

Florida Fish Busters'

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Creels—aren't they old fashioned fish baskets?

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You might wonder why someone in a Florida Fish and Wildlife Conservation Commission (FWC) boat is stopping you and asking to conduct “a creel survey.” Two questions come to mind. What is a creel? And why does it require a survey? Very good questions – one answer involves tradition; the other answer involves a healthy fishery.

A creel is a wicker basket used for holding fish that an angler has caught, or a wicker fish trap. Today, we still use the expression derived from that old-fashioned, but very stylish, basket. Somehow we haven't adapted to asking if we can do “a live-well,” “ice-chest” or “catch-and-release survey.”



A traditional creel basket used to hold an angler's catch.

So bear with us when we ask for your participation. Your answers to our questions are important to the future health of Florida's fisheries.

The FWC's fisheries biologists need to know what you have been catching. Despite using old-fashioned terminology, the sophistication of these vital surveys has grown over the years, and they are now a critical source of information for determining how Florida's fisheries are doing.

Since creel clerks who conduct these interviews cannot talk to every angler, biologists and statisticians work together to carefully determine a sampling scheme of when and where we momentarily interrupt an angler's recreation to gather this information. Each angler asked to participate represents many other anglers



Anchor tags like these are often used to help estimate the size of a fish population.



Hidden microwire tags embedded in a fish's cheek often identify it as being from an FWC hatchery, this wand detects the tag.

that we cannot talk to, so it is very important that we get the most accurate information possible. The interviewer will want to know how long you've been fishing, and what you caught and harvested as well as what you released. They may also measure your fish, check them for tags and ask some questions about where you live

and other information that helps to explain results, including information on your age, which for instance relates to license sales.

This information is used to determine what anglers want to catch, what they are catching (species, size and numbers), whether they are keeping them, and other factors that allow biologists to estimate the health of a fishery. Combined with other data, such as information from electrofishing samples, biologists can determine what regulations are needed for size and creel limits, what is needed for habitat

restoration, supplemental fish stocking, and where additional access, such as boat ramps, shoreline access, or fishing piers, may be needed.

For biologists to make the decisions that ultimately impact the quality of your fishing, they need honest, accurate information. False responses that over or underestimate your catch can lead to

unnecessary or unrealistic solutions. For example, an underestimate of angling

success could lead to stricter creel limits (the number or size of fish anglers may legally harvest) when they aren't necessary and stunting of the fish population because enough big fish aren't harvested to allow the others to grow rapidly. In case of an overestimate of angling success, the decision may be made that habitat improvements aren't needed because the fishery is doing so well, delay a proposed fish stocking, or prevent appropriate harvest regulations from being implemented.

Of course, biologists consistently use multiple sources of data to reduce the chance these types of errors will occur. But with recurring budget cuts, creel surveys and angler-attitude surveys become increasingly cost effective. As other options, such as electrofishing, seining or trawling, are reduced to save money, or sampling, such as block nets and gillnetting, are reduced because of adverse public perception, the need for honest, accurate answers to creels surveys becomes more and more important.



A creel clerk measures an angler's bass before returning them to the angler. This information is vital to scientific management of your fisheries.

In 2007-08, FWC estimated fisheries dependent effects of sportfish catch, harvest, effort and success rates from creel survey data collected from 14 freshwater bodies throughout the state. Of the three primary sportfish types (black crappie, sunfish and largemouth bass), most anglers once again pursued largemouth bass (averaging 4.3 hours/acre/100 days). The 100 days refers to the peak spring fishing season, so multiplying by 3.65 to get an annual rate would yield an over estimate, which is an example of scientists trying to keep the data “real” and to standardize it so you can compare between water bodies. Some other highlights include the fact that anglers caught the most bass per acre from the L-67A canal (31 bass/acre) and the Stick Marsh (6 bass/acre), whereas a typical figure is less than 4 bass/acre. The canal fisheries benefits from concentrating fish from the Everglades, so the per acre calculation can be a little misleading, but it is nonetheless an outstanding recreational asset. It is important to note that less than 10 percent of those bass were harvested (removed from the system, the others were released). Catch success ranged from 0.32 bass/hour (Lake Harris) to 1.19 bass/hour in the L67A. Often a figure of 0.25 bass/hour (meaning one bass caught per angler every four hours on the water) is considered typical in the U.S., with experienced anglers doing much better but the average influenced by the many novices and those casually fishing more for the relaxation than to compete for the most bass.

The Stick Marsh (5 hours/acre/100 days) and Lake Lochloosa (3 hours/acre/100 days) provided the most concentrated fishing effort for black crappie, but catch rate was highest for Lake Tohopekaliga at 2.33 fish per angler-hour. Lake Okeechobee, the international crappie fishing Mecca, has been somewhat less productive recently

due to major habitat and weather-related effects. It produced 0.7 hours/acre/100 days of crappie fishing in the northwest area of the lake, with a catch rate of 1.49 fish per angler-hour. The greatest focused effort and harvest for sunfish (8 hours/acre/100 days) was observed at L-67A canal, while the “Big O” led the way with a 4 sunfish per angler-hour catch rate. The Stick Marsh/Farm-13 supported the most fishing pressure for catfish (0.7 hours/acre/100 days) and was second only to Lake Istokpoga (1.3 fish per angler-hour) in catfish catch rates.

So the next time someone tells you they are conducting a creel survey, remember you are representing many anglers and helping to ensure the safe and sustainable future of quality recreational fishing in Florida when you give a few minutes of your time and accurate information to the creel clerk.

*Instant licenses are available at MyFWC.com/License or by calling 1-888-FISH-FLORIDA (347-4356). Report violators by calling *FWC or #FWC on your cell, or 1888-404-3922. Visit MyFWC.com/Fishing/Updates for more Fish Busters' columns.*