

Elk City District Fisheries

Kansas Department of Wildlife, Parks and Tourism

Summer 2012

2012 Electrofishing Season a Success



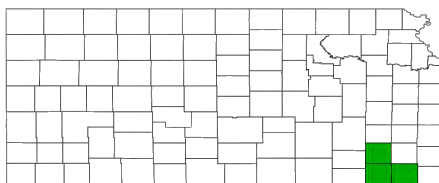
This spring we used electrofishing to sample Big Hill Reservoir, Montgomery State Fishing Lake, Wilson State Fishing Lake, Lake Parsons, LeClere Lake in Coffeyville, and Lake Tanko in Cherryvale, and the Altamont City Lakes.

We use electrofishing primarily to sample largemouth bass populations. We keep track of how long we shock, how many fish we catch, and how big they are. This information is used to help develop management plans for each reservoir.

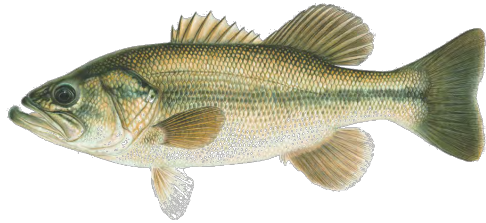
We use a term called catch per unit effort (CPUE) to estimate relative abundance. It is calculated as the number of fish caught divided the number of hours spent shocking. These data are used to track fish populations through time and help determine if particular management objectives are having desired effects.

What is Electrofishing?

Electrofishing is a tool used by fisheries biologists to sample fish. Fish are stunned by a specialized apparatus that delivers a controlled electrical field into the water. Fish are netted while stunned, measured, and weighed before being released back into the lake. Electrofishing is not lethal to fish.



Big Hill Bass Looking Good



Whether it is the crystal clear water, idyllic setting among the Osage Cuestas, or excellent fish populations, Big Hill Reservoir has long been a favorite of Southeast Kansas anglers. Perhaps the most recognized fish in Big Hill Reservoir is the largemouth bass.

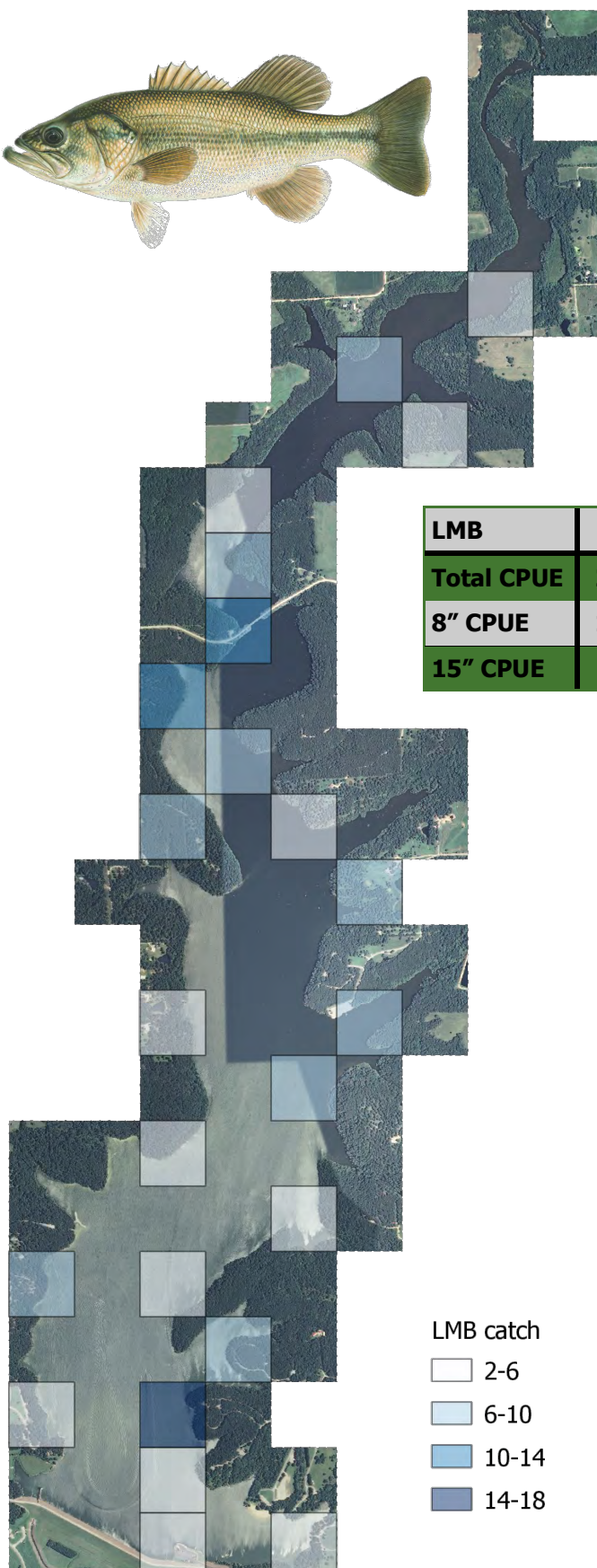
Largemouth bass anglers generally comprise around 20% of total angling effort expended in Big Hill Reservoir. Despite a largemouth bass virus scare in the mid 2000s, the population continues to support a popular fishery.

LMB	2008	2009	2010	2011	2012
Total CPUE	22.22/hr	41.09/hr	37.92/hr	31.98/hr	42.39/hr
8" CPUE	19.44/hr	37.09/hr	28.52/hr	22.52/hr	31.94/hr
15" CPUE	6.48/hr	5.09/hr	3.36/hr	2.70/hr	7.49/hr

Relative density of largemouth bass increased nearly 33% since 2011, while relative density of largemouth bass longer than 15" has increased nearly 177%. In addition to increased numbers of bigger fish, body condition has also improved from the 2011 sample. This bodes well not only for current fishing opportunities, but for upcoming years as well.

The smallmouth bass population that inhabits Big Hill Reservoir presents a unique opportunity for black bass anglers. Smallmouth bass don't generally get as large as their largemouth cousins, but have a reputation for being voracious fighters. We still aren't seeing many in electrofishing samples, but tournament data suggests that they are out there and can be caught.

Each angler may possess five total black bass while on the water. Largemouth bass must be 21" or longer and smallmouth bass must be 18" or longer.



- LMB catch
- 2-6
 - 6-10
 - 10-14
 - 14-18

Montgomery State Lake a Great Option

When folks think of fishing at Montgomery State Fishing Lake, they often think about either channel catfish, crappie, or bluegill/redear sunfish. However, the lake also harbors an outstanding largemouth bass population.

The largemouth bass population has steadily improved in terms of size structure in the last five years. **Of particular note is the consistent increase in relative abundance of bass 15" and longer.** Substock CPUE, a measure of young fish density, has also improved in the last five years. Increased relative abundance of both larger and smaller fish is a good sign for Montgomery State Fishing Lake largemouth bass anglers.



There is a 13-18" protected slot length limit for largemouth bass on Montgomery State Fishing Lake. All fish in this slot must be returned immediately to the lake after capture. Five largemouth bass, either shorter than 13" or longer than 18" may be harvested daily.

LMB	2008	2009	2010	2011	2012
Total CPUE	75.78/hr	71.56/hr	70.27/hr	108.33/hr	173.05/hr
8" CPUE	50.00/hr	61.47/hr	64.08/hr	61.11/hr	104.19/hr
15" CPUE	3.12/hr	4.59/hr	7.22/hr	7.41/hr	10.78/hr



There are several reservoir maps with blue blocks on them in this newsletter. These represent catch data from our 2012 electrofishing sampling effort. The darker the block, the more fish we sampled in that location.

Wilson Spots a Pleasant Surprise

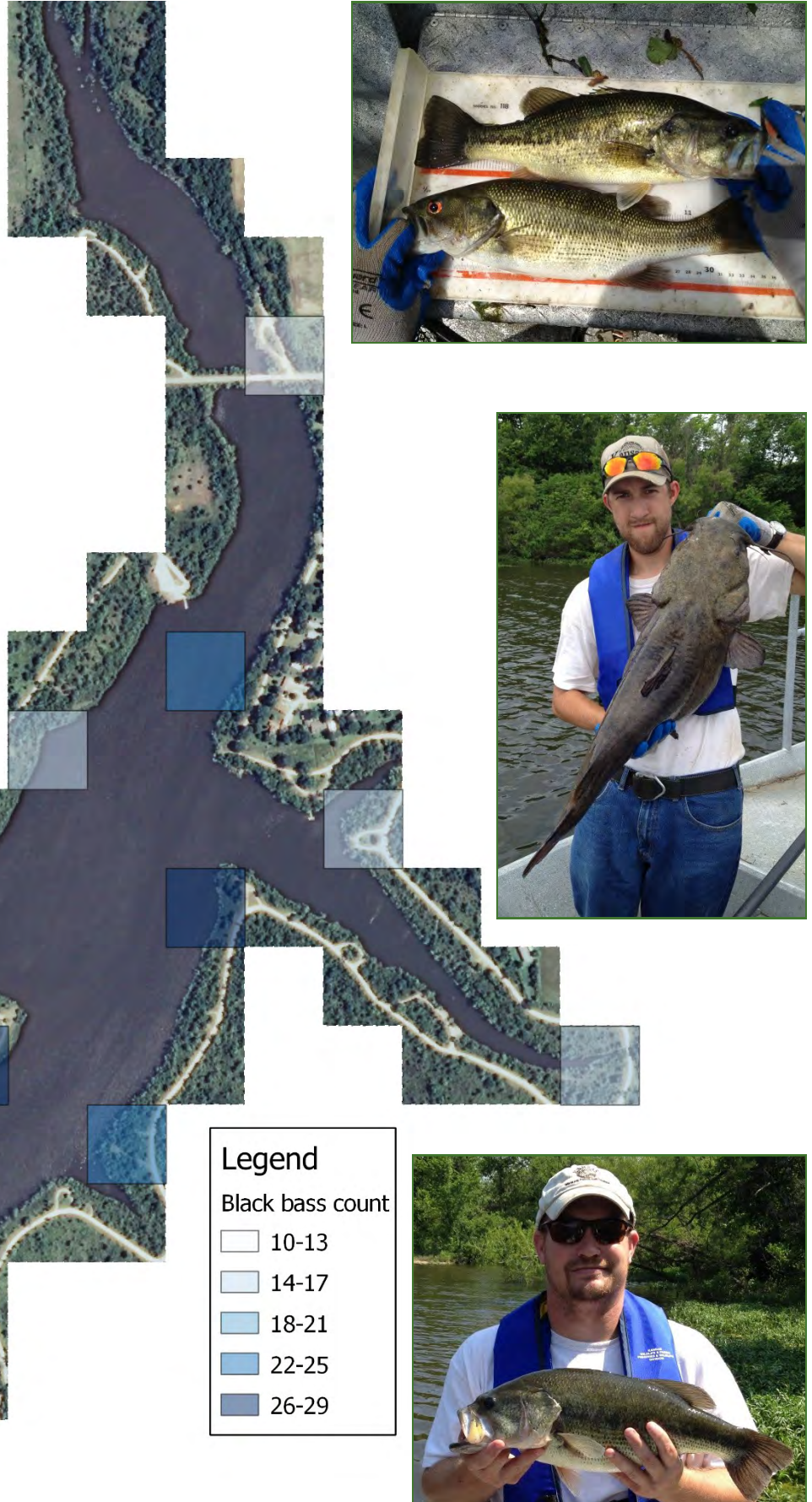
Wilson County State Fishing Lake is a beautiful lake that is popular among anglers. Channel catfish are far and away the most popular sport-fish (50% of angling effort in 2008) followed by crappies (21%) and largemouth bass (9%).

However, Wilson harbors a spotted bass population that rivals any in the state. **Spotted bass don't get as big as** their largemouth cousins, but they are fun to catch and put up a great fight.

If you haven't been out there, go check it out. Just make sure you're ready to tackle Wilson's awesome black bass.

Spotted bass or largemouth bass?

tinyurl.com/kfishid



Hidden Opportunities

By: Tyler Stewart

Nothing can beat a day out on the water when the fish are biting. Whether it is catching crappie on the spawn, high-water catfishing, or chasing lunker bass, it's always a good time. When fishing is good, it's easy, but what do you do when it seems that you can't even buy a bite?

The answer may surprise you; go hiking. Many of the local wildlife areas contain numerous small ponds for wildlife use, but they also offer a unique fishing opportunity. Most of these ponds are built along drainages where they pool up water. These drainages sometimes dump fish in from stocked ponds located upstream during periods of flood. Green sunfish, bluegill, and largemouth bass are common species deposited.

If you are after big fish, this may not be the best chance because many of these ponds are overpopulated and fish have stunted growth. On the other hand, if you want a chance to catch lots of fish, then this is for you. In one day on Big Hill Wildlife Area, myself and another caught around 60 green sunfish, 20 bluegill, and 10 bass, on nothing but worms, Beetlespin lures, and occasionally a bare hook.

When preparing to fish these hidden ponds, first you must be able to find them. Area maps will sometimes show these ponds, but using Google Earth to view aerial photos will allow you to more accurately find potential honey holes. Take a backpack to carry water, a small tackle box, and a light-action fishing rod. Small Beetlespins, Roadrunners, or worms are probably your best bets for bait. Remember long pants and bug spray, as you

will usually be hiking through uncut vegetation.

Henry David Thoreau once said, "Many go fishing all their lives without knowing that it is not fish they are after." You do not have to catch a big fish to have a great experience. Take this chance to enjoy a beautiful day in nature without seeing another angler, and what better way to introduce a child to the outdoors than by catching fish and seeing flora and fauna that you can't see from any dock.



Tyler Stewart is an Environmental Technician working in the Elk City Fish and Wildlife Office.

Summer provides fisheries biologists with time to work on habitat projects, conduct youth fishing clinics, and use hoop nets to sample channel catfish. If you see us out and about this summer, feel free to say hello or ask any questions you may have.

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