

# the Outlet



Winter 2012

## A FEW WORDS FROM THE PRESIDENT

### President's Message

By David Jarvis

Greetings, I hope *The Outlet* finds all of you and well and recovered from enjoying the holidays. The New Year is here and it is time for another round of resolutions. I wish the best of luck to those that are trying to make a positive change in their lives.

A big subject on most everyone's mind is the AZFA's tax-exempt non profit status. Mike Patera, our Treasurer is working on the paperwork and it is almost complete. I hope that by the time you are reading this, the application has been filed and we are waiting on a response from the Internal Revenue Service. As soon as I have more information I will share it with you.

John Kanzia and his Site Selection Committee are trying to finalize a commitment for the 2013 conference. If you have an interest in hosting a future conference at your institution, even if it might be years away or if you would like to investigate the possibility, please contact John at [jokanzia@brookfieldzoo.org](mailto:jokanzia@brookfieldzoo.org) and he will answer any questions you might have.

I hope everyone remembered to request some budget money to attend this year's conference in Cincinnati. I'm sure that Mark Fisher and Grace Rettig are having a great time pulling it together. The Program and Education Committee will begin our regular meetings in January with the host facility to put together another

exceptional agenda. This is the first official call for papers and presentations. We, on the committee, work diligently to put together the best program available and it is important to get as much in place as early as possible.

Don't be shy; if you have something that you can offer let us know. Whether it is a project, a success or a failure (we learn from these too), or a skill, we would love to include you in the program.



The mid-year business meeting will be held at the St. Louis Zoo on March 26th and 27th. The mid-year meeting is when the Officers, Board, and Committee Chairs discuss and make decisions about AZFA business. A couple of things on the agenda are our tax-exempt status, an insurance review, and by-laws change submissions. We do not pass by-law changes but discuss submissions and determine whether they need to be presented to the membership for a vote. This meeting is open to any members that may wish to attend. I'll let you know that this is not a conference; these are business meetings to work for the betterment of the AZFA. I know some of you have considered becoming more involved in the governing of the AZFA. If you are, we would enjoy you attending to see how we manage AZFA business.

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# President's Message

By David Jarvis

*(Continued from front page)*

Over the two days we schedule about 12 hours of meetings. We try to tour the hosting facility if time allows but let me stress again that this is a business meeting. Our host facility gives us the space to meet and their hospitality. All expenses are the responsibility of the attendee. If you would like to attend, please let me know as soon as possible as we will be committing to hotel and meeting space soon. You can e-mail me at [jarvis@stlzoo.org](mailto:jarvis@stlzoo.org) even if to just express interest and have a discussion.

In January of 2011 we began offering an electronic version of The Outlet on our website. Many of our members receive it this way which is excellent. We are committed to continuing hard copy mailers to our members that need it but I am asking you to reevaluate the way you receive it and consider switching to the electronic version. Hard copies cost approximately \$4.00 to produce and mail and we have 95 members receiving it this way. Additionally, please consider the "green" benefits of reducing this number. If you would like to make the switch please contact me and you will be added to the quarterly e-mail which links you to the newsletter on-line.

I would like to remind everyone that if the opportunity arises to help out a fellow AZFA member, please do. Here at the St. Louis Zoo, we recently hosted two Calgary Zoo personnel, via AZFA member Selby Fish, to learn from our staff about our penguin life support system. They are bringing a similar exhibit on line with similar equipment, Selby asked for some insight, and we were able to accommodate.

In closing, I'd like to wish the best to the membership and thank you all again for the opportunity to serve as your President.

## Aquarium & Zoo Facilities Association

### Purpose

To foster and cultivate the business and educational relations of the members through meetings, reports, publications, discussions and seminars, and various communications media; to engender cooperation among the construction and maintenance staffs of zoos, parks, aquariums, and similar organizations.

### Mission Statement

The Aquarium and Zoo Facilities Association is dedicated to increasing our understanding and appreciation of the inherent worth of all life forms.

Toward that objective, we commit our combined efforts and influence in conserving all plants, animals, and natural resources while educating others as to their infinite limits and intrinsic values.

# AQUARIUM & ZOO



# FACILITIES ASSOCIATION

# Purifying Treated Waste Water in an Urban Environment

By Chaim Dannenberg

In the last two years, the Tisch Family Zoological Gardens in Jerusalem – the Biblical Zoo has established itself as a leader in “green” issues by its practical actions and by educational and informational activities exploiting the fact that the zoo draws over 700,000 visitors every year and is the number one tourist spot in Israel.

In 2011, the Jerusalem Zoo completed a treatment facility which purifies waste water for gardening purposes. After a long process, this facility received a coveted license which meets all the stringent demands of the Israeli Health Ministry.

The Zoo is situated on 100 acres and keeping the area verdant in the heart of the city, in spite of declining rainfall is a significant challenge for the Zoo’s management. The many dry spells, which occur in the Jerusalem area, require that

the facility be used even in winter months (rainfall averages about 300 mm in the winter).

Every day the Zoo uses 53,000 gallons of purified waste water for gardening which is 14 million gallons a season (9 months of the year). Gardening using purified waste water was one of the important tasks set out by the Zoo’s “green team” with a view of coping with the water crisis, saving fresh water, and maintaining the uniqueness of a well-kept, green zoo.

Purification of waste water was first established at the Zoo in 1993, with a view of saving water. Use of the facility was stopped after a number of seasons because of Israeli Health Ministry demands, the high operational costs, and the refusal of the municipality to participate in the costs of water production.

In view of the water status in Israel and the emphasis on “green” issues, the Zoo’s management decided, two years ago, to invest an additional \$90,000 in order to get the facility up to the high standards of the Health Ministry.

This is the first facility in an urban environment which has earned a license and meets all the stringent demands of the Health Ministry. Our facility receives its water from the main waste water pipeline of Jerusalem.

Additionally, the Zoo recently received a permit from the planning authorities in the municipality to set up a solar station to generate electricity which is situated directly above the water purification facility. When you look at the picture, the solar panels you see are located above ground exactly at the point where the purification system is found underground.



# Membership Committee

By Stan Chapin

The new year is upon us and it is time to renew your AZFA membership for 2012. I encourage you to not hesitate and renew your membership while it is fresh in your mind. If you require approval from your department head or director, ask for it and be prepared to tell them why you want to retain your AZFA membership.

The benefits of AZFA membership are many:

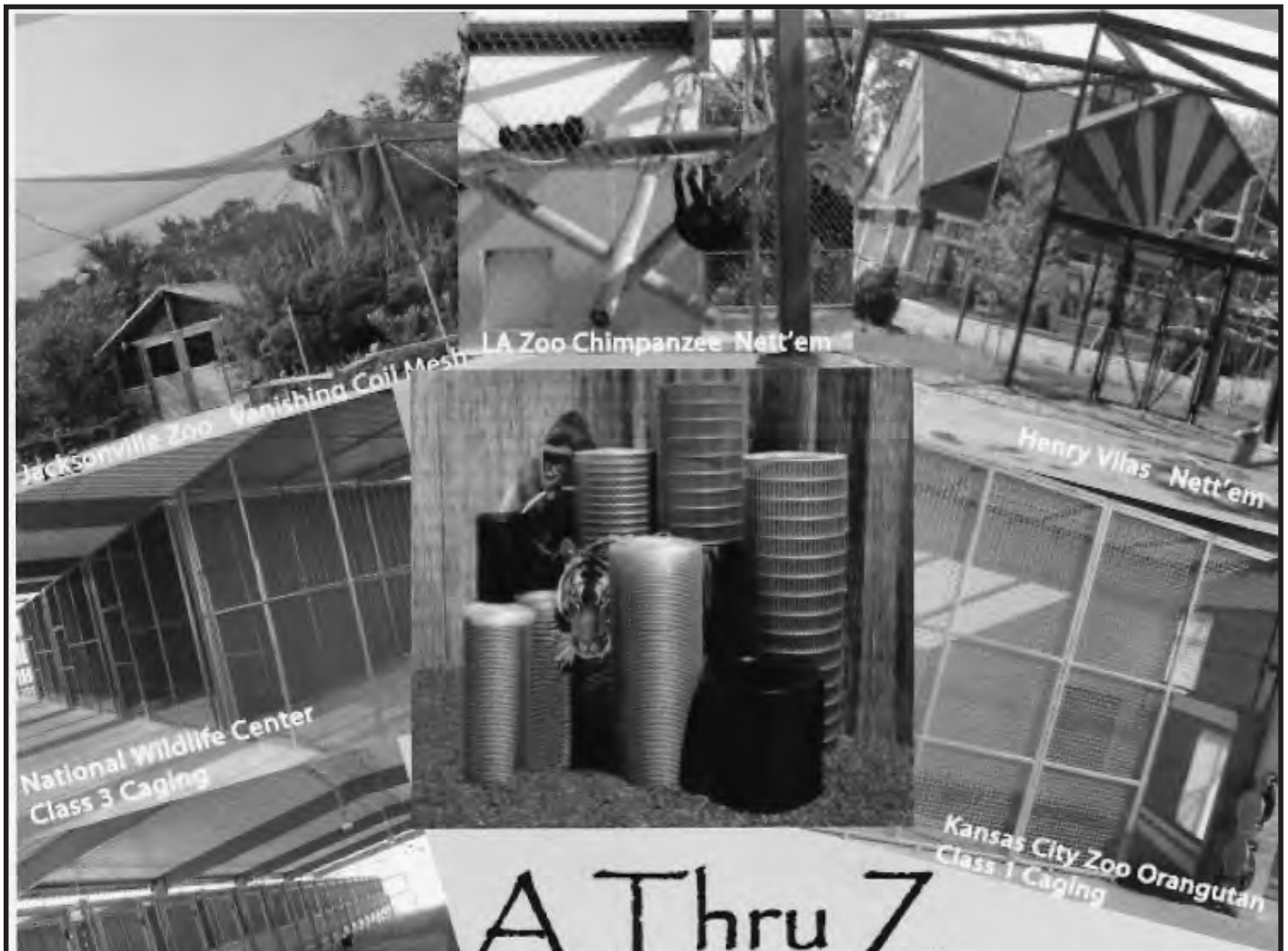
- A membership list that identifies your professional peers from whom you can gain valuable insight with a simple phone call.
- Articles published in the quarterly newsletter on topics of interest to anyone who works in our environment.
- The AZFA website where you can search a list of vendors that support the special needs we encounter in our small community.
- A forum on the web site where you can post questions on issues you are trying to resolve and find out how other operations managers or trade professionals have eliminated a situation that may be similar to yours.

I'm sure you can come up with other reasons yourself for being a member of this wonderful organization. Share these with your director, manager, and peers. Please remember that the AZFA was

created to provide support to professionals like ourselves that work at aquariums and zoos.

I would also like to encourage all budget managers to add a line item cost for professional organization membership in the AZFA when you submit your budget to your director. You may not be able to have every member of your operations/maintenance team join but make the effort to find the funds for 2-3 of your best people. Reward them for their hard work by allowing them to join the professional organization that was created to support their needs. I would encourage you and your organization to join as well. Professional/Individual memberships are just \$25. Organizational memberships are only \$100. I look forward to having you and your organization continue as members of the AZFA.





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# River Giants Project Update

BY RODNEY FULLER

The Tennessee Aquarium is now in full swing into the renovation of our original Gulf of Mexico Exhibit located in our River Journey Building. This 88,000 gallon exhibit changes from saltwater to freshwater, and the theme will focus on giant fishes from around the world that live in rivers. Many of the fish that were removed found new homes at other facilities and were part of the original collection which has been on exhibit for almost 20 years. Others will be moved to our Ocean Journey Gulf Exhibit. This was quite an accomplishment for our husbandry team.

With some visible evidence of tank leakage from below, we decided to take the tank down to the original concrete shell. This involves removing all of the tank components including; gravel bottom, Life Support System piping laterals, rock work and décor, and tank waterproofing. The rock work demolition and waterproofing should be a thing of the past while you are reading this article. The rock work which has been under water for 20 years has been a real challenge to get out of the tank. As most of you know slowing down the curing process of concrete makes it incredibly hard. Also the heavy content of cement in most rock work mixes adds to the density. In short it's amazing how



difficult this stuff is to bust up. In fact when you talk to most of the installers of rock work they do not want you to call them when you want it taken out, especially if it has been underwater for an extended period. Be forewarned if it has been underwater for a long period of time it will be the hardest stuff you've ever dealt with.

Non-explosive cracking agents do help. One product that we have used is "The Cracker" by Adhesives Technology Corpo-



ration (1-800-892-1880). "The Cracker" is supplied in powder form and must be mixed with a specific quantity of water. This mixture is then filled into holes which are predrilled in the material to be cracked. "The Cracker" develops an extremely high expansion pressure which increases to an extent that any hard stone or reinforced concrete is broken. It usually takes 24 hours to work but this can be done while workers are off shift. Of course if you have the necessary accessibility, heavy equipment

can make much more progress than manual labor but when you have a vertical structure like ours your options are sometimes limited to miniature electric excavators or as many jack hammers as you can stand.

Our next step will be to grind out the existing viewing window rebate waterproofing and install epoxy waterproofing and DOW 795 sealant. We are not removing our 2 large pieces of acrylic so we only have to work on the wet side of these panels. We have removed one curved piece of acrylic since it has leaked from time to time so the dry and wet side of this panel will be reworked. This is scheduled to be completed before the end of the year, a perfect time to start the 21 day cure time.

Application of new Aquafin waterproofing will come next followed by water testing and décor installation. As this work is moving forward in the tank we are taking the opportunity to upgrade some of our Life Support System components. New valves and actuators, pumps refurbished, filter vessel repairs, Variable Frequency Drives for the filter pumps, along with ozone system upgrades are just a few of the improvements underway.

Much of this work is being performed by our own Construction and Maintenance staff. We are very fortunate to have the expertise in house that allows us to do this specialty work. The project completion is set for the end of April 2012.

# Cincinnati Save the Date!

By Grace Rettig

This year October 6th - 11th the Cincinnati Zoo & Botanical Garden, "The Greenest Zoo in America", will be hosting the AZFA Conference. With the Cincinnati Zoo's very own Mark Fisher, Senior Director of Facilities, Planning & Sustainability, also known as the "guru of green" you can count on going green/sustainability being a hot topic for the educational sessions. Eight hundred of our parking spaces are covered with the largest public assessable solar array in the country and we did it with no upfront money.

This year we will not only have the usual ice breaker, vendor times, education programs, training, banquet, awards, and silent auction, but also the first annual AZFA Cornhole Tournament to raise funds for conservation complete with snazzy awards for the winning team.

Cornhole is a game that was first documented on the west side of Cincinnati. It became a popular game in the area and developed a local following. It was also a tailgating activity at Cincinnati Bengals' games. Visitors coming to Cincinnati for NFL games saw cornhole for the first time and helped its popularity spread. Those of you that attended the conference in San Antonio Zoo this past October may have learned a little about the "sport". For the

rest of you, oh my, there is much to learn. Just being able to keep score requires a Masters Degree in Mathematics or at the very least a calculator. Start stretching out now!

There is much more to learn about Cincinnati, the Queen City (Why is Cincinnati called the Queen City?). Have I peaked your curiosity yet? SAVE THE DATES October 6th - 11th for the 2012 AZFA conference. "The most interesting man in the world" will be attending. That is an inside joke for many of the folks that attended the San Antonio Conference. For the rest of you, come to Cincinnati and get in on it. We promise you an educational and fun time. Next installment - Cincinnati, a.k.a. "Porkopolis", things to do and see!

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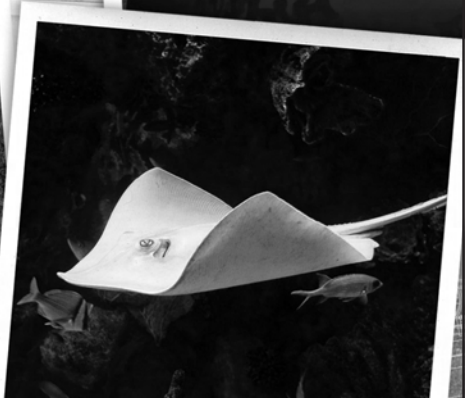
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### Publications/Website

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Rodney Fuller · Tennessee Aquarium  
423-785-4026 · rfl@tnaqa.org

### Site Selection

John Kanzia · Brookfield zoo  
708-485-0263 · jokanzia@brookfieldzoo.org

## AZFA New Members

### Professional

Wayne "Tom" Amrein, National Aquarium  
Baltimore

Mike Altman, Houston Zoo

## Education Committee

By Dennis Ethier

I would like to thank all of our instructors for taking the time to develop a curriculum and bring the materials used to execute another series of successful workshops in San Antonio.

I would also like to thank those of you who completed the survey that was distributed at the closing banquet. You have provided me with some great feedback. Dominant desires from the surveys were for additional water quality and electrical related classes. We will begin putting together the Cincinnati program and will be looking to continue incorporating subjects that you are all interested in.

I am making steps forward on the education database; my intention here is to provide you the ability to review your education history with AZFA through the member area of the website. I am doing everything I can to have it in place prior to the conference in Cincinnati.

Lastly, I am making some good progress on getting the certificates complete sent out. I have been focusing on advising the Board regarding issues surrounding our non-profit status through my role on the Finance Committee but I hope to have the certificates out shortly.

As always, feel free to contact me at dethier@wcs.org with any questions, comments, concerns, or ideas for classes/workshops that you would like to see.

## Membership Application



This is an application for a 2012 annual membership. Your membership card or certificate will be mailed to you upon receipt of your 2012 dues.

Last Name: \_\_\_\_\_

First Name: \_\_\_\_\_

Organization Represented: \_\_\_\_\_

Position/Title: \_\_\_\_\_

Trade/Area of Expertise: \_\_\_\_\_

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- Associate               Organizational
- \$20.00                      \$100.00

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# Calendar

Deadline for articles for the next newsletter: March 23, 2012.

# Publication Schedule

Summer Issue - July  
Fall Issue - October  
Winter Issue - January  
Spring Issue - April

# www.azfa.org

Don't forget to check out the AZFA website for updates and news.

Website Administrator  
Rodney Fuller, rlf@tennis.org

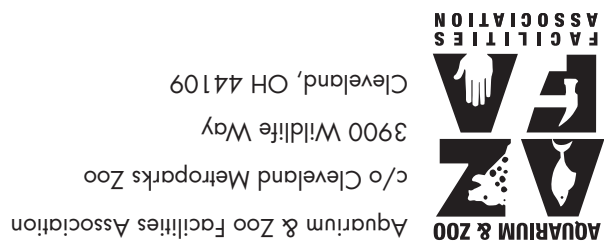
# Membership

Membership Administrator  
Ann Kaminsky, mak@clevelandmetroparks.com

# Editor's Note

By Jennifer Golden

In our spring issue you can look forward to reading "Going Green in St. Louis" by Katie Olsen. In this issue the Jerusalem Zoo wrote about their use of waste water for gardening and the 2012 conference promises to have a "green" theme. This is an important topic and one that all of our institutions should focus on. If you have sustainability related efforts taking place at your zoo or aquarium to share with our members please send an article to me at jgolden@zoonewengland.com.



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