President’s Corner

The calendar indicates that we have hit the fall season, yet the summer warmth has continued for much of the state. Although this may not make us all that comfortable, it has been great for feeding fish. Let’s hope we enjoy another productive fall and winter feeding period ahead.

We have all felt the adverse affects of the Midwest drought and huge escalation in feed prices that occurred over the summer. Now that harvest has begun in that region, there are some more encouraging yield results coming in and commodity prices have eased somewhat. Let’s hope it translates into a decrease in feed prices before our fall feeding season is complete. As for the outlook towards feed for next year, there have been beneficial rains across most of the growing regions of South America and their crop will soon be in the ground. Early indicators are, there will be record planting of soybeans in the region and come harvest time for those crops this spring we could see further softening in the feed markets. Just keep an eye on that region as our ending stocks of grains are much lower than normal and any bad news from that region could push us back into the same difficult predicament we faced this year.

Fall is also election time and this year is a very big one with the Presidential office at stake. Regardless of which side of the aisle you align with, it’s important that we make our democratic voices heard by casting our votes. Come November 6th get out there and vote!

That’s all for now and I look forward to seeing you all at the 43rd Annual Conference & Trade Show in Bay City. Mark January 23-25, 2013 on your calendar and plan to attend. Some great topics are already in the works! Also if you have suggestions to make the event even better don’t hesitate to let us know.

Hope everyone has a happy and safe holiday season ahead!

Mark
Happenings at Texas Parks and Wildlife:
Inland Fisheries
By: Rob Schmid

In the last installment of AquaNotes, in the Happenings at TPWD: Inland Hatcheries, I reported that the new John D. Parker East Texas Fish Hatchery had a successful and well attended Grand Opening. Since that time, the JDPETFH has gotten down to business and had a busy and productive summer. They produced and stocked more than 2,000,000 Florida largemouth bass, 100,000 + blue catfish, and had a bit of a learning curve with the always finicky smallmouth, producing just 2500 for stocking. They have also been producing thousands of pounds of forage to share around the hatchery system.

AE Wood, the Freshwater Fisheries Center and John D. Parker combined to produce a little over 8,000,000 FLMB fingerlings, stocked into over 35 different water bodies around the state. Future bass fishing should be good. Go get your line wet and enjoy.

Striped bass broodfish collecting was a bust last spring, resulting in zero STB/HSB production in 2012. We are pulling out all the stops to insure a successful STB/HSB production season in 2013. We are going to be monitoring the progress of spawning activities from early in the season this year. We have scattered our experienced Dundee staff (still no water there) to the other participating hatcheries, to add depth of experience to their staffs. We are planning to do sunshine, palmetto and striped bass to fulfill our requests. Wish us luck!

Channel catfish production went well for all the hatcheries this summer/fall. All hatcheries are in the process of stocking out their 9 inch catfish now and putting away for future grow-out, their 12 inch fish for the winter Neighborhood Fishin Program (NFP). To date, over 265,000 +fish have been stocked. As I mentioned above, Dundee is still in the grips of drought. They have not had adequate water in that part of Texas in over 4 years. The Dundee staff is commuting to Possum Kingdom to work. It’s causing hardships, but what can be done. No one’s figured out yet, how to control the weather. Pray for rain!

On a lighter and more enjoyable note; rainbow trout season is just around the corner. Those trout fishermen, or maybe it’s those fly fishermen, I’m not sure which category they really fall into, are the most dedicated and impatient bunch I’ve ever seen. Here it is, mid October and granted, we’ve had a few cool days, but come on. It’s still getting into the 90’s regularly. But, those guys have started calling, wanting to know why the winter trout stocking schedule hasn’t been posted and when will we start stocking trout. It’s good it’s not time for trout just yet. We are still cleaning up, repairing equipment and getting our gear all back in shape after the 9 inch catfish season.

TPWD had another of the “Old Guard”, long time employee retires recently. Gene McCarty, Deputy Executive Director for Administration retired August 31, 2012 after 34 years with the Department. Gene’s career started as a fish and wildlife technician in the hatchery system. He rose through the ranks over the years to play an important role in shaping the Departments policies in a wide range of areas. Gene will be missed.

On that note, keep your lines wet, be good sportsmen, practice good natural resource conservation, and always, clean, drain and dry your boats to prevent the spread of aquatic noxious species (NAS), like zebra mussels, and giant salvina, and water hyacinth.
TAA 43rd Annual Conference & Trade Show
“Fishing for ComplEments”

The 43rd annual TAA Conference & Trade Show is starting to shape up. There are a few presentation slots still available if you have a particular topic you’d like to have on the agenda. Just let Donna or Cindy or Rob know and they’ll try to get something together. And, if you happen to think of a vendor you haven’t seen around in a while; or you’ve started dealing with a new vendor, please let them know about the Conference & Trade Show and invite them to attend. Pass their contact information on to Donna and Cindy.

Here’s what the presentation agenda looks like so far, just topics, not the speakers. We’re still working on who the presenters will be, and what the schedule will look like.

One of the current hot topics in the catfish industry is hybrid catfish (channel catfish X blue catfish). These hybrids show promising results regarding pond performance (tolerance to poorer water quality, better FCR’s and ease in harvesting), disease resistance, and dress-out percentages. There are at least 2 presentations on hybrids, one on hatchery work, the other pond production performance.

Speaking of pond performance; there will be a presentation on “Split Pond Aquaculture”. SPA uses the same concepts as the “Partitioned Aquaculture System” (PAS); crowding the fish into a smaller culture area, using the rest of the pond for bio-filtration and water quality management. PAS is just a bit simpler and hopefully a less expense way to accomplish the same thing. And, although both of these designs have been used primarily on catfish, they show promise for other species, such as HSB, redfish and tilapia.

There will be at least three shrimp culture presentations, always an interesting topic; how to get more efficiency out of culture systems, less inputs (feed, oxygen, water, energy) more production output (lbs/unit cost). In today’s highly competitive seafood markets, every penny saved in production cost is an advantage.

As always, we will have presentations/discussions/information swaps on water rights issues, permitting issues and other regulatory concerns. Lumped into this same paragraph, if not the same sessions at the conference, we will explore eco-tourism and property/facility security.

According to just about every aquaculture related publication you read these days, some form of aquaponics/backyard/family aquaculture is the fastest growing segment of the aquaculture industry. To address this trend, Aquatic Eco-Systems, Pentair, is presenting a 1 ½ day aquaponics workshop. Topics covered will include: plant production, systems design and management, alternative systems, aquaculture versus aquaponics, and marketing and economics. For anyone interested in aquaponics, this is a must attend event.

And, that’s not all! Our conference’s famous hospitality, good food, good drink and good fun, will be a guaranteed part of the event. Hope to see you there.
Texas Aquaculture Association is excited to present our Aquaponics Workshop in partnership with Pentair, Aquatic Eco-Systems, this year.

AES has served the aquatics industry for more than 30 years, always keeping an eye to selling equipment and sharing the knowledge to make it work. Over the years, Aquatic Eco-Systems has become known as a premium source of goods and technical advice with a proven track record.

Course Topics:
- AES Aquaponics System Review
- Aquaponics Guidelines
- Plant Production
- Systems Management
- Aquaponics Water Quality
- System Engineering
- Alternative Systems
- Adapting Aquaponics to Aquaculture
- Aquaculture vs. Aquaponics
- Marketing and Economics
- Also Included:
  - Breakfast, lunch and dinner during the training
  - Free attendance to TAA’s Exhibitor Trade Show
  - Q&A with the presenters, AES staff and TAA members
  - Prize drawings

Speaker Information:

Amy Stone
Amy has 13 plus years working for Aquatic Eco-Systems Inc and Waterlife Design Group, working and consulting with plant and aquatic animal producers. Prior to working for AES & WDG, she worked for both freshwater and marine fish production facilities as managers throughout the process from hatchery to growout. She has a Bachelor’s Degree from Purdue University in Aquatic Sciences and Fisheries.

Brooke Taylor
Brooke has 2 years experience working for Waterlife Design Group where she manages a rooftop aquaponics greenhouse (Green Sky Growers). She is currently a project manager and systems designer. Prior to working for WDG, Brooke was involved in maintaining the engineering components of The Land Greenhouses as well as the design of the aquaponics system at Walt Disney World. She also spent 5+ years as manager of the Life Support Operators who were responsible for systems at four of the Disney Parks. Brooke has a Bachelor’s Degree from Louisiana State University in Biological Engineering.
Hybrid Catfish: What’s New?

April, 2012 on the web site, The FISH Site, an article titled, Hybrid Catfish Offer Performance Advantages for US Catfish, http://www.thefishsite.com/articles/1326/hybrid-catfish-offer-performance-advantages-for-us-catfish, is a worthwhile read. A summary is provided, but, we recommend you go to the site and read the article in full. Nagaraj G. Chatakondi, USDA – ARS Catfish Genetics Research Unit, Stoneville, Mississippi, a presenter on this topic at the 2013 TAA Conference in January is quoted in the article.

Why Hybrid catfish? Although channel catfish, I. punctuates, is by far the most important and commonly raised species of catfish, and it has many outstanding aquaculture qualities, its shortfalls cause the industry problems. Namely, there is much differential growth within a year class, they are excellent at evading capture with a seine and they are susceptible to a host of species specific diseases. Always looking for ways to improve efficiency, researchers discovered that the hybrid (I. punctuates (channel catfish) females X I. furcatus (blue catfish) males) is a better performer. They tend to grow faster, have better FCR’s, are more disease resistant, handle poor water quality better and they’re easier to catch. The best of all possible worlds!

The Catch! Hybrids aren’t exactly easy to make. The fish won’t hybridize naturally, so the process is labor intensive. It requires hormone injection of the fish, strip spawning the females and macerating (mashing up) the male testes into a testes sperm solution to fertilize the eggs. It’s far more of an art than a science and it takes experience to get it right. And of course, the process is “fatal” for the males! Fertilization rates are low, and as stated above, it’s a labor intensive process. Once fry are successfully produced, rearing in ponds is similar to regular channel catfish production.

Hybrid History. Although interest has increase recently, hybrid technology has been around for some time. Harry Dupree first describes the techniques for hybridization back in 1966 after evaluating more than 28 various crosses and back-crosses. A number of commercial hatcheries have taken up the challenge in recent years and it is projected that hybrids may make up to 15% of fry production by 2014.

Superior Results! Large scale pond studies conducted at a commercial farm in 2002 showed that hybrids performed about 30% better than standard channel catfish. They had 19% better survival, 15% lower FCR, grew to market size 34% faster, and had a slightly improved fillet yield. Overall, an outstand performance.

The Challenges! Genetic improvements in the respective broodfish species could no doubt improve hybrid performance. More cost effective and efficient ovulating hormones would likely improve egg quality and hatching success, thus improving hatchery efficiencies. And, all the other challenges of pond aquaculture still exist, water quality management, off-flavor and disease. In spite of these issue, more farmers will likely switch to hybrids in the years ahead.
Southern Regional Aquaculture Center
SRAC

I know that everybody knows about SRAC, but when was the last time you visited the site? http://srac.msstate.edu/. There’s enough information at this web site to keep anyone interested in aquaculture, a seasoned veteran or a brand new “want-to-be”, entertained for a while.

The “What’s New” tab will bring you the latest developments in aquaculture in the Southern region. It covers research projects, political issues and policies, new equipment and new culture techniques. It’s a great place to look for cutting edge developments in the industry. If you have broader aquaculture interests than just the southern region, take a look at the “The RACs” tab. There are a total of five Regional Aquaculture Centers, covering aquaculture species and practices all over the US and its territories (Oceana and the Caribbean). A cruise through this tab will broaden your aquaculture horizons. Who knows, maybe you’ll find that complement to enhance your business.

The “SRAC Projects” and “Progress Report” tabs will give you the latest information on research and extension activities within the region. There are 33 on-going SRAC projects in place at this time. They cover everything from updates on hybrid catfish production to bait fish culture, ornamentals, development of an aquaculture products data base, and marketing trends.

My favorite tab is, “Publications”. Publications is broken down into 4 sections; Fact Sheets, Research Publications, SRAC DVDs and AQUAPLANT. There are more than 35 fact sheets covering 10 different species and a range of general topics such as pond construction, aerations, and water quality management. The Research Publications section shows numerous published articles in scientific journals on work resulting from SRAC projects. There are currently 20 DVDs available on subjects including catfish, bass, crawfish, water quality, shrimp, baitfish and more. These are professionally produced, easy to watch and quite informative. These are great tools to help a new employee get the big picture of what you may be trying to accomplish on your farm. AQUAPLANT is a program to help pond owners and managers identify and manage aquatic plants. There’s plenty of interesting information to peruse at this tab.

The “Associations” and “Links” tabs are useful as well, if you’re looking for a species association to contact or a state association or agency.

I suggest everybody take a few minutes and have a look at the SRAC web site. There’s bound to be something of interest and useful to you there. Enjoy!
Sanford, NC, October 05, 2012 — The Aquatic Systems global business unit of Pentair Ltd. (NYSE: PNR) announced today its acquisition of Aquatic Eco-Systems, Inc. (AES), a global leader in custom design solutions, equipment and supplies distribution, and technical support for aquaculture markets. AES serves a variety of aquatic interests and industries, from commercial aquaculture and lake management to public aquariums and water gardens.

“The acquisition of AES is in line with our strategy to focus on the expanding aquaculture industry,” said Karl Frykman, President of Pentair’s Aquatic Systems global business unit. “Combining our world-class operational processes, investment capabilities and global reach with AES’s extensive aquatic product offerings, systems and their in-house team of biologists, engineers and technicians, creates a comprehensive resource for aquaculture technology, equipment and engineered solutions.”

AES is headquartered in Apopka, Florida. Robert D. Miller will continue in his role as Chief Financial Officer of Pentair’s Aquatic Systems business and has been appointed to lead the day-to-day operations of its aquaculture business, including AES. Terms of the deal were not disclosed.

ABOUT PENTAIR LTD.
Pentair Ltd. (www.pentair.com) delivers industry-leading products, services and solutions for its customers’ diverse needs in water and other fluids, thermal management and equipment protection. With pro forma 2011 revenues of more than $7 billion, Pentair employs more than 30,000 people worldwide.

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ABOUT PENTAIR AQUATIC SYSTEMS
Pentair’s Aquatic Systems business provides leading edge equipment, accessories and water technology solutions to the swimming pools and aquaculture industries. Aquatic Systems produces a broad line of products from pumps and filtration equipment to thermal products, automated controls, lights, automatic cleaners, water purification and treatment technology, water features, and more. Applications for Aquatic Systems products include maintenance, repair and renovation of existing in-field equipment, as well as new installations in North America, Europe, and emerging markets such as China, Latin America and other countries.
Like Paul Revere’s famous cry, “The British are coming, the British are coming”, we’ve been hearing for years, “Zebra mussels are coming, zebra mussels are coming”, to Texas. It’s only a matter of time. And sadly, the criers were right, and now they’re here. The first report of zebra mussels in Texas was back in 2009 in Lake Texoma. A single mussel was found on a boat hull. That was of course, only the “tip of the iceberg”. Diligent survey work by TPWD fisheries management biologist have confirmed zebra mussels in Lake Ray Roberts and in Lake Lewisville, in the spring of 2012. Finding zebra mussels in those two water bodies is like “letting the genie out of the bottle”. Ray Roberts and Lewisville are part of the Trinity River drainage system. Now, zebra mussels have access all the way from the north boarder with Oklahoma to the Gulf.

How did this happen. It’s a story that’s been repeated again and again all across the nation. Originally from Southern Russia, it is believed that these nasty little invaders first came to North America in bilge water from cargo ships. Another possible explanation, adults colonized anchor and chain and survived the trip across the Atlantic in the typically cold and damp chain lockers. The first reports of zebra mussels were in the Great Lakes in 1988. Since that time, they have spread across the country like a plague. The typical method of spread is believed to be by recreational boat owners. A boat that is operated in an infested lake is then moved to another lake. Without proper disinfection procedures, the new lake will be populated with the invaders in a short time.

TPWD has established a protocol; **Clean, Drain and Dry**, that explains the procedure to prevent the spread of these and other exotic, invasive species. The process is simple. Remove all debris from the boat and trailer. Drain all the water from the boat, engine and bait wells. Then, let the boat dry for at least a week, or wash it with high pressure, hot soapy water before boating on another water body. For more information on this program and other activities to stop the spread of invasive species, go to: [www.TexasInvasives.org](http://www.TexasInvasives.org) TPWD hatchery operations have adopted a stringent disinfection protocol. It begins after the fish are stocked at a fish stocking sight, with a spray down disinfectant of the trailer, truck tires and gear. Upon returning to their respective hatcheries, everything is steam/pressure washed, cleaned and drained and allowed to dry whenever possible.

Please do your part as well, to prevent the spread of these and other invasive species.

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### Texas Aquaculture Association

**BOARD MEMBERS**

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Seafood Chalupas
From Hooked on Seafood
A Texas A&M Sea Grant Publication

A tasty way to use a bit of leftover seafood is to combine it with a myriad of ingredients to create a quick Mexican treat.

1 C leftover or fresh cooked fish, crab meat or shrimp
4 crisp, flat tortillas
1 can Refried beans, 8 oz
2 C Lettuce, shredded
1 Tomato, chopped
½ C Cheddar Cheese, grated
Salsa, Avocado slices

To crispen tortillas, bake at 350 degrees for 3 minutes. Spread beans on each tortilla. Then layer with seafood, lettuce, tomato and cheese. Pass the salsa and sliced avocados. Makes 2 servings of 2 chalupas each.

2012-13 Calendar

October 22-24, 2012  TAPMS Annual Conference, Mayan Dude Ranch, Bandera, TX.
Updates can be found on our website:  www.tapms.org

January 23-25, 2013  TAA Annual Conference & Trade Show, Bay City, TX
Updates can be found on our website:  www.texasaquaculture.org

February 21-25, 2013  WAS-Aquaculture America, Nashville, TN
Updates can be found on our website:  www.was.org