El Dorado Wildlife Area News



Area News - Spring 2015

<u>Creel Survey Underway to Monitor Angler Success</u>

The Kansas Department of Wildlife, Parks & Tourism (KDWPT) monitors the success and satisfaction of anglers by conducting creel surveys on many of its public waters. El Dorado Lake is being surveyed in 2015. These surveys are designed to estimate angler use, demographics, harvest and release, and preference and satisfaction. Detailed findings include total number of anglers, hours of shore and boat fishing, number and pounds of fish harvested and released by species and angler, age and sex of anglers, species sought, and angler satisfaction.



Creel surveys provide managers with important insight to better meet the needs of the fishery and anglers at El Dorado Lake. Results have been used to evaluate the success of management actions and will be used as comparison following the completion of future surveys. Results from the most recent survey that collected data at El Dorado from March through October 2007 are presented:

- More than 100,000 hours of fishing were computed to have taken place.
- Nearly 55% of all fishing hours were done from a boat.
- > An average of 3 fish were caught per angler. About half of those fish were harvested, the other half were released.
- White crappie were the most sought species by anglers and were harvested more than any other fish.
- ➤ Channel catfish (followed closely by walleye) was the 2nd most sought species by anglers.
- > More pounds of white bass were harvested than any other species.
- > Walleye were the most released species followed by smallmouth bass.
- About 83% of anglers were male.
- Nearly all anglers were from Kansas.

Department clerks conduct surveys on waters throughout the state. If you are approached by a clerk while fishing your favorite spot at the lake this year, please help KDWPT to better manage our public waters by providing them with the requested information. Help us to make the fishing better for you!

For more information about fishery management at EI Dorado Lake contact District Fisheries Biologist Craig Johnson at #316/322-7513 or craig.johnson@ksoutdoors.com.



El Dorado Lake - 2015 Fishing Outlook

District Fisheries Biologist, Craig Johnson, has provided the following information to assist anglers when planning upcoming fishing trips. Information is provided based upon his annual population sampling.

White crappie-Good "Low density, high quality" is probably the best way to describe the crappie at El Dorado. Several years of drought have resulted in decreased crappie densities within the lake. Crappie density found during the 2014 fall test netting sample was the fourth lowest value collected in the last five years. While density may be down, anglers will be very pleased with the size of the crappie that they do catch during 2015. Over half of the crappie sampled exceeded 10-inches in length. Despite the lower density found in 2014 sampling efforts, anglers experienced good crappie fishing over the winter months. Anglers have been catching crappie exceeding 16-inches in length during 2015.

Walleye-Good Walleye numbers will be very similar to what we saw during 2014. Thirty-eight percent (38%) of the sampled walleye exceeded the 21-inch minimum length limit showing that good numbers of keeper sized walleye will again be available during 2015. The lake was stocked with approximately 5 million walleye fry in April 2015 and 100,000 fingerling walleye should arrive in May/June. Anglers will be happy with the quality of walleye at the lake this year. The walleye length limit is 21 inches and the creel limit is 2/day.



White bass- Fair The white bass population remains very similar to last year. Due to the prolonged drought conditions and lack of productive spawns, the white bass population density remains very low. Anglers did encounter good white bass action during the winter months and these fish were good sized. The white bass population needs a good spawn to rebuild numbers.



Wiper-Good Wiper density is down slightly but is the second highest of the last five years. Wipers are stocked each year and the stockings have been very successful as the white bass numbers have been low resulting in decreased competition for the young of the year wipers. Anglers are already catching good numbers of wipers during 2015. Anglers reported catching wipers in the 26 to 29-inch range during 2014 and these big fish opportunities should continue during 2015.



Channel catfish- Fair Channel catfish numbers remain similar to 2014. The 2014 fall test netting sample showed an increase of fish within the 24 to 28-inch range so more of the larger channel catfish will be available in 2015 than the last few years. Old Bluestem Lake produces good catches of channel catfish as do the creeks during periods of inflow.

Blue catfish-Fair This population received a fair rating mainly due to the low percentage of fish available for harvest with the 35-inch minimum length limit in place. Anglers reported several blue catfish during 2014 that exceeded the 35-inch limit. Legal length fish numbers continue to increase each year. Overall density of this population continues to increase and angler catch rates are also increasing. Catch and release opportunities would be rated **Good** as there are plenty of fish for catching. This population should continue to improve in the years to come.



Black bass-Poor The lake contains three species of black bass: largemouth bass, smallmouth bass, and spotted bass. Largemouth and spotted bass population densities are low whereas smallmouth bass densities can be quite good in areas with good smallmouth habitat. Skilled bass anglers continue to catch nice largemouth bass at El Dorado, but the casual angler would likely be quite disappointed in largemouth bass action at the lake. Smallmouth prefer the rockier areas of the reservoir while the largemouth prefer the vegetated coves, shallow timbered areas, and feeder creeks. The density of all three populations remains fairly stable from year to year. Recent attempts to increase the numbers of these fishes in the lake have not been successful.



Largemouth Bass



Smallmouth Bass



Spotted Bass

Chase State Fishing Lake - A Prairie Jewel To Satisfy Your Outdoor Craving

Just a 45 minute drive north of El Dorado is Chase State Fishing Lake. This blue jewel of public water, set amidst gorgeous tallgrass prairie, provides ample opportunity to explore outdoor Kansas. Located between the Flint Hills communities of Cottonwood Falls and Elmdale, Chase State Fishing Lake and Wildlife Area provides scenic outdoor experiences within a nearly 110 acre lake and 385 acre public land complex.





Scenic views of Chase State Fishing Lake.

Like to fish, hunt, camp, hike, or just soak up the Flint Hills environment? Chase State Fishing Lake can provide. Anglers can find good numbers of channel catfish, crappie, bluegill, saugeye, white bass, largemouth bass, and spotted bass. A boat ramp, courtesy dock, fishing piers, and mowed shoreline provide ample opportunity to access the water for any fishermen. Hunters can find opportunities to hunt prairie chicken, small game, waterfowl, & more.





Successful crappie and catfish anglers at Chase State Fishing Lake.

Visitors hoping to capture a taste of the Flint Hills can hike onto adjacent hilltops and immerse themselves in diverse prairie plant communities, among historic buffalo wallows, all while enjoying spectacular views of the lake and surrounding countryside. A scenic waterfall can be found at the end of a short hike, along the mowed path across the lake dam, at the end of the lake spillway. For those that like to camp, primitive facilities are provided and include a vault toilet, shelter house, picnic tables, and fire-rings. Take an hour, or spend a day, and explore the outdoor offerings at Chase State Fishing Lake!



Scenic waterfall at Chase State Fishing Lake.

What's Being Done to Improve Fishing in Kansas?

Ever wonder how the Kansas Department of Wildlife, Parks & Tourism works to develop or improve fishing in the sunflower state? Craig Johnson, District Fisheries Biologist for the El Dorado District has developed a number of short videos highlighting the work done by fisheries biologists to improve fishing throughout Kansas. His most recent video entitled "Underwater in Kansas: An Anglers Dream" provides a unique underwater perspective of schooling fish that can entice any angler to wet a line. Other video topics highlight recent work to enhance fish habitat and sample sport fish populations. Ever wonder how fisheries biologists do that? See it for yourself as each video is only several minutes in length, but provide a fantastic summary of the work done by biologists to enhance fishing opportunities in our state. They are a must see for anyone with an interest in fishing in Kansas. Check out all of the videos at https://www.voutube.com/channel/UCA7nV8A8XuVEGVRAhIULItA



Morel Mushroom Hunting Tips

Spring is morel mushroom time! Increasingly more visitors to the wildlife area are seeking this delicious member of our Kansas flora. The Kansas Department of Wildlife, Parks and Tourism (KDWPT) reminds hunters of a few tips for a legal, safe and fun mushroom hunt:

Hunters should do their research prior to consuming any mushrooms as some forms found in Kansas can be toxic.



Stick to state parks and wildlife areas. Walk-In Hunting Access (WIHA) areas are not open for mushroom hunting. These lands are private property and accessing them for anything other than hunting game during the identified access period is trespass unless hunters have the appropriate landowner permission.

Be prepared to walk. The use of motorized vehicles on public lands is restricted to maintained roads only, so if your mushroom honey-hole is off the beaten-path, strap on those hiking boots.

Be aware of your surroundings. Public lands are open for many types of hunting and fishing activities. This time of year, mushroom hunters can expect to encounter turkey hunters and anglers looking to lure in white bass and crappie. There's plenty of space for everyone, so when in doubt, move to another spot.

Enjoy your harvest. Mushrooms found on KDWPT public lands may only be harvested for personal consumption and selling mushrooms harvested from KDWPT-managed lands is against state law (see K.A.R. 15-8-20). You've worked hard for your harvest, so enjoy the fruits of your labor and heat up a frying pan.

Prescribed Burning – The Goals of a Habitat Manager

The spring burning season is well underway. The importance of spring burning as a land management tool is apparent throughout the Flint Hills during the month of April. Recent estimates from the spring of 2014 indicate that land managers in the region utilized fire extensively. In Butler County, nearly 95,000 acres were estimated burned. In nearby Chase County over 186,000 acres were estimated burned, while Morris County approached 63,000 acres. Ranchers in the region utilize burning to improve grass production and grazing for livestock ultimately improving their bottom line. What about those responsible for managing lands for public recreation such as lands managed by the Kansas Department of Wildlife, Parks & Tourism (KDWPT)? Does KDWPT use fire for the same reasons as the rancher? Although some commonality exists, there are differences. Here's why.



Prescribed burning can be an effective management tool to promote plant diversity and enhance wildlife habitat.

KDWPT wildlife areas are managed to provide habitat for wildlife and recreational opportunities for the public. Like ranchers, we have a respect for our state's prairie heritage, and use fire to change or enhance certain plant communities. We too use fire to control trees and brush and encourage grasses and forbs (broad-leaved plants). While the rancher's primary focus must be on beef production, the KDWPT must focus on wildlife production. This is of course not to say that the burning efforts of ranchers provide no habitat benefits to wildlife, or that KDWPT has no interest in working with neighboring ranchers to promote benefits to beef and wildlife, but rather it is to say that priorities are often different and so then are the methods employed to meet those different priorities.

As an example, let's consider **burn timing**. To enhance beef gains, spring burns for the rancher are often timed to promote grass production. Often those burns are conducted in mid-April in the Flint Hills. KDWPT burns may also enhance grass prevalence, but may also be conducted at different times of the growing season to meet other objectives as well. KDWPT burns may be conducted in March or July to promote forbs, in late April to discourage grasses that are undesirable for habitat purposes (smooth brome and tall fescue), or early May to late summer to discourage excessive brush. Ultimately KDWPT uses fire in an effort to enhance the number of different kinds of plants and believe that lands that are diverse are more attractive to a visiting public, and benefit many different wildlife species including game species such as greater prairie chicken, bobwhite quail, wild turkey, and white-tailed deer. Habitat areas that contain diverse plant communities often provide diverse food and cover options to meet the ever changing needs of wildlife species throughout the year.



This prescribed burn was planned to control invasive cedar trees and smooth brome, ultimately enhancing the prevalence of other plants valued by wildlife.

Next, let's look at **burn scope**. Burn scope refers to the extent of a burn, or how much plant material was consumed in the fire. Is all plant material planned to be burned or only portions? One benefit of spring burning for the rancher is the removal of dead plant material that remains from previous growing seasons. By removing the old dead vegetation with a fire, cattle can more efficiently graze new vegetation that is often more nutritious therefore improving weight gains over time. For the habitat manager, burning can provide similar benefits by improving forage availability and quality for some wildlife species such as white-tailed deer. However, for the habitat manager, land entirely without vegetation from past growing seasons is often not desirable. Residual vegetation (that which remains from previous growing seasons) is needed to provide wildlife with concealment and protection from the elements. For wildlife species that nest on the ground, residual vegetation is critical. It provides the material to construct the nest, to insulate eggs or young, and to conceal the parent and young from predators. Without cover provided by last year's plant growth, spring nesting wildlife species, including prairie chicken and quail, may refuse to nest or nesting attempts fail because they are not concealed well enough and are detected by predators. If adults fail to nest or successfully raise young, populations soon decline. When conducting a prescribed burn with wildlife in mind, the values of burn scope should be considered to insure that some residual vegetation remains within the management unit, or nearby, to provide cover for nesting and protection from the elements and predators.



This "patchy" prescribed burn will provide diverse habitat benefits later in the season.

Nesting cover has been maintained by excluding fire (background) and brood-rearing cover will become established in the adjacent burned area (foreground).

Like burn scope, burn scale is important to consider. Burn scale refers to the size of a burn. Is the burn planned to be 30 acres in size or 300 acres? The rancher interested in maximizing cattle gains for a yearling stocker herd may wish to burn an entire pasture, preferring to burn at the larger end of the scale. Those interested in the management of habitat for game species such as deer, turkey, quail, and even prairie chicken, may want to plan burns at the smaller end of the scale. These game species often prefer to spend much of their time in areas where different habitat types come together. They like diversity and they like it nearby. By conducting smaller burns and making them irregular in shape and size, structural diversity of the habitat is enhanced. These species then don't have to travel far to meet changing needs. As an example let's consider the changing needs of bobwhite quail and prairie chickens. Habitats chosen by adults for nesting may not be well suited for providing cover and food for young. Shortly after hatching, young game birds must begin to feed on their own. They must find habitat that is rich in insects (food) yet provides them with a canopy for concealment and protection from the weather and predators (cover). This habitat has to provide food and cover needs while also allowing them to move about within it. Therefore it is critical that some bare ground be available to allow these tiny young an opportunity to travel to carry out daily activities. Burning does just that as it removes old vegetation, encouraging bare ground within developing plant stands. For the habitat manager, burn scale is important. A goal should be to provide patches of different plant age and diversity because diverse habitats are more likely to meet the changing needs of wildlife species and a wider array of species.

Let's now consider **burn frequency**. Historical accounts indicate burning within the Great Plains prairie region occurred approximately every 3 to 7 years. Those accounts indicate that burning was often initiated by Native Americans or by lightning and occurred during many different months of the year. Prairie plants and associated wildlife species evolved under such indeterminate conditions. Diversity was maintained because fires occurred irregularly during different years and time of the year. Burn frequency within today's culture can vary widely within the Flint Hills region with some land managers completing burns annually or nearly so, while others may exclude fire entirely. The resulting vegetation can thus vary widely through the region. Habitat managers in Kansas often try to strike a balance somewhere in the middle by periodically returning fire to an area every 3 to 4 years. By doing so they insure that fire is returned frequently enough to control woody vegetation to maintain the grassland system, but infrequent enough to allow some grassland species to utilize residual vegetation to meet life history needs.



Prescribed fire may also be used as a management tool within woodlands. Although fire frequency is likely needed less than in grassland systems, fire can provide valuable habitat benefits. This woodland burn had several goals. The burn was conducted primarily to control invasive cedar trees. It was conducted under conditions that generated enough heat to damage cedars, but remained cool enough to avoid damage to most mature oak, hickory, and walnut in the stand. The burn will also harm some of the brush, encouraging adjacent prairie plant species to occur at the woodland floor, enhancing habitat for quail, deer, and turkey. The burn may also encourage young oaks to enter the stand as competition for sunlight has been reduced by removing the cedar trees.

Lastly let's discuss the value of **heterogeneity**. Heterogeneity can be defined as differing or opposite in structure or quality. More simply it can mean dissimilar, varied, or diverse. The term is an important one to the habitat manager. The value of diversity has already been shared, but of value for consideration is the importance of managing lands in ways differing from those around you. That may include how you use prescribed fire to manage your land as compared to your neighbors. If everyone manages lands the same, heterogeneity is reduced. There will be a small suite of wildlife species that do well with that type of management, but for others their habitat needs will not be met and their populations will be reduced or removed. If some manage differently, including with the use of fire, heterogeneity is enhanced and varied habitat types will exist across the landscape. A larger suite of wildlife species will be able to find what they need in those varied habitats and populations will be more likely to remain strong.



This prescribed burn illustrates the concept of heterogeneity. The burn has provided a varied habitat. This varied landscape may provide attractive habitat for prairie chickens. Nesting habitat is maintained with the presence of residual vegetation to the left, while preferred brood-rearing habitat can be found in recently burned areas to the right.

The goals of prescribed burning to a habitat manager may well be in line with those of the rancher, but may also differ. By encouraging plant diversity and providing varied vegetative structure, the KDWPT can enhance habitats on public lands for the benefit of area wildlife species and the people of Kansas.

Anglers and Boaters Reminded to Take Precautions to Control Aquatic Nuisance Species!

Unfortunately more Kansas waters were recently added to the growing list of those threatened by aquatic nuisance species (ANS). ANS waters are defined as those containing Asian carp, white perch, or zebra mussels. In 2013, zebra mussels were found in Clinton and Glen Elder Reservoirs, and in Wabaunsee Lake and Lake Shawnee. In 2014, zebra mussels were found in Pomona Reservoir.







Zebra Musse

Asian Carp White Perch

Why are these species a problem? ANS often become dominant within an area. They can out-compete native species for food or space and can reduce biological diversity or the assemblage of plants and animals within our native habitats. Ultimately, ANS species such as zebra mussels, asian carp, and white perch, threaten to alter aquatic habitats, of which our wildlife species depend, including those species sought by anglers in Kansas!

Regulations have recently been enacted to prevent the spread of ANS. Boaters and anglers are reminded to follow these regulations while visiting Kansas waters.

- 1. Livewells and bilges must be drained and drain plugs removed from all vessels being removed from waters of the state before transport on a public highway.
- 2. No person may possess ANY live fish upon departure from any designated ANS body of water.
- 3. Live baitfish may be caught and used as live bait only within the common drainage where caught. However, bluegill and green sunfish collected from non-designated ANS waters may be possessed or used as live bait anywhere in the state. Live baitfish shall not be transported and used above any upstream dam or barrier that prohibits the normal passage of fish.



For a list of ANS designated waters please refer to the 2015 Kansas Fishing Regulations Summary (page 30) or visit the Kansas Department of Wildlife, Parks & Tourism website at www.ksoutdoors.com and click on "Fishing", then "Aquatic Nuisance Species". Other ANS designated waters near El Dorado Reservoir include Cheney, Marion, and Council Grove Reservoirs, Coffey County Lake, Kingman and Chase State Fishing Lakes, Lake Afton, and Council Grove and Winfield City Lakes. Streams and rivers below these Kansas lakes are also designated ANS waters.

To protect our aquatic habitats, follow these simple steps at every lake, wetland, and river, every time:

CLEAN: Inspect all equipment for anything attached (plants, animals, and mud) and **remove** anything that is found. **DRAIN:** Empty all water from equipment (livewell, bilge, bait bucket, etc.) before using at a different location. **DRY:** Dry all equipment for a minimum of 5 days before using it again. If you need to use it sooner, wash with hot (140 degree) water.

Would you like more information about the El Dorado Wildlife Area?

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