The Cortland – Onondaga Federation of Kettle Lake Associations, Inc.
Meeting Minutes
August 17, 2009 – 7:00PM
Tully Town Hall, Tully, NY

Facilitator: Anne Saltman, Principal Planner, Central New York Regional Planning and Development Board
Guest Speaker: Dr. Randy Jackson is a Senior Research Associate, Cornell University Biological Field Station.

Participants (from Sign –in):
Song Lake Property Owners' Association
Marjie Grillo, Carl Grillo, Tony George, Tarki Heath, Daniel Jezer, Rhea Jezer
Crooked Lake Homeowners' Association
Tom Bergamo, Sue Bergamo, Tom Cappa, Dave Zimet, Niles Brown
Tully Lake Property Owners' Association
Dan Johnston, Leo Visconti
Little York Lake Improvement Society
Karen Lang, Paul Stepien, Tom McLyman
New York State Federation of Lake Associations: Nancy Mueller, G.C. Kelley
(Estimate ten people present for the presentation did not sign in)

Meeting opened at 7:12
Facilitator: A. Saltman, Principal Planner, CNY Regional Planning and Development Board

Anne opened the meeting at 7:12

1. Welcome and Introductions

Anne reviewed the agenda and invited participants to stay or leave after presentation. Anne started introductions going around the room, providing name and affiliation. She pointed out the handouts from NYSFOLA and others.

2. Guest Presentation

Anne introduced Dr. Randy Jackson
Dr. Randy Jackson is a Senior Research Associate at the Cornell Biological Field Station. His fisheries research interests include sampling selectivity, predator-prey interactions, fish early life history, fish movements and habitat interactions, and recruitment variability and year-class development. Randy's research also includes applied fisheries ecology, particularly as it relates to the management of exploited fish populations. His current projects include studies of lake sturgeon restoration in Oneida Lake, sampling of near-shore fish communities, creel survey methods, and fish population dynamics in Oneida Lake.

1/ Assessing fish populations
A general discussion about fish management and some possible actions to take.
2/ Fisheries include three components: Organisms/ Habitats / People
Assessment or management will generally focus on one or more of these.

Organisms: Taxonomy, Ecology, Population, Dynamics, Life History, Stocking, Introductions, Population Reductions
Habitat: Limnology, Water Quality, Water Quantity, Constructions, Access
People: Sociology, Economics, Politics, Laws, Planning, Education, Information, Population
3/ Management Goals
These will vary, depending on the fishery. For example, bass was main fish in the south (no walleye). Management in the past was focused more on high harvest rates, today the emphasis on size for sport fishing: world record bass – 22 pounds set in Georgia.

4/ Population Dynamics
Assess things that allow us to measure management success and pinpoint problems.
Measures: Fish numbers vary from year to year: it is a characteristic of all fisheries no matter what we try to do.
5/ What control fish numbers?
Reproduction, recruitment, growth, and mortality
6/ Some questions of assessment
How many are there?
It the annual production adequate?
Is there satisfactory growth?
Is there survival?
7/ How many are there?
Relates to reproduction, recruitment and survival.
Not easy to count fish
Eletrofishing is a common sampling gear: versatile and non lethal.
Uses 300 to 450 volts to stun the fish.
8/ In deeper lakes: gill nets may be used, but they are often lethal and have a high degree of selectivity. Not great for bass because they to move less, better on walleye.
9/ Even with best gear
- the measure does not reflect absolute abundance
- only index data can be gathered: catch per effort, catch per unit effort.
10/ Proper design will give RELATIVE abundance
This can be used to compare systems or years
11/ Index data collected year to year
Long term data is expensive, but it can alert us to problems.
It can tell you when something good is happening (Oneida bass recovery)
12/ It is important to know what we are measuring.
Using angler data is not reliable and it must be standardized if used
13/ Why?
Common sense would lead you to think that the higher the catch, the more the fish there are in the lake. This is not always the case. When angler catch rates from Oneida were used (for walleye), angler success has not correlated to fish abundance, so the research station uses its own data.

14/ Factors affecting angler catch
Bait fish abundance: A year with low bait fish may make lures of anglers more attractive to fish. In abundant bait fish years, the angler's lure would be less attractive. All this makes angler catch misleading.
15/ Common assessment questions
Is annual production and survival of the young adequate?
Function on reproduction and recruitment
Think small: Success/ survival in the first spring is the crucial time.
16/ Year to year variability in adult fish recruiting to the fishery can often be traced back to events in first year of life
17/ Bass are complicated.
Early history of bass: Adult reproduction, female lays eggs and leaves, the male guards the eggs and then the fry until about 1 inch (most of the summer).
18/ Scientists do not agree on critical period:
Is it parent stock, egg laying, guarded young, first summer or winter?
Probably will depend on where you live.
19/ How do we sample small fish?
Electro fishing can be modified to get into small fish habitat: dubbed widow-maker (That's really just the gear we developed in NC, not widely used anywhere else – but standard backpack shockers are)
20/ Beach seines are also used
These are not good for catching big fish
Knowing what your gear will and will not tell you is important
Beach seine data compared to electro fishing data on Oneida gave very different data when compared over the years and might have led to different conclusions about the fishery recruitment.
21/ Is there satisfactory growth?
22/ Comparing growth rates can tell us something about differences among waters or years.
23/ Growth impacts: temperature, age, fish type, food availability
24/ Fish aging and growth rates
Scales and hard structures (ear bones and fins) create growth rings like trees.
You can compare growth rates from year to year
25/ Otoliths, or ear bones are the best but fatal
Scales can be used reliably in the north, but not in the south
26/ Growth rate data can provide information species to species or year to year. They can also be fine tuned to a specific life stage.
27/ Most of the time growth rate relates directly to the food availability or the fish community balance (between predator and prey).
28/ Other indicators of balance can be done without the ear bone.
29/ Fish grow and Long fish tend to be heavier than short fish
30/ Differences in the rate of weight gain can serve as an indicator of the condition of bass.

31/ Fish length and weight can give a relative weight inked to compare to a "standard fish."
Where the relative weight index *Wr* would compare our fish a standard fish
$Wr = (W / Ws)$ X 100
32/ Relative weight tells us whether our fish are conspicuously "fat" or "skinny" relative to what wee know about the species. This can be used for the fish in your lake to give a reflection of the fish condition and the food available.
33/ Before deciding to stock, you need to know if your lake can support more fish. Finding out the relative weights of your current stock may be the place to start. This is the kind of information we like to have.
34/ An application of *Wr*: Crappie before and after a shad die off in North Carolina
Responsiveness of relative weight to food availability
35/ Another application of *Wr*: 1994 study: Small bass were found to be completely dependant on blue gill while big bass utilized a more varies suite of prey.
36/ *Wr* is something we can measure. Catch a bunch of fish and weigh them to get relative weight to get an idea of the conditions.
37/ Another approach to assessing predator/prey balance is PSD: Proportional Stock Density
This looks at the size and structure of the population
38/ Think if fish as a renewable resource, you want a constant flow of fish of various sizes. Sustainable fisheries will have various sized fish of each species; large, med, small.
39/ PSD looks at the proportion of stock densities of large fish to medium sized (and small) fish.
If sizes are missing then there will be a few years of unsustainable fisheries.
40/ An imbalance with more small than large fish is usually the result of overfishing large fish or overcrowding and poor growth (stunting) of small fish.
41/ Comparing results from the Wr example using crappies
PSD was also poor (indicating stunting). Getting a few different views helps support your conclusions.
42/ When PSD shows more large fish than small, this usually means poor reproduction or high juvenile mortality rates. The big fish are either not producing well, or are eating all their own young.
42/ We can extend PSD to look at predator and prey together.
Overharvest will lead to lack of large fish conversely when they are not harvested enough, the fish will not get as large as needed. Proper harvesting is necessary to assist sustainability
43/ Is survival satisfactory?
There are usually more young than old fish in the populations. Mortality rates can be determined. We can then compare with harvesting rates and mortality year to year.
44/ Take home points
We can use our knowledge of the biology and ecology of fish in assessing populations - and guide us to where improvements might be needed.
"If you are going to manage a lake or suggest some kind of change, I encourage you to go in and understand more about what's going on (in the lake) first."
Early "willy-nilly" stocking mistakes warn us not to do things carelessly.
Learn about your fish populations before going in and making any changes.

Participant Question: Looking at the amount of research on Oneida, and looking at our kettle lakes; what is available to us?
Randy: Our contract is pretty specific to Oneida so it probably cannot be done through our office, but there maybe some flexibility. One way to get the researchers is to get the agencies here to show need. There are some private consultants. Best bet would be to contact DEC to work with us. Perhaps they can get the Cornell group to work on a contract/ not unavailable, just not able to do work unauthorized.

Participant Question: what about Cazenovia Lake and their efforts to eradicate weeds.
Randy: Not really involved with that. It is a private lake and the landowners are working on that.
Anne: Cazenovia Lake has been dealing with abundant plant growth for several years and the long-term use of the harvester showed minimal benefits. Chemicals were applied this past spring following an extensive community fund-raising campaign. The lake community had also addressed issues regarding the high cost of chemical application, the potential impact on shoreline homeowners, and downstream impacts on the endangered Chittenango snail. The chemical application has resulted in reduced plant growth, although algae growth has been notable.

Participant Question: What types of plants are better for the fish? Specific concern about chara.
Randy: Some vegetation is always good, but too much vegetation can be adverse. Typically what you will hear is 20% to 30% vegetation is considered best as some fish (bass) cannot get into the weeds to forage. Smaller fish then can hide in the weeds where the larger fish cannot get to them causing hardship to the larger fish. To my knowledge, chemicals are expensive and considered a quick fix, but grass carp have been seen as an "all or nothing" solution; they seem to eat too much. Difficult to get the right balance.

Participant Question: Concerns over grass carp escapement and sterility: any comment?
Randy: The agencies are conservative, but there is no guarantee that the fish will not escape and cause problems for larger regions. Mention of Chesapeake Bay and ability to adapt to salt water.

Participant Question: Were you suggesting that the carp were not really sterile?
Randy: Carp from commercial fisheries and they only test a fraction of them. Guess is they are 99.9% effective, or they wouldn't get the permit, but there is no guarantee. But, even if they are sterile, they can still have an impact and they live a long time.

Participant Question: Do they cut back in their eating over 4 years of age?
Randy. That has not been my experience. The fish we caught were still eating at all ages, maybe not as aggressively. They live to about 7 years.

Participant Question: as we see the lake temperatures rise, how is that affecting the fisheries in the state?
Randy: We're just starting to see that. In Oneida, the burbot (the last cold water species in the lake) are not surviving as well. Our best guess is that is due to the summer water temperature.

They are about as far south here as they go and have never been that strong here. They have gone from 2 to 3 weeks without eating (when we first started the studies) to 2 to 3 months. They are probably losing more weight than they can make up for to reproduce successfully. Increase in bass also probably has something to do with the increase in temperature. Clearly the lake is going through a lot of shifts; impacts from invasive species as well.

Participant Question: On Song Lake we have been stocking grass carp and walleye since 1995. About 2,500 grass carp, and 2,000 walleye. The sizes of carp are very large and they are doing a good job on the weeds. There has been no stocking of either fish in the past 3 or 4 years. Some want to put walleye in. Lars response to walleye was that in a small lake with bass, the walleye tend not to do well. He says, be happy with the bass. We have a lot of bass.
Randy: I agree that the walleye would be a waste of money. Walleye did better when the bass populations were lower. If it's a bass lake, then it's a bass lake. First year of study on 16 lakes where fingerling walleye were stocked it was found that where there were bass the walleye did not do as well, especially in small lakes. It's possible you could stock bigger walleye, but you want to be sure you have enough prey to support them.

Participant Question: We are seeing an increase in pickerel population with bass and bluegill. Not sure if that is an issue. The lake is small, with public access and the DEC has deemed it fishable year round. With all these predator fish and possible overfishing, what can we do?
Randy: The pickerel are probably responding to the vegetation: more weeds, more pickerel. They usually stay in the shallower denser places, but theoretically they could become dense enough to compete with the bass. For overharvesting: just keep records on what is being caught. Small fish will indicate overfishing and then you can go to the agency to complain. It's pretty easy to overfish small lakes in NY. With regulations where you can sell perch, there is a chance of commercial fishing.

Participant Question: I have been catching fish that are showing small worms in the flesh. Is that harmful?
Randy: All fish carry parasites, if the fish look healthy then the parasite is probably not a burden to them. If they look sick, they probably are. If it gets out of hand you will probably start to see emaciated fish.

Participant Question: If I catch one that is emaciated, where do I go with it? Do I kill it? Will this get worse in the lake?
Randy: Some parasites are habitat specific. If you think there is a problem, you may contact Paul Bowser at Cornell vet school, he may help. You may need to freeze the fish. He can tell if the parasite load is enough to be of concern or not. If you start to see one out of every 5 or 10 in that condition then it might be worthwhile having Paul look at it.

Small discussion about "Diet for a Small Lake."

Participant Question: How effective is electrofishing?
Randy: Varies depending on how conductive the water is. Probably about on to 1:1/2 meters from the field. We will see fish move away. More effective when the water is less conductive.

Participant Question: We talked about percentage of weeds in a lake: if there is a proper balance would the prey and predator situation be maintained?
Randy: It depends on the harvesting of the lake- people tend to overharvest, or they may resist pulling small fish out that they need to take out to keep it sustainable. In a larger lake, things usually balance out on their own. We (humans) are the most disruptive force. Small lakes take more work to keep in balance, especially when stocking is involved (and overfishing.) You can have balance with out weeds too, but some weeds are better than no weeds. Getting that balance is difficult and anglers inevitably want more weeds than swimmers.

Anne asked if Randy would be agreeable to taking questions via email.
Randy agreed and Tarki will send around Randy's email address (jrj26@cornell.edu).

3. Lake Share – Tully Lake: Dan Johnson

Tully is one of the bigger kettle lakes and is split between Cortland and Onondaga Counties. Inflow comes from Green Lake and springs from the bottom headwaters of the Tioughnioga River and goes past the sewage plant. Average is 13 feet in depth, but some kettle holes go 25 to 30 feet and the drop off is very steep. Some stocking of walleye, bass are doing well. They are sticking with perch, and bluegill. The lake has an unusual red breasted bluegill. Chara and milfoil are present. Chara is huge problem. There is not much root system, but it is prolific.
The lake is divided between the Upper and Lower Tully Lake sections. Once it was One Tully Lake, but now it is separated by a small channel. Lake water quality is good. There are always concerns from waste water plant discharges. They are also looking at additional problems coming from agricultural inputs and some poor septic systems.
There is a lot of activity on the Lake with an annual sail boat race, carnival and other activities. There are two associations: The Tully Lake Property Owners have been around for 25 years and with 160 residents it has 70 members. Tully Lake Parks Association is on the west side along Hoffman road. On the park there are lifeguards and roads so the dues are higher.
They experience very little trouble with motor craft. Many boats are non-motorized, so there are few troubles there.
Possible problems on the lake include the waste treatment, open (southern end) access for carry on craft with no place for waste or restroom facilities. DEC calls it a Lake Assoc. problem. The Lake Assoc. might come back to the coalition for support on this.

Participant Question: public access; do you have a fair number of motor boat users?
Dan: No, they really cannot get in.

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Participant Question: Who would have made the access restricted?
Dan: DEC: has gate with a key. Recently residents are complaining about trashing.

Participant Comment: At a lot of places where DEC has put in a cleaning area, it turns into a garbage pit.

Anne thanked Dan and introduced the next sections.
8:25PM

4. By-Laws and Mission Statement

Revised by-laws were sent prior to the meeting for review.
Anne led a review of the document and a review of the mutual goals and recognition of the input from the others.
Three areas of concern emerged:
One: Process needs to be clarified as to how another lake can join COFOKLA as an association member.
Two: Take out the ex-officio provision for the president.
Three: How can it be addressed that this coalition will not direct the activities of the member associations? How can we ensure that this organization will not overrule the individual organization?
The temp exec committee will review the changes requested and implement for review.

5. Nominations Committee:

Discussed process and time frame to elect Board of Directors and Executive Committee
2 representatives from each association: currently Song and LYL have two, but Tully and Crooked have one.

6. Incorporation Status

Tarki filled in for Tom Fox. The first submission was rejected by the state, so Tarki is working with Tom to resubmit.

7. Fall COFOKLA Picnic Plans - date, time, location, tabletop displays

Possibility: Karen – Little York Lake will have a fall picnic the lake at pavilion. They could host the COFOKLA picnic at the same time.
Date is September 12th. All can bring a dish to pass
Time: noon
The pavilion has a capacity of 300. If it is being used, there are other outdoor pavilions.
Karen will work to organize and send information to Tarki to distribute.

8. Additional Lake Association Announcements

Anne: Lake Management Conference scheduled for September 16th in Cicero.
Septics – on site management course: information on side table.

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Tony: There will be a septic systems seminar at the Homer Town Hall. Karen will find details and Tarki will send on email.

9. Next Meeting Date, Time, and Location

October meeting: 19th, Monday at 7pm
Tarki will ask Sue if the Town hall is available.

Submitted by Tarki Heath