The N.C. Wildlife Resources Commission (NCWRC) is conducting a creel survey at Lake Phelps from September 2016 to August 2017 to better understand angling effort and angler preferences. Lake Phelps is the second largest natural lake in North Carolina (6,480 ha) and is surrounded by Pettigrew State Park, Pocosin Lakes National Wildlife Refuge, and a small portion of privately owned land. Lake Phelps is home to popular sport fish, such as Largemouth Bass *Micropterus salmoides* and Pumpkinseed *Lepomis gibbosus*. Since 2002, Largemouth Bass are managed with a minimum size of 14 inches, with a protective slot limit from 16 to 20 inches and a five fish daily creel limit, while sunfish are managed with a 30 fish per day creel limit and no minimum size limits. Since the implementation of the protective slot limit for Largemouth Bass, there has been no official survey of angler effort, harvest or opinions on lake management measures. Angler practices and harvest information are needed from Lake Phelps to evaluate management practices, especially the protective slot limit for Largemouth Bass.

**Project Objectives:**
- To quantify recreational angler effort, catch, harvest and target species at Lake Phelps.
- To determine angler preferences, expenditures and thoughts on current management regulations on Lake Phelps.

**Methods:**
- A creel clerk will intercept and interview anglers following completed angling trips at five access areas around Lake Phelps.
- Each angling party will be asked formalized questions regarding effort, trip information, targeted species, catch, harvest, trip expenditures and opinions on available access and current Largemouth Bass regulations.
- At each six-hour interview session, the creel clerk will also identify, count, measure and weigh any and all harvested fish.
Results:

- Through January 2017, 26 completed trips were recorded. During these trips, 48 anglers spent 111 hours and 45 minutes fishing. This effort information is preliminary, and will be expanded to provide estimates of the total angling effort during the creel survey period.
- Of the 48 anglers, 69% (33) were specifically targeting Largemouth Bass, while 31% (15) targeted Pumpkinseed or “anything.”
- During the 26 interviews, anglers reported catching 91 Largemouth Bass and 25 Pumpkinseed. There were no Largemouth Bass harvested, while only seven Pumpkinseed were harvested.
- About 38% (18) of the anglers interviewed were from Washington, Tyrrell or Dare counties, while 56% (27) of anglers were from Cabarrus, Davidson, Green, Johnson, Nash and Wilson counties. The remaining 6% (three) were from out of state.

What’s next?:

- A NCWRC creel clerk will continue to interview anglers through the end of August 2017.
- Following the completion of the survey in August 2017, the data will be analyzed and a report summarizing the findings is expected to be completed by the fall of 2018.

For more information, please contact:

Christopher Smith, District 1 Assistant Fisheries Biologist
Phone: (252)-333-4709
E-mail: christopher.smith@ncwildlife.org