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Subject: : Paflyfish General Forum

Topic: : "wild" rainbows

Re: "wild" rainbows

Author: : JackM

Date: : 2009/7/2 10:23:20

URL:

Quote:

pcray1231 wrote:

Jack,

Ok, I'm getting confused about where we agree and disagree now....

Quote:

1. The wild brook trout in our state could be....

We all pretty much agreed the result has little effect on management decisions, unless only a small handful of isolated heritage strains are found, at which point we have a decision to make on whether to place special protections on them.

My belief is that while most wild brook trout are probably not a pure heritage strain, there are significant populations that are. This is a mere belief and I agree that the Mansfield U. studies may begin to answer this question definitively.

I do think it makes a difference in management decisions. If dealing with a population that is not heritage, it eliminates any justification for extraordinary efforts to preserve the non-indigenous brook trout strain at the expense of any other trout species that might thrive as well or better than the non-native brookie strain. On the other hand, if found to be indigenous, then it may provide a basis for extraordinary measure to preserve it, even to the extent of extirpation of non-natives by means of poisoning or attempt at species-selective harvest. The relative rarity of indigenous strains should impact how far to go with any such extraordinary efforts, or how broad in scope such efforts should be. In other words, if all population of brookies are indigenous strains, then the justification for using extraordinary measures on any particular water become weaker.

Quote:

2. A much higher percentage of the total wild brown trout streams are under special regs than the percentage of wild brook trout streams.

I don't disagree, but we differ on why this is the case as noted below.

Quote:

3. It can be debated whether #2 is a bias for type of fish, or angler preference for a style of water (fertility, size, fish size, etc.). Most of us picked the latter but for various different reasons. My point was that it doesn't matter if the reasons are valid, it still shows brook trout are an undervalued resource that needs some promoting, IMO of course.

There are additional possible explanations here, and mine is missing. You mention a. bias for type of fish and b. angler preference for type of water. My position is that it has more to do with the extent to which special regulations can have a positive effect on the wild populations. To be sure, some special regs streams are that way only because of vocal angler desire, irrespective of whether from a resource management viewpoint the regs make sense. We had an example of this on another thread where FFOC&R remains on a stream where everyone agrees that few if any fish can hold over the summer.

What I think is at work is the understanding of whether harvest or tackle restriction can be effective on relatively infertile streams-- i.e. the majority of brook trout exclusive or brook trout dominated waters. On these types of waters, there is little or no evidence, except for anecdotal "cropping" claims occasionally professed, that harvest or even incidental mortality from angling constitutes a limiting factor. On the other hand, with fertile streams, including the typically most fertile limestoners, habitat and forage are NOT limiting factors, leaving only (primarily) mortality as a limiting factor. On such waters, harvest and IM can have an effect on populations. Though I don't believe that such stream can be devastated by these premature mortality issues, the catchable populations can be reduced in the short-term and negatively impact angler experience. Thus, in my opinion, the PFBC is more likely to impose special regulations. In my view, it is COINCIDENTAL that these types of water are predominantly brown trout waters.

In light of what I have stated is my view, I cannot accept the conclusion, which I do not believe really even follows from yours and other poster's view, that "brook trout are [treated by the PFBC as] an undervalued resource."

Quote:

4. Brown trout average larger in every single stream where the two species co-populate. Browns do indeed tend to dominate in more fertile waters, but their size advantage over brookies has nothing to do with fertility. We are debating whether they grow more quickly overall, sexually mature a year later and thus grow more quickly for only one year, or simply live longer and thus have a higher average age. I hold that it doesn't matter, the end result is the same, but FWIW, I'll go with "all 3 factors are at play."

I think the dominance of brown trout in certain waters has everything to do with fertility. Brown trout have their genetic origins in highly fertile, typically limestone waters. They are genetically programmed to thrive in such waters. [Ken Undercoffer makes an explanation in this PDF article of why](#), which I find persuasive. To an extent also, their preference for a higher pH chemistry keeps them from becoming dominant in the lower pH (and typically lesser fertile) waters.

Having addressed most of your points, it should, perhaps, be more clear to you where we agree and disagree.