From: "Ivan & Pat Paulsen" <ipaulsen@arvig.net>
To: "Annexstad, John" <iceman58@eot.com>, "Jim Bedell" <jjbdell@tds.net>, "L...
CC: "Schultz, Doug" <Doug.W.Schultz@state.mn.us>
Date: 11/12/2009 7:36 AM
Subject: Summary of Discussion Items

After reading everyone's comments on the discussion items, I thought I would give it a shot to incorporate all comments into something a little more readable. I apologize if some of my personal biases enter in this summary. Will try to stay pretty generic.

1. Slot limits - Leech Lake currently has a slot limit of 18 to 26 inches, where no fish within this size may be kept. Anglers are allowed one fish over 26 inches and 3 below 18 inches, or 4 below 18 inches. As indicated to the Advisory Committee members at our last meeting, the DNR would like to keep the slot in place at Leech Lake for the 2010 season so as to incorporate their findings in order to better evaluate walleye slot limits on a statewide basis.

I believe the general consensus on slot limits is a definite need to critically review and evaluate effects on the walleye population of Leech Lake. There are arguments for and against the slot. Pros - A slot limit protects spawning stock sized walleyes which in turn helps ensure natural reproduction within Leech Lake. It also increases an angler's opportunity to catch a quality sized walleye. Cons - A slot limit may result in an inordinate number of larger walleye in the population which in turn can have a negative impact on smaller walleye survival through predation. Additional predation on prey species could affect overall condition factors of the walleye population. A walleye caught within the slot limit could be mortally injured, but could not be kept, resulting the "waste" of the fish, a definite public perception problem.

It will be an individual decision as to whether or not slot limits, minimum size limits, etc. are applied based on biological data and personal preferences. I hope this captures our discussion on this subject. One can argue either side.

2. Stocking rates - Leech Lake has been stocked with walleye fry in 2005, 2006, 2007, 2008, and 2009 and is scheduled for stocking with fry in 2010. Approximate numbers stocked per year were 7.5, 22, 7.5, 22, and 22 million and an additional 22 million are on schedule for 2010.

I believe we did not discuss any specific stocking rates other than we felt blank years (years with minimum to no stocking) should have a minimal number of walleye fry stocked, i.e. 7.5 million, to allow for evaluation of natural walleye production. There was discussion regarding genetic integrity of the Leech Lake strain of walleye. It is a unique strain and we do not want to lose that uniqueness. There was some differences of opinion on whether or not other strains, such as Cutfoot Sioux fish should be used. I think we all agreed first choice for stocking source should be Boy River walleye. To this end, it should be recognized there is a limited number of fry available from the Boy River stock. We all agreed that OTC marking should be done on all stocked walleye to allow for evaluation.

3. Gill Netting - One of the biases of the current gill netting methodology is selection for walleye 2 years of age and older. Data from gill netting is fairly "noisy" due to many factors such as location, weather, fish growth rates (size), swimming speed, net visibility, etc. Therefore it requires careful evaluation to determine results and be able to compare data from one year to the next and one basin to another (i.e. main lake/Walker Bay/Kabekona Bay/Sucker/Steamboat). Dr. Anderson mentioned that a study is being proposed, I believe at Mille Lacs, to evaluate the use of small mesh nets to capture YOY (young of the year) and 1 year old walleye. YOY and 1 year old walleye have limited data available and increased data collection could assist in evaluating year class success.

It was suggested that Doug may want to investigate this study and possibly see if Leech Lake could be included as part of this study. I think we all felt it would be good to get additional data on young walleye as this seems to be of great concern to most all individuals on the Advisory Committee.

There were some side discussions regarding increasing sampling size (locations based on various basins) to gather additional data. If this were incorporated, it would be imperative that the data be looked at as both inclusive and exclusive of the current sampling regiment.

4. Lake Assessment - It was agreed that the DNR should continue annual population surveys on Leech Lake to gather data for use in evaluating the walleye fishery/population. A proactive approach is much better than a reactive approach and will garner the support of the local community. Bench marks should be established which serve as an "alert" to possible downturns in the walleye population. This information should be used by the DNR, organizations and local citizenry to make adaptive management decisions.

Other areas discussed included the need for volunteer help for Doug S. as he is the only individual assigned to manage Leech Lake. It was also suggested that the DNR needs to assign an additional individual to assist Doug. Areas which may serve as indicators for the health of the walleye fishery include angler success (creel surveys), data collection, additional sampling methods, higher minimum standards, and better evaluation and interpretation of the data.

I hope this streamlines all of our ideas and comments into this document. My personal thanks to Dr. Anderson for his time and sharing of information, Larry for his gracious use of Hiawatha (and the meal), and to all of you for your time and concern about working towards a solid management plan for Leech Lake.

Comments/corrections/clarifications greatly appreciated.

Cheers!

Ivan

From: Charles Anderson
To: Ivan Paulsen; Jim Bdell; Larry Jacobson
CC: Kathy DonCarlos
Date: 11/12/2009 12:45 PM
Subject: natural mortality rates
Attachments: Leech Lake Natural Mortality Estimates.doc; Leech Lake Natural Mortality Es timates.docx; notes_meeting with LLAC_Nov. 9, 2009.pdf

Larry, Ivan, and Jim,

I promised to send you several things. One was some information on natural mortality rates. In the attached Word files (two versions in case you can't read the Word 2009 version), I provided some natural mortality estimates (and survival). I also tried to provide a very brief summary of our technical discussions related to Larry's survival rate calculations. I'll try to send a very brief summary of the Year-Class Strength discussions and the Qabg discussions late tomorrow. I'm not sure we (or you) want to present a summary of all the more technical discussion to the larger group, and I'm not certain I can finish a full draft in time. Maybe it will suffice to note that we did spend time considerable time discussing Larry's calculations, various Year-Class Strength methods, and the Qabg selectivity model, then that we identified DNR action items, especially related to identifying signal vs. noise in the data, improving assessment of age-0 to age-3 walleye, and considering separate basins.

Brian's summary is also attached. I think he did a great job pulling out action items that I (or others in DNR) will address. Let me know if we missed anything. I'll plug away on the action items.

And my thanks to all of you for your willingness to tackle this difficult problem and assume leadership roles in developing a better management plan.

Charles

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