

# Quarterly News Letter

## Summer 2011



Well, spring reports are all done and have been mailed out. It has been by far our busiest quarter since we opened for business. I greatly appreciate everyone being patient waiting for your reports, like you I wish I could type faster. Now we have some equipment maintenance, follow-up work and our monthly herbicide treatments to do. We want to thank everyone for allowing us to work with them, and we also want to welcome our new clients that came on board this spring. We know



A typical shocker boat can have one or two dippers, and is usually crowded inside with equipment!

you have lots of choices in consultants to assist you with lake and/or land management and we greatly appreciate you giving us the opportunity. I enjoyed seeing everyone and greatly appreciate those who invited me to stay with them or have dinner to enjoy some good food while visiting and catching up. There is no doubt, I have a great job, because it doesn't feel like a job!

This quarter I want to talk about how the shocker boat works. Folks constantly ask us about the electrofishing boat and how it actually works without shocking us. Our boat is a 16 ft X 48 in flat bottom Jon boat with a 40 hp motor. On our rig the boat itself is the ground and the booms sticking out the front with the stainless steel droppers are the positive. Some rigs use separate cables for the ground, but by using the boat, you produce a better field. The boat has a padded railing around the front deck so we can lean out and dip without falling in. Although I have seen it happen a couple times in my 25 years of being a fish biologist. Some shocker boats have lights on them for sampling at night. Our generator puts out up to 7,500 watts, up to 1000 volts, various pulses (7.5-120 per second) and amperage from 1-62, and is all controlled by the Shocker Box. The settings we use depend on the objectives for sampling, the water's conductivity and species of fish being targeted. There is a peddle, that when pushed, puts electricity into the water and a timer that keeps track of seconds sampled, which we convert into a fish per minute index that give us the CPUE (catch-per-unit-effort). The range and depth fish are affected depends on the fish species, size and water conductivity. In some waterbodies fish need to be within three feet or-so of the outside of boom and less than four

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Dave Edwards of Westervelt and his two sons helping out and learning about aquatic ecosystems!



Captain Kevin Faver and his son Kolt helping dip fish at their South Georgia pond!

feet deep. Other times fish are stunned as far as 15 feet outside the booms, and greater than 10 feet below the surface. Some fish are completely stunned and easy to dip, while others fight the electricity and can be very difficult and some individuals almost impossible to dip. Research has shown approximately 0.1-0.5 % of the fish shocked die, and generally those are fingerlings and fry, which is why sometimes we let off the peddle if we notice a ball of fry getting close to the booms. All remaining fish wake up and swim away unharmed. After we dip the fish they are placed into an aerated tank, sometimes with salt, until measured, weighed and then released. After each sample the tank water is pumped out and refilled. The water temperature can rise in the tank when crowded with fish, from the sun, fish depositing waste and some regurgitate their last meal in the tank which is why it is changed so frequently. Generally larger fish get hit harder (shocked) than smaller ones as they have more surface area to transmit electricity and occasionally take longer to wake up. Most fish by the time we measure and weigh everything eagerly swim away. Once in a while a big fish will float or lay nearby and eventually wake up,

or we upright it and it swims away. No one has ever been killed as far as I know from electrofishing, but if you touch the water and the boat simultaneously when the peddle is down, you will feel it. If the water is highly conductive, the shock is very mild, but if the water is very soft and has very low conductivity the volts we are using are very high, even though the amps produced are low, and you will really feel it. We always wear rubber soled shoes and the deck and in front of the driver's seat has a rubber mat for additional insulation. Sometimes we use one dipper and sometimes two. The driver always wears ear protection and sometimes the dippers do too, and we use 6-8 ft long handle dip nets. If we are targeting catfish, the net webbing may be rubber to eliminate their spines getting tangled in the traditional green nylon nets.

The shocker can affect turtles, snakes, alligators, birds and even manatees. If we encounter a non fish animal, we simply release the peddle and allow it to get away and we resume. The larger the gator, the more thrashing they do. I have seen them up to about 12 feet get shocked and those are dangerous that close, especially to the driver. Gators have a tendency to try and climb into the back of the boat by the driver. That makes it interesting during night sampling. The guys in the front think its funny, but when you see teeth and that front foot coming at you out of the dim light, it scares



An aerated tank keeps fish alive and preps them to be released after they are measured and weighed!



you know matter how used to it you are! Manatees also cause a threat as they can literally flip the boat if they are in shallow water. My first month on the job we were electrofishing on the St Johns River near Titusville and in the front of the deck a huge swirl with the water dropping about a foot, before this 11-12 footer threw his head between the railing and onto the boat deck. Being from Missouri, that was really scary at first then I realized it was pretty cool!

The term Monkey Rig is frequently used when describing illegal electrofishing. Those were and probably still are specifically used for catfish and most were built from the old crank telephone generators. The reason it works so well on catfish is it is low amperage, medium volts, with low pulses per second, which catfish are very susceptible to. When I did my catfish research on the St Johns River in the late 80's and early 90's we actually abandoned the modern day shocker and used an old telephone rig we built in some areas of the study, and it was amazing how many catfish were in any stretch of the river. In some areas the water literally turned white with bellies up. We can now use the modern shocker box to simulate this and we have seen catfish surfacing more than 100 yards away and jumping like tarpon to escape. We also use rubber dip nets for catfish to eliminate their spines getting tangled in the net.

## **Uplands**

Many people ask us for the best way to remove undesirable, invasive or exotic trees and brush. Each scenario is different, first the problem needs to be identified, then solution options compiled and finally choosing the remedy that best fits your situation. Options include girdling, foliar treatment, basal application, hack-and-squirt, cut stump and soil spot treatment.



Dylan Lageman got his first turkey while hunting with his dad Jeff on their Ochwalkee Creek Plantation this spring!

Girdling is cutting into the tree trunk with axe, machete, or chainsaw past the bark, all the way around, but not cutting it completely down. This can be used when a standing tree is desired possibly for bird perch or roost, but it is no longer desired that it lives.

The foliar application requires a sprayer and the appropriate herbicide, where the leaves of the target plant are sprayed wet (but not dripping) and they (the leaves) take in the poison and kill the tree or bush. This application is common on trees and bushes short enough to spray to their tops, and not in dense areas where spray drift could kill other desirable non-target plants nearby.

The basal application is when a herbicide is applied to the trunk of a tree from the ground to approximately 18 inches up all the way around the trunk needs to be soaked. The herbicide is usually mixed with an oily additive to help get into cracks and crevices and cling to the trunk.

This application is a common technique on trees six inches in diameter or less with thin bark.

For selectively removing trees above four inches in diameter the hack-and-squirt method is very common. This is where you use a small axe, machete or hatchet to cut slots into the trunk and then squirt the prescribed herbicide into the cut. Cutting at a downward angle to create a “cup” doing one hack per 2 inches of diameter is recommended (10 inch diameter tree needs a minimum of 5 hacks around the trunk all at the same height), and one full squirt of herbicide in each cut. Make sure all cuts are spread out round the entire trunk, and not all on the same side.

The cut stump method is used when the entire tree is cut down and the stump is treated to prevent sprouts from coming up off the stump. On small stumps treat the entire stump top. On large stumps, only the outer perimeter (2-3 inches) of the stump top needs treating.

The soil spotting method works well when large areas of small trees are targeted or one large tree with nothing around it. One must be careful as some of the herbicides for this type of treatment may kill out to 30 feet and non-target vegetation can be damaged or kill if not careful. Apply the herbicide to the ground under the canopy, preferably just prior to your area’s wet season, as frequent watering post application helps get the herbicide into the root system. On some large trees and certain species, it may take one or two additional defoliation cycles before a total kill is observed.



Kayla Faver last fall got her first deer with a bow on her third trip to the stand in South Georgia. Her father Captain Kevin Faver could not have been any prouder!

Always know your state and county regulations and read herbicide labels and use only as directed. Many people think more is good, but with herbicides it is not. Companies spend millions of dollars to test products and they know how to get optimal performance from their product. Herbicides are a useful tool in fish and wildlife management, but can also cause unwanted damage to your and neighbor’s properties.

## Upcoming Events

Mossy Oak has teamed up with Bass Pro Shops and Ram Trucks to host the first Land & Wildlife Expo in Nashville, Tennessee August 12-14<sup>th</sup>, 2011. This will be conducted at the same time and place as the Quality Deer Management Association’s (QDMA) National Convention. Last year’s Land & Wildlife Expo was cancelled due to flooding and it looks to be shaping up as a real nice event. Steve Lopez and I will be attending this year and manning the Southern Sportsman Aquatics & Land Management booth at the Expo in the aquatics section of the conference center at the Gaylord Opryland Resort and Convention Center. If you attend, please come by and chat for awhile about lake and land management, we would like to

see some familiar faces. More information can be viewed at:

<http://www.landandwildlifeexpo.com/index.html> & <http://www.qdma.com/events/national-convention/>

We want to remind everyone of the Southern Sportsman Aquatics & Land Management Lunker Fish & Bruiser Buck Clubs. A commemorative plaque will be presented to landowners who experience an exceptional fish being caught from their waterbodies or a whitetail deer harvested from their land that we manage on a regular basis. The landowner need not be the successful angler or hunter, but we do need a quality photo, name of angler or hunter, date and time caught or harvested, total length, girth and weight of the fish or antler measurements of the deer. Please check our web site for more details:

[http://southernsportsmanaquaticsandland.com/lunker\\_fish\\_and\\_bruiser\\_buck\\_club](http://southernsportsmanaquaticsandland.com/lunker_fish_and_bruiser_buck_club).

Please forward these to friends and colleagues or direct them to our web site where all previous Quarterly News Letters and links of interest can be found at our newly updated web site where we are now accepting credit cards for certain merchandise (feeders, fertilizer, fountains, fish attractors, bird nesting boxes, along with hats and tee shirts with our company logo on it) purchases: <http://www.southernsportsmanaquaticsandland.com>. Also on the web site people can now sign up to receive electronic copies of the news letter upon publishing.



A real nice bass caught and released in the pond on the Coe Property in East Texas! Unfortunately the fish was not weighed, but I would guess it's around eight pounds.

If you are pleased with the services and products you receive from Southern Sportsman Aquatics & Land Management, please tell your friends and associates about us. The best compliment you can give us is a referral. We are always looking for additional clients from Texas to Florida. We have had an enormous increase in electrofishing requests this year, so anyone wanting it performed this fall needs to contact us immediately to reserve a day, otherwise it will be spring 2012 before we can get to them.

If you want us to order or bring feeders (parts), aeration/fountain (parts), pond fertilizer, build fish attractors or wood duck boxes during summer site visits please contact us immediately so we can make all the necessary arrangements to get things ordered and on the schedule. We have more free time in summer and winter to perform these types of tasks. Anyone needing fall fish ordered, please contact us and we will order them and get you on the stocking list at the hatcheries. Those who did not get your threadfin shad this spring are already on the stocking list and we hope suppliers will get them to you this fall.

***Scott G. Brown, Owner***