

Pittsburg District Fisheries Newsletter

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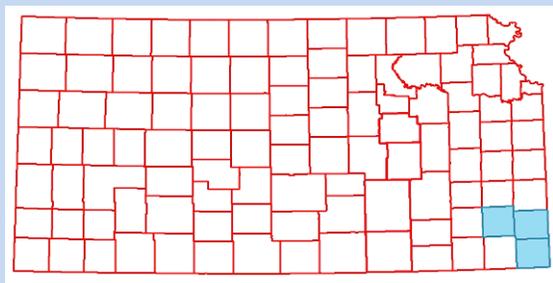
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Fish Consumption Advisory Rescinded on Mined Land Wildlife Area Lake

On January 1, 2015 the advisory on consumption of fish and shellfish from Horseshoe Lake, located in Units 22 and 23 of the Mined Land Wildlife Area, was rescinded. This advisory was issued in 2003 by the Kansas Department of Health and Environment (KDHE) and the Kansas Department of Wildlife and Parks (KDWP) because of perchlorate detected in the water.

Perchlorate is an oxidizing agent used in certain solid rocket fuels, explosives, gunpowder and highway flares. Perchlorate can interfere with the thyroid gland's ability to take in iodine and regulate metabolism in adults. The perchlorate contamination was a result of operations at the former Slurry Explosive Corporation plant located on the east side of Horseshoe Lake. Based on EPA exposure limits at the time, occasional consumption of fish from the lake would not pose a significant health risk to healthy individuals, but could pose a risk to sensitive populations such as women who are pregnant,



Anglers can now enjoy eating their catch from Horseshoe Lake in Areas #22 & 23 of the Mined Land Wildlife Area. Following extensive water quality testing and both ecological and human health assessments, the fish consumption advisory implemented in 2003 has been rescinded.

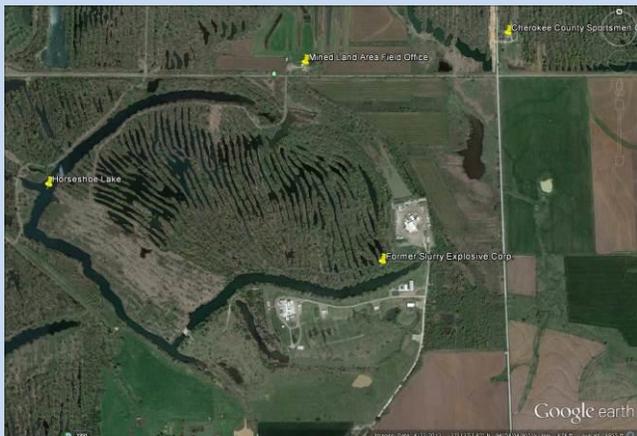
children and people who have health problems. In order to be protective of human health and error on the side of caution, the advisory was implemented.

Remedial efforts to reduce perchlorate levels have been successful. Extensive water quality monitoring has been conducted and ecological and human risk assessments have been completed and approved by KDHE. All indications are that the contamination was historical, and not recent or ongoing. Clint Goodrich, program manager for KDHE's Fish Tissue Contaminant Monitoring Program, stated that "recent studies provide strong evidence that perchlorate does not accumulate in fish muscle tissue, is not bio-accumulative in animals, nor does it bio-magnify in the food chain. Therefore, consuming fish or other aquatic animals from Horseshoe Lake does not represent a significant health risk because of perchlorate."

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(Fish Consumption Advisory continued)

KDHE's Fish Tissue Monitoring Program is designed to identify types of fish or other aquatic animals that should be eaten in limited quantities or, in some cases, avoided all together. With so many Mined Land Wildlife Area (MLWA) lakes open to public fishing, I generally provide several samples each year for the fish tissue monitoring program. I also worked with a PSU graduate student who analyzed fish tissue samples from ten MLWA lakes as her master's thesis in 1995. No advisories have ever been warranted on the MLWA with the exception of Horseshoe Lake.



Horseshoe Lake is located within Units # 22 and 23 of the Mined Land Wildlife Area, just across the road from KDWPT's field office near West Mineral.

The consumption advisory for shellfish (crayfish, mussels and clams) on Spring River and Shoal Creek because of lead and cadmium remains in effect in 2015. There is no advisory on consumption of fish. This is currently the only advisory in Crawford, Cherokee and Neosho counties. For more information about KDHE's Fish Tissue Contaminant Monitoring Program you can visit KDHE's website at: www.kdheks.gov/befs/fish_tissue_monitoring.htm.



My back side is shown here holding a gill net while former Mined Land Wildlife Area manager Rob Riggan and his supervisor, Doug Blex, assist with collecting fish at Horseshoe Lake prior to the consumption advisory in 2003. KDWPT routinely provides fish to KDHE for pesticide and heavy metal analysis. My hair was brown back then, not grey.

2015 Pittsburg District Fishing Prospects

To monitor the health of fisheries and help anglers find the best places to fish, Kansas Department of Wildlife, Parks and Tourism (KDWP) fisheries biologists spend much of each fall sampling lakes throughout the state. In October gillnets and trap nets are used to sample all sport fish with the exception of bass. Electrofishing for bass is done in the spring. Here are the fishing prospects based on these samplings, as well as angler reports I receive.

Trout – Bi-weekly stockings of 935 rainbows in Mined Land Wildlife Area No. 30 will continue through May. Success rates remain very good. Cash in on this unique fishery before crappie and bass fishing gets into full swing.

Crappie – It's time to get out there now. When the water temperature reaches the low- to mid-60s, crappie move in shallow to spawn. That is the best time to catch high numbers, and often from the shore. The highest density population of 8-inch and larger crappie in the Pittsburg district was again found at Neosho State Fishing Lake. The October frame-net catch was 30 fish/net. Although numbers are high, you'll have to sort through some smaller fish for a good mess to eat. Just ten percent of the catch was over 10 inches in length.

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(Crappie Fishing Prospects Continued)

Crawford State Fishing Lake and Chanute City Lake both have high numbers of fish, but most are small. Bone Creek and some of the larger lakes on the Mined Land Wildlife Area have more quality-size fish to offer. Bone Creek frame-net catch rates are low due to the very clear water, but anglers commonly catch crappie 12 inches and larger. Nearby Big Hill Reservoir has a good crappie population, and it may just be worth a two-hour drive to John Redmond Reservoir. It is the state's highest ranked crappie fishery this year.

Largemouth Bass – Based on 2014 spring electrofishing results, the best bass lakes in the Pittsburg district are Chanute City Lake and Bone Creek Lake. Chanute produced a catch of 96 bass/hour with a very impressive 40 percent between 15 and 18-inches in length. The Bone Creek sampling showed 66 percent of the catch were 12 inches or larger, with 40 percent over 15 inches. The quality of the bass fishery at Bone Creek is very good.

All MLWA lakes have bass, but the best for big fish are often the ones that don't receive heavy fishing pressure. It could be worth the extra effort to walk into or portage into an overlooked or hard to get to lake. Other nearby lakes with good bass ratings include Bourbon State Lake and Big Hill Reservoir. Bourbon State Lake also has a high density spotted bass population. Bourbon's combined largemouth and spotted catch rate was 114 fish/hour.



This proud 5-year old angler displays the 21 1/2-inch bass he caught at Chanute City Lake this spring. Chanute City Lake, Bone Creek Lake and the Mined Land Wildlife Area are good bets for area bass anglers.



Most all public waters receive annual stockings that maintain good success for channel catfish.

Channel Catfish – Channel catfish anglers are fortunate. Even though channel catfish don't reproduce and maintain their numbers in small lakes on their own, KDWPT hatcheries produce plenty. In 2014 over 33,500 intermediates (8 to 12 inches) were stocked in the Pittsburg district. Catfish are plentiful in all our public waters. Neosho State Lake, Chanute City Lake, and Crawford State Lake ranked the highest based on samplings last October. Catfish numbers are down at Bone Creek because we haven't been receiving all the fish we've requested for stocking. The quality of the fishery is very good though. The MLWA also has a lot to offer, as each fall 14,000 fish are stocked throughout hundreds of pits. Other good catfish lakes nearby include Bourbon County Lake, Ft. Scott City Lake, and Bourbon State Lake.

One tip to improve your catfishing success is don't fish too deep throughout the summer months. Most large, deep lakes stratify, and there is no oxygen in deeper water. You'll have better luck fishing at the shallower ends or along shoreline vegetation in water 15 feet deep or less.

If you like river fishing and the opportunity to set limb-lines or trotlines, the Neosho River and Spring River-Empire Lake complex offers some good fishing.



(Fishing Prospects Continued)



Redear sunfish are found in many public fishing waters in southeast Kansas. Redear are sometimes called shellcrackers because of their love for mollusks including snails, clams and mussels. They like to eat aquatic insects as well, and are generally found in deeper water than bluegill.

Blue/Redear – Bluegill and reard are common in most all of our lakes. Put a worm on a small hook a few feet below a bobber, fish along weed lines, and you will probably be successful. Bluegill, reard, crappie, and bass are members of the family Centrarchidae, or nest builders. They move into shallow water where the male builds a plate-sized nest he tends until the eggs hatch. The clearer the water, the deeper they nest. In strip mined lakes, where shallow water is often restricted to the ends of larger lakes, spawning fish are not hard to find. Spawning areas are at a premium, and all the sunfish are forced to use the few suitable areas. The result is that hybridization is common, and you will often see hybrids of bluegill, reard, green sunfish, and longear sunfish. 2014 nettings showed the “new” Thayer City Lake, Bone Creek Lake, and Neosho State Lake have the best quality sunfish fishing. The MLWA also offers great opportunities.

Synthetic Fish Attractors Now Available

Anglers and biologists alike have long provided habitat or “structure” in the form of brush piles, tire-reefs or half-cuts in known locations to concentrate fish in order to increase fishing success. Fish are attracted to these structures because they provide cover, shade and food. Soon after fish attractors are installed, periphyton accumulates on the surfaces, which attracts insects and small fish, which in-turn attracts sport fish like bass, crappie and bluegill. These structures can also provide important nursery habitat for small sport fish. This nursery habitat is often lacking in our larger reservoirs.

Generally, hardwoods like Osage orange (hedge), locust and cedar are cut, taken to the boat ramp, then loaded on a large boat where they are bundled, weighted with cement blocks, secured with #9 galvanized wire, and sunk. Brush pile fish attractors are definitely effective, but it’s generally only 3 to 5 years before substantial structural breakdown occurs and additional brush is needed. Maintaining these fish attractors is a labor-intensive process.

KDWPT fisheries programs specialist Bryan Sowards has recently initiated a statewide project to provide habitat structures that are much easier to place, and last more than three times longer. The synthetic structures are called “Georgia cubes”, and consist of more than 50 feet of corrugated pipe woven into a PVC plastic frame. They are weighted by about 16 pounds of gravel poured into the PVC frame.



The Georgia cube was developed by the Georgia Department of Natural Resources. The structures were scientifically proven to hold as many fish as brush pile attractors and may last 10 – 20 years.

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(synthetic fish attractors continued)

Materials for each structure cost approximately \$125. KDWP plans to construct and place 150 to 300 structures per year. This year the new fish attractors will be placed in Milford, Wilson, El Dorado and Cedar Bluff Reservoirs, as well as a few state and community lakes. Bass club members will provide most of the labor for assembling and placing the structures, and will coordinate with district fisheries biologists on placement locations. The reservoir locations will be marked by GPS and will be available on KDWP's web site.

Anglers are always more successful when fishing around good habitat, and the new Georgia cubes will concentrate fish and help anglers catch more fish. However, Soward's said the program's overall goal is "to accumulate enough structures to improve fish populations."

We were unable to acquire any of the Georgia cubes this first year, but have requested 25 to be placed in the Mined Land Wildlife Area.

KDWPT & KDHE Continue Reclamation Efforts on Mined Land Wildlife Area

The Surface Mining Section of the Kansas Department of Health and Environment (KDHE) has been completing reclamation projects on abandoned mined land in Crawford and Cherokee counties since 1994. The primary purpose of these reclamation projects is to



Prior to reclamation, the overflow structure at MLWA #35 was essentially non-functional. Marlene Spence photo.



The new overflow structure in MLWA No. 35 is massive since Deer Creek flows through this lake. It is doubtful that KDWP could ever be able to afford an outlet structure of this magnitude. A tax on current coal operators is paying for these improvements, not our Kansas license buyers. Marlene Spence photo

remove safety hazards to the public. Many of the projects are geared toward eliminating vehicle safety concerns of steep-sided high-walls next to public roads. These projects are paid for by KDHE, with funding coming from a federal tax placed on newly mined coal. The tax money is distributed back to states to reclaim old mine sites that were abandoned long before reclamation laws were written. KDHE prioritizes these safety concerns, with Area No. 35 of the MLWA their highest priority site. This \$3.5 million project is nearing completion, with more liming, seeding with native grass and forbs, and planting shrubs to come.

Nearly 10 million dollars have been spent by KDHE on improvements on the MLWA to date. Some of the many benefits realized include: making interior roads safer and more assessable; improving productivity of soils by applying crushed limestone to neutralize acidic sites; installation of water control structures to help prevent flooding and erosion; increasing water levels to inundate timber and improve aquatic habitats; improving boat access to large, newly-connected pits; improved shoreline angler access; greatly reduced long-term maintenance costs; and the construction of additional wetlands.

KDHE reclamation work on the MLWA will continue with projects to be initiated soon in Areas No. 2, 3,4,11, 22 and 23.

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(Reclamation efforts continue)



Rock piles were placed in the soon to be flooded lake bottom in MLWA No. 35 as fish habitat. Insects and crayfish will love these rock piles, and the fish will too.
Martin O'Brian photo



Liming and mulching is extremely important not only for establishing terrestrial vegetation, but for maintaining a productive fishery. High acidity is of primary concern in strip-mined lakes. A pH range of 6 to 9 must be maintained to ensure a productive fishery. The ground at this site required in the neighborhood of 50 tons/acre to neutralize and bring to within soil specs. It is standard procedure for us to first get the watershed in good shape, then apply lime in the lake itself if the water quality warrants it.
Martin O'Brian photo

Bone Creek Pavilion

Public Wholesale Water Supply District No. 11 (PWWSD No. 11) is nearing completion of a pavilion at Bone Creek Lake made possible through a \$4,964 Community Fisheries Assistance Program (CFAP) grant. The pavilion project was submitted to KDWPT by PWWSD No. 11 and the Thursday Night Bass Club, with the District providing 26 percent of the pavilions total cost. A good portion of the match was covered by volunteer labor from bass club members and Bone Creek employees.

KDWPT's CFAP program was initiated in 2004 in order to reduce barriers to fishing by removing fees charged by community lakes to anglers. KDWPT now leases the lake and provides PWWSD No. 11 with nearly \$25,000 for annual maintenance costs associated with providing public access and carrying out fisheries enhancements like the fish feeding program. This is the approximate annual revenue supplied by the sale of lake use permits from 1999–2003. The CFAP program has been a win-win for everyone. Anglers don't have the hassle of finding and buying a lake use permit, and Bone Creek officials don't have the hassle of administering a permit sales system to fund recreational expenses on the lake.

The pavilion grant is not the first CFAP grant awarded to PWWSD No. 11. In fact, eight fisheries enhancement grants have been funded at Bone Creek since 1997. Well over a quarter million dollars has been spent on angler development projects including pre-impoundment fish eradication, fish habitat development, fish stockings, access roads, boat ramps, restrooms, fish feeders, and boat ramp extensions.



The pavilion project was submitted by PWWSD No. 11 and the Thursday Night Bass Club in order to provide a sheltered area for tournament weigh-ins, family gatherings, and special events.

**Free Fishing Weekend
June 6-7, 2015. Why Not
Make a Kid (and yourself)
Happy, Happy, Happy?**



Kids love to fish, so please consider getting someone you know involved in this life-long activity. Smiles like this make it all worthwhile.

Upcoming Fishing Derbies

- May 2, 2015 Eagles Kids Fishing Derby
West Mineral Eagles Club
Sign-up Fri. 6-9 pm & Sat 6-9 am
Weigh-in Sat. 4:00
- May 2, 2015 O.K. Kids Fishing Derby
Lakeside Park, Pittsburg
8:00 - 10:00 am
- July 4, 2015 Pittsburg Annual 4th of July Derby
Lincoln Park Ponds, Pittsburg
8:00 - 10:00 Youth & adult categories
- Aug 17, 2015 Arma Homecoming Kid's Derby
Hookie Park, Arma
10:00 - 12:00

A promotional graphic for aquatic education. It features a blue background with white text that reads "Aquatic Education" in a large, stylized font, followed by "The time of your life ... One cast at a time." in a smaller font. To the left is a logo for "KANSAS WILDLIFE PARKS" featuring a bird. Below the main text is a "TAKE ME FISHING" logo with a fish icon and the "FISHKS" logo, which is a stylized fish shape with the letters "FISHKS" inside. At the bottom, it says "Visit us at: FishKS.org". There is also a small circular logo for "SPORT FISHING RESTORATION" on the left side.