Fishing & Hunting By Richard Seale

## **More restrictions**

I do not have time right now to uncover how the "facts" have been derived, but for the 2016 recreational season the limit for cobia has been cut in half to just one fish a day. Size limits are still being derived. The official season information has been determined and our NC cobia season will close on June 1 and not reopen until January 2017. Effectively, our cobia season will be about two months long, April and May. Possession of a cobia after June 1 means a citation and court costs.

These restrictions come out of South Atlantic Fishery Commission (SAFC) "findings" that in 2015 the North Carolina recreational take of cobia was more than the allowable limit of 630,000 pounds. In the months to come, I shall try to schedule meetings with fishery officials with the intent of learning how the statistic of the annual take of fish is determined for recreational fishing. Theoretically, commercial fishing data is more reliable since dealers have responsibilities for reporting what they purchase. However, no such procedures are in place for recreational fishing. The recreational data is generated using mailed surveys, college kids being hired to watch people fishing, onsite data collectors questioning people actually fishing, and DMF Marine Patrol personnel cooler inspections. Such a data collection system must then extrapolate this limited known database up to "total population" guestimates.

Besides the errors inherent in doing this "extension of the known," the limited known data itself has only certain degrees of acceptable accuracy, which depend on the number of samples and the size of the population being measured. Properly executed statistical analysis with a set of data that adheres to a "normal distribution around a mean" generates degrees of accuracy using standard deviations. Put all together, a given statistical average could be stated as having, say, a 95% certainty within two standard deviations. These esoteric calculations have meaning when real-life decisions are made as to what we humans can fish for and when, and even more so when the livelihoods of real people are impacted. Good statistics without fairly accurate knowledge of the total population are generally not all that reliable.

What has all this to with the South Atlantic Fishery Council decisions? So far, we are never informed as to what degree of accuracy that 630,000-pound number really has, nor whether the SAFC uses one, two or three standard deviations to make "fact" decisions that impact when we can fish for what fish and how many we can harvest. I will hope to find out in the months to come just how good or questionable the statistics being used might be. After all, if the 630,000-pound number is from data that is widely spread out, or the number set is too small, we may be being forced to stop fishing for cobia when there really is no accurate scientific reason to do so. If the statistic carries three standard deviations of certainty, about 98%, then the science might be an estimate of representing reality. As with most numbers, statistics can be a license to lie since a single number, purported to be "the truth," must come with many assumptions. Without a clear description of those assumptions, there are many opportunities for smoke-andmirror "fact" reporting.

## **Turkey season**

The North Carolina statewide spring bearded wild turkey gobbler-only season will start on April 9 and run to May 7. There is a youth season for hunters less than 16 years of age, but accompanied by a fully licensed adult over 21 years of age, that runs from April 2-8. I am reluctant to say this, but, frankly, hunting is becoming less burdened with regulations than fishing. Incredible.

