NOTE:

The following writing samples were written during my public relations and marketing internship with TRINDGROUP. During the writing process in this internship, my work would receive multiple rounds of edits and suggestions that I would apply. My superiors and I would collaborate on every piece to ensure the content was accurate, professional and fit the voice of our clients. With the guidance of my mentors, I produced written content that was posted on client websites and sent to publications.

Other pieces of writing I have done for TRINDGROUP including application guide pages, a referral program outline and new website copy could not be shared.

The samples in this pdf include:

- 5 Blogs (The images used in the published blogs are not included in the samples.)
- 1 Pitch

Transmitting Data: The Importance of Telemetry in Water Quality Monitoring and SaaS

Water quality monitoring in aqua-farming ponds, tanks and raceways is made easy by utilizing telemetry systems. These systems are vital in accessing data in real-time. Telemetry works by automatically sensing and measuring data, then remotely transmitting the collected data to a centralized location. The process allows users to supervise their pond's conditions from any location, making telemetry a convenient and efficient tool for water monitoring in real-time.

Aquasend, a division of Precision Measurement Engineering (PME), has designed the Aquasend Beacon® to sense water quality data of dissolved oxygen (DO), temperature and a total of 28 different data points in real-time. The Beacon uses telemetry systems to record data that is sent to a personalized online portal, giving instant access to farmers no matter how far away they are from their Beacon.

Benefits & Advantages of Telemetry Systems

Time Saved

When farmers and researchers do not have telemetry systems in place, they must manually collect and update their pond conditions, which costs valuable employee time, as well as sacrificing time needed to address detrimental water quality issues. With automatic and remote data collection systems, it is easy to access farm status while maintaining a flexible schedule. The time saved from traveling to pond, tank and other locations to manually observe water conditions improves overall operational efficiency while increasing aquafarm productivity by decreasing maintenance and labor costs.

Simple and Easy-To-Use Software

Telemetry permits effortless data collection for farmers connected to the centralized portal. All recorded data is stored in one place, helping farmers keep their data organized and readily available for ongoing evaluation. Recorded data is instantly transferred to the farmers' online portal, with access to their data as it becomes available online. Beacon users have the ability to customize portal settings and alerts to meet their farm's unique needs.

Long Term Savings

There are many key components to managing any aquafarm, a main focus being keeping operational expenses low. Operating costs typically include energy, feed, labor, maintenance, equipment and transportation. Without regular water quality monitoring, accomplishing a healthy and sustainable aquafarm is extremely challenging and can result in significant losses. Institute of Electrical and Electronics Engineers (IEEE) describes "smart fish farming" as maintaining cost-effective operations and sustainable development by using digital monitoring in aquaculture field locations.

Over time and with further technological advancements, aquaculture operations will see an increase in productivity and profit. Through remote monitoring software, aquafarmers will be able to quickly catch any irregularities and address the problem before it causes catastrophic damage to their aquafarm ponds and livestock. The Aquasend Beacon® adds value to aquafarms by sending alerts to help prevent fish loss, improve feed conversions, supporting healthy growth rates and reducing costs overall.

Telemetry and Software as a Service (SaaS)

Software as a Service (SaaS) is a type of software in which users can access data applications through the cloud or internet. Telemetry and SaaS go hand-in-hand as recurrent, remotely recorded data from telemetry is automatically uploaded to the cloud. This gives users instant access to their farm's water quality levels. The Beacon's online portal stores 30 days of data, per Beacon installed. The data file can hold all measurements collected by the Beacon to provide aquafarms insight to their pond's historical data and overall longevity.

Features of the Beacon Portal Include:

- Adjustable oxygen concentration alerts
- Alerts via text, email and voice message
- Stores 30 days of data per Beacon
- Ability to review 3 data points recorded by Beacon
- GPS map of Beacons on farms
- Track Beacons and data on the map

The combination of telemetry and Aquasend's Software makes the Beacon a desirable option for aquafarmers when deciding the best way to monitor their farms. Eliminate worry of unsafe or undesirable water conditions since they will be monitored regularly and uploaded to their Aquasend portal. The Aquasend Beacon® gives farmers the competitive advantage to strengthen water quality, ensure farm's livestock is healthy and increase their profitability.

To learn more about The Aquasend Beacon® and its SaaS please click these links.

To request a quote for the Beacon, click here.

TRINDGROUP Awarded PRCA Awards for Successful Client Campaigns

As a public relations agency, TRINDGROUP recognizes the value that comes from being a member of nationally accredited organizations in the public relations field. The Public Relations Council of Alabama (PRCA) is a professional organization comprised of public relations practitioners who network with each other to advance public relations and communications within all types of businesses and organizations. PRCA was founded between 1953-1956. Currently, the organization has approximately 700 members across six Alabama chapters.

PRCA Medallion Awards

PRCA hosts its annual Medallion Awards to allow members the chance to have their work recognized as well as receive feedback from fellow members to encourage improvement and learning. Work may include programs, plans, projects and campaigns.

At the 2023 Medallion Awards, TRINDGROUP received two awards. An Award of Excellence for their client, Silver Ships "Tobin" campaign and an Award of Merit for their client Operators Unlimited "Birthday Backpack" campaign.

Silver Ships "Tobin" Campaign

Silver Ships, Inc. produces high-quality aluminum workboats for military, federal, state and municipal government and commercial applications. In August 2022, Silver Ships custom-built its largest surveying vessel, Tobin for a specialized mission on the Mississippi River. At the time of Tobin's delivery, the Mississippi River was experiencing historically low depth levels, causing navigation challenges and transportation delays on the river.

Recognizing the distinctiveness of the vessel's mission and the timeliness of its delivery due to river conditions, TRINDGROUP seized the opportunity to capture the significant attention of media channels and publications in the marine boating industry. In addition to seizing industry publicity opportunities, TRINDGROUP implemented a strategy to increase media exposure of Tobin through curating branded messaging and materials in the form of press releases, blogs, image and video assets and social media content as well as pre-public relations (PR) efforts to secure notable award titles in the marine industry.

"Developing a PR strategy requires industry knowledge and understanding the technical aspects of your client's brand that sets them apart from competitors. Leveraging the timeliness of Tobin's delivery while utilizing our relationships with industry media outlets, the 8-month campaign was extremely successful and I couldn't have been happier with the outcome," says Audrey Roberts, Public Relations Manager at TRINDGROUP.

Silver Ships was awarded both WorkBoat's 10 Significant Boats of 2022 and Marine News Top Vessels of 2022. Achieving these competitive marine industry awards while reaching more than 82 million people has strengthened Silver Ships' overall brand in addition to generating customer leads.

Operators Unlimited, Inc. "Birthday Backpack" Campaign

Operators Unlimited (OU) provides wastewater treatment services to manufacturing facilities. In 2022, OU wanted to prioritize a local community service project to live out their core values. The OU team came to TRINDGROUP with a new project aiming to provide local foster children and foster parents memorable, stress-free, expense paid experiences for their birthdays. In partnership with Greenville County Foster Parent Association (GCFPA), OU and TRINDGROUP developed a program that would allow OU to sponsor three foster families each month for a family-wide day trip.

Thus the "Birthday Backpack" campaign was formed. With the help of TRINDGROUP's expertise, campaign initiative, newsletters, logo and title, website and marketing materials were developed putting OU in a position to bring awareness of Birthday Backpack applications to help families in need. The goal of this ongoing community service campaign was to bring foster families to the application form on the OU Birthday Backpack experience website, where potential participants could see all the options for the experience. As a result, each family that applied to the campaign is considered a success. Since its launch in February 2022, 24 children have had full birthday backpack experiences.

"Referencing the OU brand standards and pre-established type and color resulted in a new, playful logo and an approachable yet accessible website," says Hannah Jones, Graphic Designer at TRINDGROUP.

At the request of our client, the Birthday Backpack website is intentionally not indexed and viewable from searches. So, below we've given you a peek at the work done for this project.

Earning two awards from PRCA is significant because we enjoy showcasing our client projects and we are proud of the work that we get to do for them. To see previous awards TRINDGROUP has won, please visit our website.

How to Reduce Fouling While Using PME Data Loggers

Many researchers using Precision Measurement Engineering water quality monitoring devices will struggle with instances of fouling during their deployments. Fouling is the result of living organisms or non-living particles settling on external surfaces. Higher water temperatures during the summer season allow for more buildup, however, fouling can be a year-round issue when obtaining accurate data measurements. The buildup of organisms or particles can eventually block the sensors, resulting in inaccurate findings. PME developed effective options to combat fouling from occurring on their logging instruments.

Understanding Fouling in Freshwater and Saltwater Scenarios

Most fouling in relation to PME products is caused by living organisms growing on the sensors. The cause of fouling is the same in both freshwater and saltwater scenarios. Researchers must be aware that fouling organisms will vary based on their research location and application.

Lakes, or other freshwater locations have a wide range of significant fouling organisms. Loggers deployed in The Great Lakes may have fouling caused by zebra mussels, an invasive mollusk, whereas algae might be the problem in other lakes or bodies of fresh water. According to Dr. Mike Head, PME Founder, saltwater locations are similar in the variation of organisms, but temperature is a significant guiding factor. Higher temperatures are more appealing to fouling organisms looking for the perfect conditions to grow, meaning warmer water locations will see increased instances of fouling.

“Fouling is an issue all researchers collecting marine data need to be concerned about. While the causes of fouling can sometimes be unclear, it is not a problem that can be ignored. PME understands the importance of anti-fouling measures and is committed to helping their customers find the right products to prevent fouling,” says Dr. Mike Head.

Advancements in Anti-Fouling Technology

Numerous reviews have been conducted on fouling and its effects. A 2014 review from The Journal of Ocean Technology discusses antifouling technologies such as chemical coatings and non-toxic options. Chemical anti-fouling options can be problematic because they need to be effective without being harmful to researchers or marine ecosystems.

Robyn Gilden, Materials Manager at PME emphasizes the importance of working with engineers on creating custom parts and products. Every time PME develops a new product, Gilden looks closely at any modifications that need to be made based on case studies and customer feedback regarding fouling and works with engineers to accurately apply the modifications.

PME’s Anti-Fouling Solution

PME offers a solution to prevent fouling with the miniWIPER. The wiper is a self-contained, completely submersible, wiping device that can be used with a variety of sensors. The wiper’s function is to clear any fouling organisms or particles from the device. The concept and look of the wipers are very similar for each PME product, yet there is slight variance in the wiping action due to factors such as sensor size.

“The miniWIPER brush, like a car windshield, swipes back and forth, removing debris. Users schedule the wiping frequency based on their fouling conditions. says Gilden.

https://vimeo.com/866037142/7df66a4fdc?share=copy

PME is currently providing the miniWIPER for the miniDOT, Cyclops-7 Logger and the miniPAR Logger, all of which work to reduce the growth of various organisms on the sensor. The wiper can be programmed to wipe at various intervals and is powered from two AA Lithium batteries. A small brush rotates over the sensor to perform a complete wipe of the sensor surface, and then rests away from the sensor to allow for accurate and continuous monitoring.

Additional anti-fouling options are available for the miniDOT logger: A copper plate that fits directly on top of the sensor endcap and a copper mesh that creates a wire cage over the sensor. These anti-fouling add-ons can be used separately or together to increase wiper effectiveness and longevity.

To learn more about PME’s miniWIPER and anti-fouling options, please contact our sales team.

Protecting Aquaculture Ponds Against Winter Fish Kills

Winter is on the way and its low temperatures often threaten fish populations within aquaculture farms. As temperatures decrease, the potential for reduced dissolved oxygen production and ice formation over ponds increases which can lead to winter fish kills. Aquafarmers must be aware of the contributing factors to properly assess their farm's water conditions and livestock for a successful transition into the cold, winter months.

Causes of Fish Population Loss in Winter or Winter Kills

There are many elements that contribute to fish kills. The focus lies on dissolved oxygen (DO) levels and temperature, typically DO levels and temperature will decrease during the winter. These contributors can change very quickly, so it is essential aquafarms monitor their pond's water quality to ensure ideal water conditions for their fish to survive the winter months.

Understanding the causes of winter fish kills and preventative measures can make a significant difference in the number of occurrences during the colder season.

Decreased Dissolved Oxygen Levels

One of the most common causes of fish kills is suffocation due to the lack of dissolved oxygen. Fish take in oxygen through their gills rather than breathing in air. A common sign of a lack of oxygen in the water is fish trying to intake air at the water's surface, usually in the early morning hours. Aquafarmers should consider their region's DO water trends as the seasons change to effectively monitor their livestock.

Large contributors to DO production in water are aquatic plants and algae. Unfortunately, aquatic plant growth will be reduced due to the colder water. This means that photosynthesis in aquatic plants will occur less frequently. During photosynthesis, plants consume carbon dioxide and release oxygen, therefore resulting in less oxygen produced as temperatures drop.

It is important to note, when oxygen production is low, it does not mean fish kills are definite. Oxygen can be replenished from the surface through diffusion from the atmosphere as well as limited production from photosynthesis. However, this will become a more concerning problem if ice and snow form on the ponds because they will block the sun from reaching aquatic foliage and gas exchanges will occur less often.

Aeration systems are a great solution that farmers can utilize to keep oxygen exchanges constant. This process will circulate and aerate water that lacks oxygen and is achieved by having open waters. Commercial aerators are also an option, though this is more commonly used in the summer. During winter months, aeration systems are only needed to minimize ice formation on ponds.

Temperature Drops

Dropping temperatures are the main cause of infrequent plant growth, ice formation and stress of fish during winter months. Sunlight can still reach the water when a layer of ice covers the pond, but the real problem arises when snow lies on top of the ice and prevents sunlight from getting through.

One way farmers solve this issue is to remove 30 to 50% of snow from iced-over ponds by shoveling, snow-blowing, etc. According to The Ausable River Association, clear ice should be four inches thick to safely walk on it.

Another way to alleviate the stressors caused by snow cover is to drill holes into the ice, permitting gas exchanges and oxygen replenishment through absorption from photosynthesis or the atmosphere. If farmers create holes in the ice, snow on the pond's icy surface is not as large of a concern.

Evaluate Winter Water Conditions in Real-Time with Aquasend Beacon®

Aquaculture farmers typically run daily water assessments to manage their pond's water quality. They can be expensive, but they are essential in keeping fish populations healthy, especially during the winter.

Through remote monitoring software, the Aquasend Beacon® will continuously monitor dissolved oxygen and temperature levels in water, alerting farmers of any irregularities as soon as they occur. Farmers will be able to solve problems quickly and prevent fish kills with the Beacon, as the alerts will be sent through text, email and voice message. Through the Beacon's on-line portal, farmers can then access their farm's water quality levels and address any concerns.

Disclaimer If a customer is utilizing a Beacon and their farm experiences an unexpected arctic blast resulting in ice or snow accumulation, it is recommended that they either remove the Beacon or monitor the Beacon via the portal and implement a secondary monitoring protocol.

To learn more about the Aquasend Beacon®, click here.

To request a quote for the Beacon, click here.

TRINDGROUP WELCOMES CAROLINE TREBINO AS PUBLIC RELATIONS AND MARKETING INTERN

TRINDGROUP is excited to announce the recent addition of Caroline Trebino. Caroline joins us as a Public Relations and Marketing Intern and is set to graduate in May 2024 with a Bachelor of Arts in Public Relations and a minor in Business from Auburn University. During her internship, Caroline will have the opportunity to think creatively, write content such as blogs and press releases, analyze data through Google Analytics and learn from an experienced team of industry professionals.

Caroline began her academic career as a marketing major. As her freshman year came to an end, Caroline started to become uncertain about a future in marketing. She quickly realized how much she enjoyed writing and the versatility of public relations as well as the wide variety of industries to work in. After coming to this realization, Caroline decided to make the change and pursue a degree in public relations.

“Every company needs public relations, so the possibilities are endless. I am looking forward to gaining industry experience and learning more about agency life. As I join TRINDGROUP, I am excited to further my understanding of the many different areas of public relations and marketing” said Caroline.

Caroline is currently a member of The Oaks Agency, Auburn University’s student-run public relations firm and has overseen earned media opportunities for her clients for the past year. This summer, Caroline spent her time working in public relations for an agency focused on the healthcare industry. As she transitions from working with healthcare clients to industrial-focused clients, Caroline is ready to challenge herself at TRINDGROUP and is eager to learn about public relations and marketing strategies and how they are applied in various industries.

Originally from the small town of Rumson, New Jersey, Caroline spends her free time enjoying the beach with friends and family. Her favorite way to relax is sitting by the water while reading a good book. Her favorite book is “The Nightingale” by Kristen Hannah.

Although Caroline has only been at TRINDGROUP for a few weeks, she is off to a great start and has proven her strong work ethic. We are thrilled to have her work with the TRINDGROUP team this semester.

Fish Farmer's November Issue Feature: Fish Health and Welfare

Aquasend® Pitch: The Aquasend Beacon®

Email

Hi _____,

I hope you are doing well. My name is Audrey [redacted] and I am excited to introduce my client Aquasend®. Aquasend is committed to helping aquafarmers efficiently and affordably manage farm production through usage of continuous water quality monitoring technology.

Maintaining correct oxygen levels and temperatures is crucial in sustaining successful fish health. The Aquasend Beacon® uses real-time data monitoring, or telemetry systems to serve as a remote data collection device for aqua farms. The Beacon is anti-fouling, solar-powered and equipped to handle the most intense weather or farming conditions.

Telemetry permits effortless data collection and monitoring for farmers by connecting to a customizable centralized portal, allowing farmers to set alerts of any unsafe water conditions based on their farm's unique needs. The Aquasend Beacon® adds value to aqua farms by sending alerts to help prevent fish loss, improve feed conversions and support healthy growth leading to increased productivity and profitability.

As Fish Health and Welfare is a common topic featured in Fish Farmer, I believe featuring the Aquasend Beacon® would be valuable to your readers, informing them about the benefits of the Beacon and its telemetry software to monitor fish health. I have included product images and would be happy to send additional information or material featuring Aquasend® water monitoring products.

Please let me know if you are interested in speaking to Kristin [redacted], Aquasend CEO or a member of the Aquasend team about The Beacon.

Thanks,
Audrey