moments and stock footage that we often refer back to in our teaching situations. Nowadays, live videos walking around the garden sell water features. People don't even need to leave the comfort of their homes.

Not only are we training in the sand and soil, but we also are helping the next generation of budding businesses owners. Job costing is often a frequent conversation (as most don't know where to start). This year we are starting to offer more help with spreadsheets and tracking information, which can be more daunting than working on the job site! Sometimes it's uncomfortable for people to talk about money, so we offer business planning and management training at Pc as well.

It all starts with our in-house team actively updating documents and recording the person hours on projects. This not only helps us, but it helps others in estimating accurate build times on the features that we sell. Keeping score and tracking person hours also increases productivity and efficiency in all aspects of the pond-building business.



James and I begin to select rock for our NRG Waterfall Display here at Pc.

Joe (top, left), an employee of Nice Ponds, was project managing his first solo pondless waterfall installation. We fixed up some spot lights as the light was fading. Charlotte (bottom, left) takes a picture of George, Jake and David from Brit Ponds. They installed a small pondless feature in a couple of hours.

### Final Exams

The POND college gardens are for our in-house team to showcase their work, but we also invite contractors (once we have seen their stuff in the sand) to install their own displays. Two British companies so far have taken us up on the opportunity to install their own features — Brit Ponds and Ecoscape Water Gardens.

Contractors may not have had the opportunity to fit or install some of their products, so this facility gives them that chance. We can help them mock up the installation in the sand or in the gardens.

The sandboxes are very popular with contractors who want to bring new or existing field staff to project manage and hone

their skills. Pc offers a change of environment and feedback, all in a non-pressure situation. After all, it's better to make a mistake in the sand than in a paying customer's garden.

Lots of people enjoy the chance to fit face plates, repair holes in rubber liner or work with solvent fittings. Eventually, they graduate to advanced tasks like motion calculations for negative-edge water features. Tasks of all levels of difficulty can be practiced here at POND college.

Now in 2021, our facility has grown to ½ acre, so we can accommodate much larger parties of people, with car parking and all the normal facilities. Anyone is welcome.

"If you have the time, we've got POND college!" ☞

### About the Author

From a very early age, **Mark M.J. Wilson** was fascinated by the aquatic world and knew that it would eventually become his life's work. Through his academic training and varied commercial experience, M.J. has built up a unique knowledge of aquatic design and husbandry, which, combined with his artistic flair, enables the construction of inspiring water garden designs that work in the real world.

Taking his inspiration mainly from Mother Nature, he spends all his professional life and most of his spare time in and around water. Through his academic training and diverse experience in horticulture, fish husbandry and aquatic engineering, M.J. has a wealth of experience in creating the perfect environment that will thrive in the long term.





350-gallon Rubbermaid tank system



A turtle stretches out on a polyurea-coated brick.

| **Best Practices** |

# Holiday on the Half Shell

Quarantine tank rebuild for desert pond dwellers

by **Kent Wallace**,  
Living Water Solutions, Inc.

Three months ago, I received a call from a previous client who said he needed to quarantine his fish and two turtles off-site for a year. This was unexpected, because he had just built his dream home — and his dream pond — in 2016. He had decided to build a new home and pond, but it would take about a year to complete.

years, so I started looking for another place to house his fish and turtles. After about a month of no success, I volunteered my systems, even though they were probably too small for all his fish (not to mention the two turtles).

After a couple of weeks of reconstruction, the tanks were ready to go, and we moved all the aquatic life.

### Quarantine Quarters

A good rule of thumb for all koi keepers is to have some type of quarantine setup available on short notice as a place to house new fish coming into their pond or for disease control when the situation arises. In this case, on-site quarantine would have been of no use anyway, so my tanks were the best option.

My large quarantine system is constructed using a 1,500-gallon WLim preformed tank. These are nice to have if you can get ahold of one. They are large for a preform, and shipping is an issue,

but if you can get your hands on one, they are well worth it. The tank is a 4-foot-deep kidney shape with a completely rounded bottom, making cleaning and maintenance easy. Originally, I installed a 4-inch aerated bottom drain with a wye fitting, reducing the side to 3 inches. This is connected to a 55-gallon drum settlement tank with one of my static prefilters installed in the center. The straight end of the wye has a 4-inch knife valve attached and is sealed off with a rubber Fernco cap. I have used the 4-inch outlet to experiment with different prefilters and biofilters over time, but usually it's just capped.

The biofilter is a two-tiered, 55-gallon drum shower filter with the upper basket filled with Bacti-

Twist and the lower basket filled with Cermedia MP2-C. A small skimmer is located on the left end closest to the equipment. This system is powered by a WLim Wave 1 1/15-hp pump that pulls from both the prefilter and skimmer, giving me a twice-per-hour turnover rate. For this reconstruction, I built a rear deck platform that holds the edge of the netting and gives me a place to store nets and other equipment.

### 'Hospital Tank'

The smaller tank (my "hospital tank") needed more work. This smaller system is constructed with a Rubbermaid 350-gallon stock tank. These work well for a small system and are quite common for use as a quarantine tank. At the time this system was originally built, I didn't have a 3-inch aerated bottom drain for small tanks as I do now. I used a Tetra bottom drain that connects to a 55-gallon drum with one of my static prefilter baskets located in the center, just as I did for the larger tank.



**SERIES:**  
Best Pond Practices

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

About a month later, Simmons resold the property, because apparently his family decided that Las Vegas was too hot in the summer. Whatever their reason, the residents of the pond had to be moved.

My quarantine systems hadn't been used in

**FAST TRACK YOUR CONTINUING EDUCATION HERE**

**VIRTUAL HNA EVENT**  
2 DAYS TO A BRIGHTER, MORE PROFITABLE HARDSCAPE CAREER  
January 25-26, 2022

REGISTER AT  
[ICPI.ORG/VIRTUAL-HNA](http://ICPI.ORG/VIRTUAL-HNA)

**2022 MEDIA KIT**

2022 **MEDIA KIT**  
[www.pondtrademag.com](http://www.pondtrademag.com)

**Attention advertisers!**

Secure your ad space now in the popular industry bimonthly publication written FOR and BY pond professionals.

Contact us at:  
[llgelles@pondtrademag.com](mailto:llgelles@pondtrademag.com)



**GRAND  
KOI**

**THE FINEST IMPORTED JAPANESE KOI  
FROM THE BEST BREEDERS IN THE WORLD**

**CALL : 1-844-GRANDKOI (472-6356), 1-201-245-9352.**

**WE ARE ONE OF THE LARGEST JAPANESE KOI INVENTORY  
HOLDERS IN THE UNITED STATES. TO SUPPORT HOBBYISTS  
IN USA, WE HAVE COLLABORATED WITH LEADING MANU-  
FACTURERS OF AUTOMATED FEEDERS, CERAMIC MEDIA,  
AND OTHER KOI ACCESSORIES "MADE IN JAPAN".**

INFO@GRANDKOI.COM

USA | JAPAN

WWW.GRANDKOI.COM

3751 GA-166, DOUGLASVILLE, GA 30135, UNITED STATES



Shelf (top, left) for air pumps and water quality test supplies (top, left) sit on a shelf for easy access. A heater (bottom, left) is located in turtle tank. A larger 1,500-gallon system (right) is next to the 350-gallon setup with all the equipment in the back corner.

A small external 1,200-gph Waterway pump pushes water into a 55-gallon drum up-flow biofilter filled with Bacti-Twist. Aeration is through the lower side bulkhead using a 6-inch air stone.

This tank received a similar deck to secure the netting and store equipment but also required the resealing of every connection on both filters and replacement of all the knife valve seals. I have always kept the large tank running with no fish in it, but this smaller tank sat dry for several years, causing all the seals to dry out. The one change made to the filtration was the addition of an aerated Cermedia chamber located in the top center of the biofilter run by a small Whitewater V-301 air pump from Aquatic Eco-systems.

A small shelf is mounted on the back wall between the two systems. Both air pumps for each system are located there with enough room for the master test kit and a holder I made specifically for the glass test vials while testing both systems. Having this holder separate from the kit makes testing and maintenance much more convenient.

### Climate Control

I separated the fish by size, with all the larger fish going into the 1,500-gallon system and the smaller fish going into the smaller system. The turtles needed to be kept a little warmer over the winter than the exposed tanks would allow, so I

built a smaller system out of a 150-gallon Rubbermaid stock tank and located it in the greenhouse. This system has a 2-inch bottom drain line that connects to a small prefilter made using a 55-gallon bucket. I built a short stand assembly to hold a couple of rounds of Matala matting above the inlet in the bucket. This pad set supports a small fountain pump with a 1/2-inch hose that goes up and over the edge of the tank. At the edge of the bottom of the prefilter bucket is a 1-inch bulkhead with a threaded standpipe for draining and cleaning.

To stabilize the temperature, I placed a bucket heater in the Rubbermaid tank and constructed a stainless tubular screen that surrounds it, protecting both the turtles and the tank from the heating element. The bucket heater has no temperature control to regulate it, and leaving it on all the time would boil the tank. My solution was to find a mechanical outdoor timer with 15-minute increments and adjust them accordingly. I started out at 15 minutes every hour and a half and added additional time during the night. After a couple of days, I had the temperature regulated between 62 and 68 degrees consistently, knowing I'd have to adjust it from time to time as the weather gets colder.

All these systems drain into my existing landscape drainage piping, making weekly water changes and maintenance easy and less time consuming. Having to hold all these fish and the two turtles for an entire

year makes ease of maintenance important. Even if there were only one tank, ease of maintenance should always be a priority, because human nature dictates that if it's easy, it will get done — and if it's difficult or time consuming, it won't.

Thankfully, none of the fish spawned when they were moved into fresh water — at least for now! ☺

### 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 race car 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.

**livingwatersolutions.com**  
702/845-6782



## | Business Plan |

# Have a Backup Plan

Help ensure success for your successors

by **Tom Grandy,**  
Grandy & Associates

If you are married or have children, it's highly likely you have purchased a life insurance policy. Why? If something were to happen to you, you want to be sure your family is taken care of, right?

Guess what? Your business is no different.

Nobody likes to think about it, but what if you didn't show up for work Monday morning? What if you became very sick or were seriously injured in an accident? What would happen to your company in the short run — or worse yet — in the long run, if it were to be weeks or months before you were able to come back to work? Do you have a backup plan?

### Get a Plan B

The reality is that all business owners should be in the process of preparing

for the what if, no matter their age or the size of the company. Life is full of uncertainty, and we need to be thinking of a Plan B even when there seems to be no immediate need for it.

Plan B can take several forms. One form is literally to document every area of responsibility within the company. That's right. Put it in on paper, step by step. This actually applies to all the employees. What happens if Jim, Suzie or Joe doesn't come to work tomorrow? Does anyone know what they do or how they do it? They might get sick, have an accident or simply decide to take another job.

Let me warn you ahead of time. Documenting everything that goes on in the office is a huge task and, when done correctly, can easily take a year or more. The process begins when the phone rings. Who is supposed to answer the phone? What do you want them to say? Part of the process is literally to script what should be said. What specific questions should the customer-

service representative ask the customer? Who is responsible for entering the data into your customer base? All this needs to be documented.

What about something as seemingly simple as charging a customer's credit card, for example? It sounds easy, until a new person has to do it for the first time. Who enters data into your accounting software? Is each step documented so that if Mary doesn't show up one day, Suzie can produce a check for a vendor?

### Go on Vacation

After the owner feels like all processes are fully documented, that is when the fun begins. Now it's time to take a week of vacation. Instructions to the staff are very straightforward. If they have questions while you are gone, they aren't allowed to call you. They should be able to look at the appropriate policy or procedures manual and try to figure it out. Don't answer your cellphone for the entire week.

When you return to the office, there

will likely be a few questions that were not completely answered by the manual. The process continues by updating the manual, and a few months later, guess what happens? You got it, it's time for another vacation!

This time, take two weeks. Continue the process of updating and leaving the office until the company is at a point where it can run without you. When that point comes, the company truly is ready to be sold — if that is your goal.

Documenting all areas of direct responsibility will do two things. First, it will allow someone filling in to know what to do, at least in the short run. Secondly, it will serve as great basis for a job description for the new person filling the job.

### Train Your Successor

A second mitigation technique is a combination of delegation and training your replacement. Let's face it, some day you are going to want to retire or sell the company. Having trained the next owner or general manager while you are still at the company will greatly ease that transition.

This is not a simple or short-term process. It literally will take years, so the sooner the process begins, the better

off you and the company will be. As the process moves forward, take another vacation and don't communicate with your replacement. When you return, see how things went. What needs to be tweaked? Later, take perhaps two weeks off, and eventually maybe even a month. (Gee, this is fun!) You are now beginning to enjoy the fruit of your labor. Bottom line, train your replacement so that at some point you can either fully retire or at least let go of the reins and enjoy the fruits of the company you have invested so much in.

There is another good reason to train your replacement before you leave. There likely will be some kind of a buyout arrangement with the new, fully trained owner. Sometimes it is an outright sale, but often it takes the form of the company paying the owner a salary for a specific number of years. If the new owner fails, the company goes down the tube, and your retirement plan goes up in smoke! The more successful the new owner, the more likely you are to get paid.

### Embrace Change

By the way, delegation is one of the most difficult things you will ever have to do as the owner of a business. It's especially hard, because the reality is

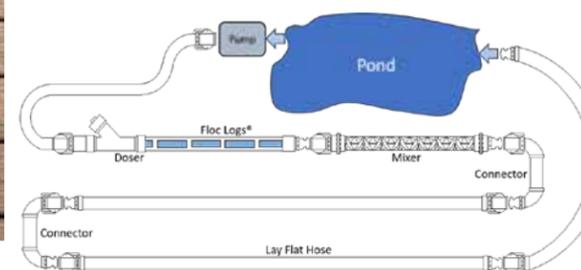
that the person to whom you delegated the tasks initially will not do them with the same efficiency you did.

When that happens, embrace change. "Different" doesn't necessarily mean poorly done; it just means the task was approached from a different direction. However, like I stated earlier, life happens. Why not try to delegate as best you can while all things are going well?

One last tip: Be sure to have a significant life insurance policy on the owner, again, just in case. If the owner were to disappear for any reason, having extra cash on hand will at least help the business's cash flow during the transition period. ☞

*Tom Grandy has more than 35 years of experience in industry and small business. He has worked as the general manager of a service company and is the founder of Grandy & Associates, a firm that holds seminars, two day workshops and one-on-one consulting for business training. Grandy & Associates also writes articles for numerous trade publications. Tom routinely presents at national and state conventions. For contractors who are serious about profitable growth, we also offer our two-day "Planning for Profit" at numerous locations across the country. Go to [www.GrandyAssociates.com](http://www.GrandyAssociates.com) or call 800/432-7963.*

## | Trade News |



### Clarify Water with Turbo Floc Treatment System

Improve water quality and clarity in your pond or lake with the Turbo Floc system, a portable water treatment system that can remove sediment and nutrients from ponds and lakes. When circulation options within a pond such as aerators or other bubblers are limited or not available, this system can be used to clarify the water. The Turbo Floc system introduces an environmentally friendly flocculant (anionic polyacrylamide) that binds to particulate material in the water, forming large agglomerates that can then be settled or removed — resulting in more than 90% turbidity and phosphorus removal in minutes. The Turbo Floc system is optimized for use with Applied Polymer Systems Floc Logs and Pond Logs — the industry's first and leading anionic polyacrylamide logs since 1997. This compact system provides rapid dosing, mixing and treatment in an easy-to-use, portable package.

For more info, contact Applied Polymer Systems at 678/494-5998. [www.siltstop.com](http://www.siltstop.com).



### K+ Advanced Pressure Filters for Ponds Using K+Media

Introducing Evolution Aqua's latest innovation in pond-filtration technology, the K+Advanced Filters. Manufactured by Evolution Aqua in the U.K., this new range of pressure filters has been specifically designed to use Evolution Aqua's own filtration media, K+Media, to deliver exceptional water clarity while being economical to run. They are available in six sizes: 15"/2,400 gallons, 18"/3,600 gallons, 20"/4,800 gallons, 24"/9,600 gallons, 30"/14,000 gallons, and 36"/24,000 gallons.

#### Key Features

- Manufactured to last using latest rotational moulding process for peace of mind
- Supplied with advanced K+Media, delivering enhanced mechanical and biological filtration
- Economical to run. The filter has been engineered to maximize pump efficiency
- Matches the color of existing Evolution Aqua filters. The 15" and 18" filters are blow-moulded, not rotationally molded.
- Easy to operate and clean, with pipework, blower and multi-port valve supplied.

#### Economical to Run

To optimize performance, there are unique double laterals inside the filter that help to improve flow through the bed of K+Media. This laminar flow coupled with the use of K+Media reduces back pressure on the circulating pump, ultimately making K+Advanced Filters one of the most economical filters to run.

#### Easy as 1-2-3

They are simple to install and can be used as a standalone filter or as part of a larger filtration system. The K+Advanced Filters are incredibly easy to clean and are supplied with K+Media, pipework, air blower and multiport valve.

For more information, contact Evolution Aqua USA, Inc. at [info@evolutionaquausa.com](mailto:info@evolutionaquausa.com) or by phone at 888/417-5837. Visit our website at [www.evolutionaquausa.com](http://www.evolutionaquausa.com).



### Ready to Make a Splash? EasyPro's 2022 Catalogs Now Available!

EasyPro Pond Products offers two specialized catalogs. The Pond & Water Feature catalog is packed with professional and DIY pond products and ProTips to make choosing and installing water features easy. In addition to EasyPro's signature line of Tranquil Décor water features, you'll also find everything you need for pond aeration, pond lighting and water treatments. Check out their new Starburst Mini Fountain for an affordable and beautiful addition to ponds. The Lake & Pond Management catalog is also available for those who maintain larger bodies of water. Check out their ever-expanding line of aeration products and water treatments to see how EasyPro's 50 years of experience can work for you!

For more information or to request a full-color catalog, call 800/448-3873 or visit [easypro.com](http://easypro.com)



### Pondemonium 2022 Dates Announced!

Aquascape Inc. is excited to announce that Pondemonium returns as a live, in-person event in 2022! Scheduled for Aug. 27 – 30, 2022, this year's theme focuses on the "Rising Tribe" of dedicated and creative pond builders from around the world. Attendees can expect to enjoy hands-on training, networking opportunities, classroom sessions, award ceremonies, good food, fun and camaraderie, and the ever-popular blow-out bash to wrap up the event.

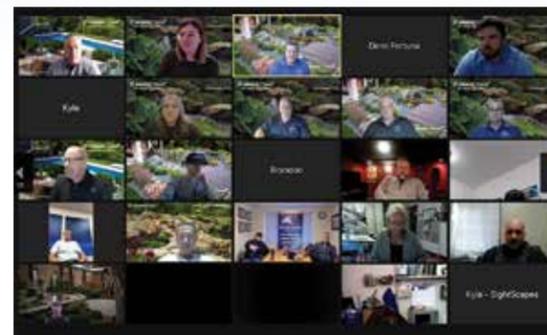
Whether you're an experienced pond builder or are just getting started on your professional water-feature journey, you'll find the inspiration and education you crave to take your business to the next level. Visit [www.pondemonium.com](http://www.pondemonium.com) for more information as it becomes available.

### 2021 Atlantic-Oase Virtual Conference Round-Up

Atlantic-Oase held its annual Professional Conference virtually again this year on Dec. 2, 2021. After the introduction by president Jeff Weemhoff, the 2021 Atlantic-OASE Virtual Conference began with a review of new products being introduced in 2022 by Demi Fortuna, Jim Chubb and Frayne McAtee, including Aura Vases and Hammered Brass Bowls in both overflowing and spillway styles. Four new Pump Vaults and a new Eco-Blox were presented, complementing the completely redesigned Eco-Rise System with higher flow capacities through a new 1-inch Diverter and a new, lower-cost Eco-Rise weight distributor/plumbing riser to handle multiple accents of practically any size with less excavation and at lower cost. Also unveiled was the OASE ProfiClear Gravity-Fed Filtration System, a suite of products including the ProfiSkim and AquaSkim skimmers, add-on Filtration Modules and high powered 12-volt pumps for safety and economy. All these products were purpose-built for Recreational Ponds, which were the subject of the next presentation. As might be expected, the exploding interest in Recreational Ponds and Natural Swimming Pools made for a lively virtual intercourse between Frayne McAtee and many of the 130-plus registered attendees.

Following the Recreational Pond chat, Jim Chubb outlined the new 2022 winter training program and schedule for those interested in introductory water-feature training courses. The Conference ended with the awards presentations. Josiah Crousore was named Atlantic-OASE Professional Contractor of the Year. Landon Malave won the President's Award, and Lloyd Lightsey gave a stirring posthumous tribute to Joe Adams the Pond Butler, the recipient of this year's Monster Award.

We want to give a huge thank you to everyone who attended the Virtual Conference this year, and we hope we can all see each other soon!



### Attend and Register for the 2022 Water Garden Expo

Pondliner Wholesale's Water Garden Expo returns to the Heart of Oklahoma Exposition Center in Shawnee, Oklahoma, March 2 – 4, 2022.

Wednesday afternoon will feature in-depth training sessions that are appropriate for experience level at the Expo Center. A happy hour will follow the completion of the sessions, with a chance to network and visit the trade show booths.

The presentation of Pond Trade's 2020 Artisans of the Year will kick off Thursday morning with 21 seminars following over the next two days. Three educational tracks will provide learning opportunities for all knowledge levels. Attendees can also visit with manufacturers exhibiting in the trade show and network with peers from across the country.

The Water Garden Expo is open to trade professionals only. Visit [www.wgexpo.com](http://www.wgexpo.com) or call 866/219-3561 to register or to receive more information.



### Matala Unveils New High-Efficiency Platform for Air Diffusers

This air diffuser platform allows you to mount air diffusers firmly at the bottom of a pond and keeps them up out of the mud. It is designed with a hollow base that can be filled with sand or gravel. Choose the number of disc diffusers to meet your installation needs.

The Matala EPDM disc diffusers are designed for industry heavy duty installation. Precision perforated I-shaped slits open when airflow is present and close when airflow is stopped, which increase the slits resist from tearing, and stay cleaner longer. These diffusers offer the lowest back pressure in the market, only adds less than 6 inches of water depth back pressure, allowing you to utilize your air pump in the most efficient way. All different model types come with a single 3/4-inch PT female threaded outlet connection. The air diffuser bases are available in four models. A 12-inch EPDM disc diffuser is also available and offers almost double the flow rate. For more information, visit [www.matalausa.com](http://www.matalausa.com).





**OASE Professional Nozzle Catalog Available Now**

Learn more about the OASE Professional Fountain Nozzles with the new digital Professional Nozzle Catalog available at [www.atlantic-oase.com](http://www.atlantic-oase.com). Professional Fountain Nozzles direct water in decorative patterns or shapes in larger fountain applications. Made of high-quality brass and stainless steel, these commercial-grade nozzles all perform well in fresh water, and select nozzles are capable of being used in non-freshwater applications such as pool and sea water. Choose from a variety of decorative nozzle patterns, such as rotating dancing nozzles (Rotating Nozzle), foaming and frothing (Cascade & Schaumsprudler Nozzles), cylindrical geysers (Geyser Nozzle) and more multi-stream nozzles to create beautiful and entertaining water features!

Atlantic-OASE  
330/274-8317  
[www.atlantic-oase.com](http://www.atlantic-oase.com)



**Blue Thumb Publishes 2022 Catalog**

Blue Thumb's 2022 wholesale catalog is now available and packed with more than 1,000 professional-grade fountains! With 164 pages of professional-grade equipment for fountains, pondless waterfalls and ponds, this year's catalog is filled with projects for you to design, install, and maintain profitably.

Blue Thumb  
888/619-3474  
<https://bluethumbponds.com/request/>

# MARKETPLACE



Pond Aeration  
**Mescan Windmills**  
Farm & Koi Pond Aeration  
PondAeration.com  
440 236-3278



**K LOUBEC KOI FARM**  
WE DELIVER MORE...  
Family owned & operated,  
3 generations of award winning  
excellence in aquaculture  
**(319) 846.2077**  
[www.kloubeckoi.com](http://www.kloubeckoi.com)



**HARDSCAPE**  
North America  
an icpi event  
**SAVE THE DATE**  
OCTOBER 19-21, 2022  
LOUISVILLE, KY · [HARDSCAPENA.COM](http://HARDSCAPENA.COM)

**Don't miss out on this Market Place advertising opportunity. See our website:**  
<http://www.pondtrademag.com/advertise-with-us/>



**Koi-Kit**  
For sparkling clear Koi pond water.  
treats 100,000 gallons  
**FREE SHIPPING!**  
**Aquacide.com/kit**  
800-328-9350  
Our 66th year  
**AQUACIDE CO.** PO Box 10748 DEPT 720, White Bear Lake, MN 55110-0748

**WGE 2022** MARCH 2ND-4TH  
**WATER GARDEN EXPO**  
[WGEXPO.COM](http://WGEXPO.COM)



www.kodamakoifarm.com  
YES WE LOVE NISHIKI KOI  
KODAMA KOI FARM  
Quality Wholesale Koi and Pond Supplies  
Contact us for a price list  
1-808-354-7031 info@kodamakoifarm.com

**NEED MARKETING HELP?**  
**pondtent**  
215.805.8257  
WE TURN YOUR DATABASE INTO DOLLARS

## Advertisers' Index

Anjon Water Garden Products .....	2
Aqua Ultraviolet .....	23
Aquacide .....	57
Aqua Niche .....	7
Aquascape, Inc. ....	16
Atlantic / Oase .....	60
Bassinger Fisheries .....	21
EasyPro Pond Products .....	30, 31
EasyPro Pond Products .....	46
Evolution Aqua USA, Inc. ....	59
Fitz's Fish Ponds, LLC .....	59
GC Tek .....	39
Grand Koi .....	50
Hardscape North America .....	49
Joe Mescan Windmill .....	56
Kloubec Koi Farm .....	24, 56
Kodama Koi Farm .....	57
Koi Smart Pond Supply .....	45
Laguna Water Gardening .....	44
Microbe-Lift .....	12
Netherland Bulb .....	22
Nitto Kohki .....	42
Patio Ponds .....	7
Polytank .....	28
Pondliner.com .....	3
Pondtent .....	26
POND Trade Magazine .....	49
ShinMaywa .....	25
Ten Mile Nursery .....	21
Underwater Warehouse .....	45
Water Becomes a Garden .....	46

Extend your national visibility -  
advertise in

**PONDTRADE**<sup>SM</sup>

Call Lora Lee Gelles 708/873-1921  
or [llgelles@pondtrademag.com](mailto:llgelles@pondtrademag.com)

FINAL THOUGHT...

Winter Wonderland



FITZ'S FISH PONDS

# Wholesale Japanese Koi Pre-order Koi for 2022 NOW!

## Wholesale Japanese Koi

Hand pick from tens of thousands of Imported Koi from the finest breeders in Japan. All sizes and varieties available



SHIP ORDERS ANYWHERE IN USA 



Contact us today:  
sales@fitzfishponds.com  
908-420-9908  
fitzfishponds.com

# EVOLUTION AQUA

INNOVATION IN WATER



Need Pressure Filters?  
We have them in stock and they are ready to ship!

NEW & IMPROVED

Redesigned for maximum efficiency performance and serviceability



## tempest

- Innovative Polishing System
- Stand-alone filter for small ponds
- Can be used in conjunction with any filtration system
- Great for retail and quarantine systems

Simple to Clean

Up to 1,320 US Gallons

Uses 7 Liters of K+ Media

## K+AdvancedFilter



Available Sizes	Max Pond Size
- 15" Diameter	- 2400 Gallons
- 18" Diameter	- 3600 Gallons
- 20" Diameter	- 4800 Gallons
- 24" Diameter	- 9600 Gallons
- 30" Diameter	- 14,500 Gallons
- 36" Diameter	- 24,000 Gallons

info@evolutionaquausa.com evolutionaquausa.com 888-417-5837

Photo courtesy of Aquascape, Inc.

Make a  
*splash*  
with Oase's Professional Nozzles



Scan the QR code to explore our new Professional Nozzle Catalog!

 **Atlantic | Oase**

[www.ATLANTIC-OASE.com](http://www.ATLANTIC-OASE.com)

