

Fluke Wars

By Tom Peter (conservationist/fisherman)

I've been reading a book titled *Striper Wars* by Dick Russell (copyright 2005). The book is about the recovery of the striped bass over the last 20 years. The recovery of the striped bass is precedent for fish conservation/recovery. I am seeing some similarities in the Dick Russell book about the bass as now with the summer flounder "fluke".

The book discusses the history and fight to protect habitats for reproduction, the fight for protecting their habitat waters from pollution and to protect them from over fishing.

The same is going on now with the summer flounder but we must look at a few things that we need to discuss before anything drastic occurs.

First, the term "over fishing" is an expression being used today with the summer flounder. Researchers had set a target number for the total biomass of this species to define it's recovery in a set number of years. They are now saying that over fishing is the main contributor to the deficit in their theoretical biomass goal.

How did the researchers come up with a target goal to define recovery of the summer flounder? They are using mathematical models that were used 30 years ago that were originated from another species of fish on the opposite side of our continent. In the last 30 years has our climate changed? Has our environmental regulations changed? Has our water quality changed? Of course it has!

Reading the Striper Wars book, Dick Russell quotes John Boreman of the Northeast Fisheries Science Center: "fisherman don't simply look for numbers" "they get a sense of what is happening in the water" "We're losing that aspect of our science. We're not doing enough natural history work. I think that's because of the training coming out of school - get those numbers and mortality estimates into assessment, crank the models through and get the output."

A quote from Joe Boone in the book: "You can't manage fish through mathematicians... because you've got to know a whole lot more than just how to plug numbers into a formula. A manager needs to have a lot of biological and environmental knowledge. If you can't prove your results from more than one viewpoint, how do you know they're correct?"

Eric May, who's been studying striped bass for twenty-two years and today a Distinguished Research Scientist with NOAA's Living Marine Resources Cooperative Science Center in Princess Anne, MD, points out another problem that may arise in model analysis. He admits that, "A lot of the models we work with originally evolved in the late '60s and '70s." "Yes all of the conditions which those models originally rested on have changed."

Our environmental conditions certainly have changed, locally and globally. How can 30 year old models by themselves accurately predict population of a fish species? Are the models based on numbers alone or is real field data being applied? Real science is dynamic and the modeling should be composite of all confounding factors, such as pollution, other species predation, fishing and other environmental factors. The models should be species and geographically specific. Thirty-year old models used for a species of fish from the other side of the continent should not be used to predict populations of fish or be a determinate for regulations on this side of the continent.

It is the consensus that more research is needed. Scientists and fisherman should accumulate real data and create a truly scientific evaluation of the summer flounder population. The fishermen realize that more research is needed but the regulatory groups are only listening to the mathematicians using 30 year old modeling.

More research means more time.

Both fishermen and researchers should read the Dick Russell book, *Striper Wars*. They all can learn something about, how battles were fought and how to come about with genuine conservation of a species.