

summer 2016

OCEAN ARTISTS SOCIETY

IMAGINATION AND ART FOR A HEALTHY PLANET



FRESH WATER



OCEAN ARTISTS SOCIETY™

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Welcome



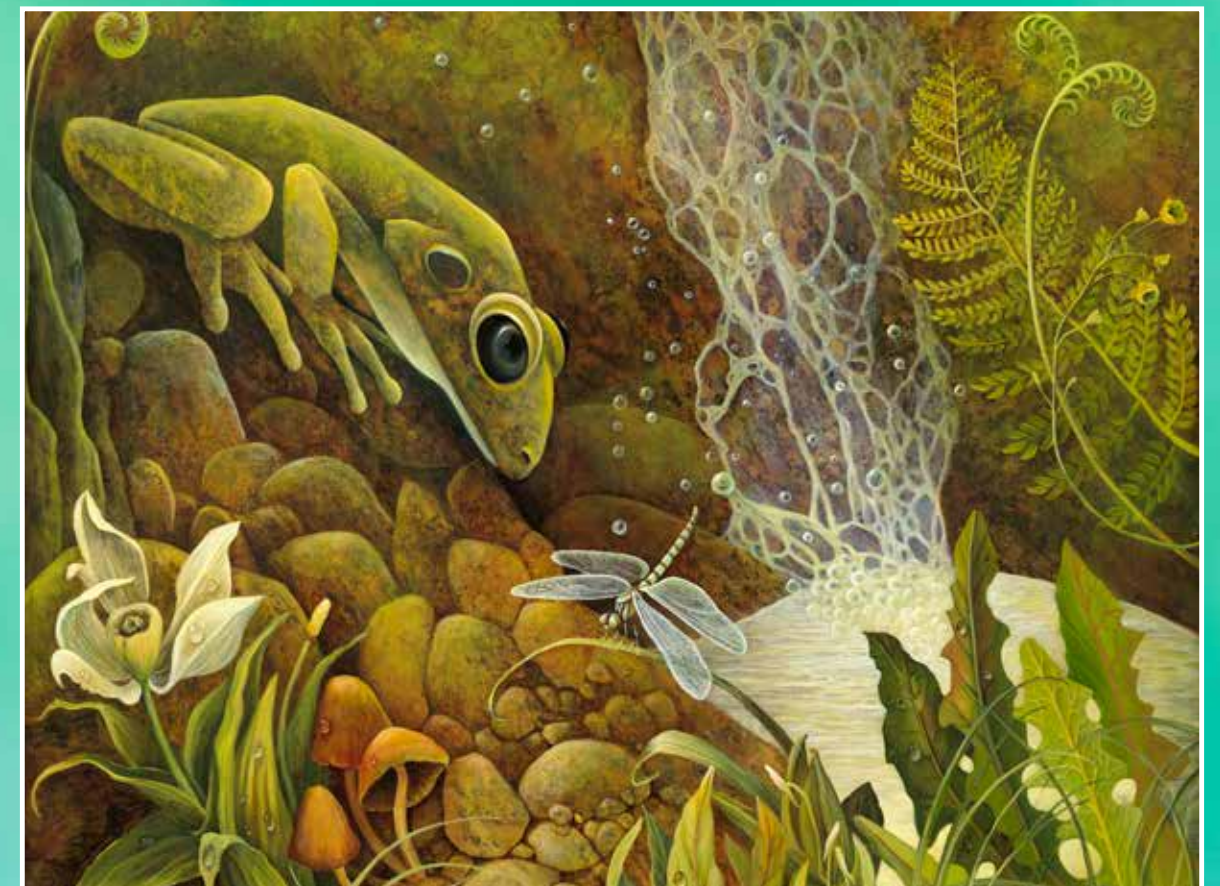
“All life on planet Earth begins with water ... and nothing can live long without it. From the rain forests to the oceans, fresh water is created by cloud formations which eventually create rain for our entire planet. When we pollute our lakes, streams, ponds, and other water sources, we pollute the Earth’s greatest body of water, our ocean, because all water eventually leads back to the sea. So it is the responsibility of all of us to take care of our most valuable resource ... the resource that literally give us life itself, our freshwater”

— Gloria Clifford

In this issue of the Ocean Artists Society magazine we turn our attention away from the ocean briefly to look at the current state and future of our freshwater habitats. Many of us know that three quarters of the planet is covered in water. Most of that water – about 97 percent – is salt water. Of the rest, two percent is locked away in the polar icecaps, glaciers, and underground aquifers, leaving only a small amount of fresh water available to us in lakes, rivers, and streams. We may look at famous bodies of water like the Mississippi River, the Amazon, and the Great Lakes and see abundance. But we are entering a period of time when the demands on our freshwater systems are having a dramatic effect on the people, plants, and animals that depend on them. Drought, overuse, and pollution from runoff are all making their effects known. From an ocean artist’s perspective, our ability to communicate the beauty and vitality of these systems is an important part of the message of conservation. Our magazine is a powerful example of the ways our members are reaching out to communities. I also encourage you to see our companion film featuring the perspectives of young people on many of the issues affecting our aquatic habitats and freshwater mammals, such as the manatee, that are under constant pressure. On behalf of the Ocean Artists Society and our efforts to inspire people around the world to preserve all our aquatic habitats, we thank you for taking this journey with us.

WYLAND

— Wyland
Co-Founder, Ocean Artists Society
Summer 2016



PAINTING BY: OLGA SUSLOVA



Could anything be as simple, yet as misunderstood as water? It's plentiful. It's self-replenishing. It covers 70 percent of our planet, and it is essential to sustaining life. To most people, the continual supply of fresh water seems as inevitable as the sun rising and setting. But, with changing climate and growing populations, we could be looking at a very different future of water availability than the one our grandparents imagined.

With more people on the planet, some scientists foresee a time when fresh water is being used faster than it can replenish itself. Although water use in the United States has leveled off, water consumption around the world has increased steadily, with most of the water we use going toward power generation and irrigation. These uses have a big impact not only on where we'll get our drinking water, food, and energy, but also on the natural ecosystems that depend on fresh water. For six million years, powerful rivers like the Colorado charged thousands of miles over mountains and

deserts before emptying into lush wetlands. Now, after meeting the needs for agriculture, industry and public use in seven states, the Colorado rarely reaches its delta. The dewatering of the delta has wiped away the rich diversity of wildlife that once depended on the delta ecosystem. Other rivers like the Ganges and the Nile are equally over tapped, while still others serve as endpoints for polluted runoff collected on their journey.

As if that weren't enough, climate change has dramatically altered when, where and how we'll get the water we currently use in the form of intensified droughts and changes in rain, snow, and runoff patterns. There is certainly a case to be made that managing our freshwater systems is important to our survival, but the often overlooked side to sustaining these systems is the role that freshwater plays in support of the world's biodiversity. More than 10 percent of all known animals and 50 percent of all known fish species depend on healthy plentiful supplies of fresh water, but these systems are endangered due to human development, pollution, and climate change. Water may seem



to be everywhere around us, but as artists who work tirelessly to capture the beauty of our water planet, there should be no misunderstanding that the future of this valuable resource and the ecosystems it nourishes is anything but guaranteed.

— Steve Creech



HOLDING BACK THE BLOOMS



Most people associate the words “nutrient rich” with good things. But what works for breakfast cereals and baby food doesn’t necessarily bode well for healthy lakes and coastlines. In fact, experts warn that growing problems associated with algae blooms – toxic clouds of blue-green algae in our waterways and near our beaches – may become more prevalent as climate warms. These goopy clouds of muck are most often the result of chemical fertilizers from farms entering streams, and then draining into successively larger bodies of water. As seasonal temperatures rise, the dissolved nutrients accelerate the growth of algae leading to massive die-offs that suck the oxygen from the water. This process results in freshwater and saltwater dead zones that cannot support life. Some of the most well known dead zones occur annually in Lake Erie, the Chesapeake Bay, and the Baltic Sea where they are on the receiving end of tremendous amounts of nutrient runoff. And while algae blooms and their corresponding die-offs have always occurred in nature, experts believe rising global temperatures will make these events more common. The key is in trying to reverse years of bad habits. As of now the solutions to climate change remain elusive, but few people disagree that reducing pollution and managing the excess runoff from our farms can go a long way to ensure the future health of our waterways.

Shrinking the “zone”

Each year heavy rains and high nutrient runoff into the Gulf of Mexico lead to low-oxygen areas known as dead zones that are unable to support most of the marine life in the deeper waters. These conditions threaten seafood production, recreation, and marine life. In recent years, dead zones in the gulf have increased in duration and frequency due to changing climate, development, loss of wetlands and an excess of fertilizers that funnel into the Mississippi River Delta region.

In 2014, scientists compared the annual dead zone to a landmass the size of the state of Connecticut. The process is simple. First, algae that have been stimulated into high production from the increase in nutrients eventually die. Then, as the dead cells sink to the bottom of the water, they are consumed by bacteria. This process of decomposition consumes the oxygen needed to sustain animal life. That’s bad news for the commercial fishing industry that powers the regional economy. But it’s even worse for an already stressed ecosystem.

Managing this stress and reducing the impacts of these dead zones will require a much broader understanding of the complex web of factors that lead to these conditions. Modifying farm practices, restoring wetlands, and tighter controls on discharge into the Mississippi River watershed will take enormous political will and consumer buy in. But in the end, if we don’t make these changes soon, the beautiful waters of the gulf that we see from above will be little more than an empty wasteland below.

— Steve Creech



Manatees: A Fight for Survival



by Angela Smith

As manatees still struggle for survival in Florida the fact that their numbers have risen seems like they are on the road to recovery, yet scientists and conservationists warn that manatee numbers could fall drastically with just one cold snap, putting them at risk of extinction all over again. Manatees are slow moving animals and much of their time is spent resting and eating. They can consume up to 15 percent of their body weight in vegetation daily and are mammals who must surface to breathe air. They are an iconic and beloved Florida symbol and have what I call a “panda-effect” on people. That is the sweet, cuteness factor and the “I just want to hug and help that creature effect” that they elicit from their human advocates.

This year, the U.S. Fish & Wildlife Service decided to downlist manatees from endangered to threatened status under the Endangered Species Act. What may sound like good news met with heated debate from scientists, conservationists and concerned citizens who did not agree with the reclassification. A number of us started to raise awareness for why reclassifying the manatee was a terrible idea. Before you knew it, thousands of people from all over the world made their voices heard to FWS and are all hoping for a ruling in early 2017 to keep the manatee listed as endangered.

Scientists and conservationists argue that U.S. Fish & Wildlife Service is basing the decision to reclassify on an old computer model which counted manatees but didn't take into account a number of recent mass deaths from cold snaps and toxic

PHOTO BY: ANGELA SMITH



PHOTOS BY: ANGELA SMITH

red tide to name a few causes. We have not taken away the dangers that exist to manatees so therefore a reclassification does not make sense, since the governing regulations for the Endangered Species Act state that foreseeable threats to the animal must be diminished or under control. Threats to manatees include bad water quality, reduced spring flows, watercraft injury and a pending loss of artificial warm water habitat. Although manatee numbers have risen the threats remain. Scientists also know that manatees show a low genetic diversity, since their numbers are still only around a thousand individuals.

We also fear that a downlisting would lead to an easing of restrictions on boating and other protections that helped the species rebound. This fear is already starting to manifest as groups lobby to ease water speed limits knowing the manatee downlisting could happen soon. To assist with the cause, I made a trek to Crystal River, FL to help raise awareness for this loveable marine mammal and to see the Kings Bay manatee wintering population for myself.

Early in the morning under permit, I snorkeled into Three Sisters Springs which is one of around thirty springs fed by Crystal River. I found many manatees finding shelter from the cold snap of recent days. Conservation groups keep tight tabs on the number of manatees and only allow people to visit the area when there are not too many manatees in the springs. Personally, I am on the fence about invading the space of these beloved animals seeking shelter, but decided to brave the cold temperatures in order to raise



awareness for our plight about their listing. The springs were a wonderland of manatee behavior: there were large manatees using the underwater roots as scratching posts, and manatees sleeping on the bottom in a funny looking face down posture, their algae covered backs creating complete ecosystems for the freshwater fish that coexist with them in the springs.

Many manatees were badly injured from boat strikes, their paddle tails mangled. Others had deep, fresh propeller marks across their backs. Mothers were nursing their young from under their front flipper, and the babies were coming up to see if I was some odd looking thinner manatee. Some getting so close you could hear their squeaks and see the long sensitive hairs that cover their bodies. Touching manatees is not allowed and so I remained completely motionless as they seemed to sniff around almost wanting attention. One calf stayed with me for an hour as we just watched each other. Eventually he looked straight into my eyes and gave a number of squeaks as if to say, "Aren't you going to DO something? I want to play!"

Scientists were in the area that day and I saw a baby manatee calf with a male symbol mark on his back, since he had just been counted. I thought how sad it was that there are so few of his kind left he had to be counted in the first place. Manatees are slow to reproduce and are not sexually mature until five years old. Only one calf is born every two to five years and their gestation period is about a year. So this little guy would be under his mother's care for one or two years.

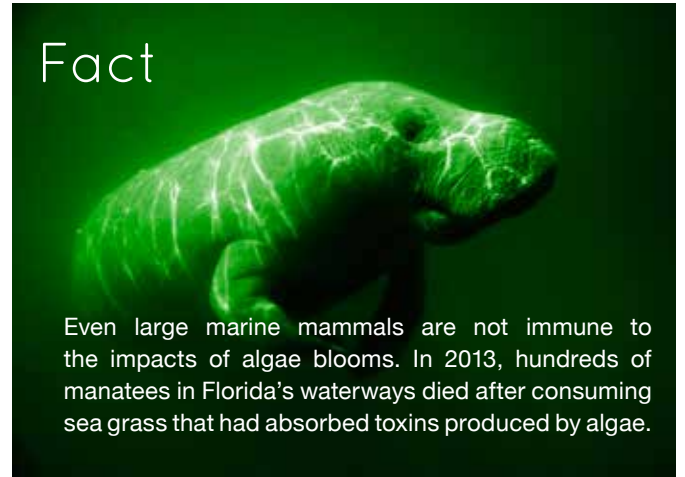


PHOTO BY: ANGELA SMITH

Whether it be more hotel construction, speeding boats for a Sunday fun afternoon or creating algae blooms that kill off manatees by using toxic fertilizers on their near perfect yards, humans seem to take for granted that "having everything" isn't as important as being a good steward of this planet. If I could put those same people face-to-face with that squeaking, adorable baby manatee ... I'm sure their heart would melt.

Science, conservation, grassroots efforts, and a bit of the "panda-effect" could help keep this docile and loveable species around for future generations. Most importantly, we must remain diligent in reducing the impacts that cause manatee death like watercraft collisions, habitat loss, litter, hazardous flood gates, canal locks, and water pollution. Manatees depend on us for survival. Let's be sure to make solid plans for their recovery!

Fact



Even large marine mammals are not immune to the impacts of algae blooms. In 2013, hundreds of manatees in Florida's waterways died after consuming sea grass that had absorbed toxins produced by algae.

PHOTO BY: WYLAND



OAS MEMBERS INVITED TO DEMA SHOW, LAS VEGAS

Marine life artists, sculptors, painters, photographers and filmmakers are invited to share their work as part of the Ocean Artists Society Art Exhibition, Nov. 16-19, at the 2016 DEMA Show at the Las Vegas Convention Center. The exhibit is the premier opportunity for leading ocean artists around the world to spotlight their efforts to raise awareness about the beauty of our planet's marine habitats. For more than a decade, top artists representing millions of ocean enthusiasts, including Wyland, David Doubilet, Ernie Brooks, Richard Ellis, Eric Chang, Stan Waterman, and Howard and Michele Hall, as well as co-founders Guy Harvey and Bob Talbot, have led the field of people who have used their art to engage and inspire people throughout the world to a greater awareness of the need to protect and preserve our global natural resources. "Art is a powerful way to inspire and educate people about the problems of the sea," said internationally renowned marine life artist Wyland. "I believe this distinguished group of artists will have a profound impact in the next century and inspire a whole generation to care more about our ocean." For questions about the show, please email OAS@oceanartistsociety.org.



OCEAN ARTISTS PROUDLY SUPPORT THE WYLAND WORLD WATER PLEDGE

Today's water crisis touches virtually every person on earth. The fact is we need to conserve, protect, and respect our precious water resources to ensure the highest possible quality of life -- no matter who we are and no matter where we live. That's why the Ocean Artists Society proudly supports the Wyland World Water Pledge, a 10-year outreach project to inspire every person across the face of the globe to take action to ensure clean water and a healthy ocean for generations to come. Building on the legacy of the UN Water for Life Decade 2005-2015, the Wyland World Water Pledge will encourage people from every country, city, and village to save water, save energy, save money -- and save our planet. We hope you and everyone you know will join us on this landmark journey. To get started, take one minute to learn how you can conserve water

and make a simple water pledge at
wylandworldwaterpledge.com



DEEP
DOWN
YOU
WANT
THE
BEST



SCUBAPRO

