

**Lake Champlain Fish and Wildlife Management Cooperative  
Policy Committee Meeting Minutes  
August 9, 2012**

**NYSDEC Warrensburg Office, 232 Golf Course Road, Warrensburg, NY**

Policy Committee Chair Patrick Berry called the meeting to order at 10:00 am, and attendees introduced themselves (meeting attendance list attached).

**AGENCY UPDATES**

**New York - Patty Riexinger**

The NYSDEC Division of Fish, Wildlife and Marine Resources budget is improving after years of cuts. Past staffing reductions and a recent license fee increase has resulted in a \$47M surplus in the Conservation Fund. The Division recently filled several vacancies, including 11 fish hatchery staff, two regional fish biologists and one regional deer biologist. Five vacancies within the Bureau of Fisheries were also filled by internal promotions. There are still a lot of field biologist vacancies; a new biologist civil service test was just given in NY, which attracted 1,300 applications from around the country.

More resources are being directed at game species management planning. A 5 year deer management plan was completed and new deer hunting regulations are in effect, including expansion of antler restrictions into more Wildlife Management Units. A bobcat management plan is underway. A number of new fishing regulations were adopted, including expanding bass fishing opportunities in Oneida Lake. New legislation passed to allow more free fishing clinics sponsored by outside organizations. Legislation regarding use of crossbows is generating controversy. There is a lot of pressure for regulations to allow the sale of live farmed black bass for food. This is strongly supported by the NY Farm Bureau, but anglers are concerned that allowing sale of farmed bass would encourage poaching of wild bass and negatively impact bass fisheries. The Governor signed an invasive species bill.

In response to flooding from Tropical Storm Irene, New York is doing more outreach, including training for local highway superintendents to better plan for and react to storms.

**Vermont – Pat Berry**

The VTFWD received its largest general fund appropriation ever in 2012. License sales revenue is increasing, but there are still challenges from not having enough state funds to fully utilize federal aid PR allocations. The legislature passed a bill declaring fish and wildlife in public trust.

Several vacancies have recently been filled or are close to being filled. After three recruitment efforts, a new deer project leader has been hired. Other new hires include a new director of public affairs, a federal aid coordinator, a fisheries biologist in the Springfield office, and 5 new game wardens. The vacant information specialist position is also in the process of being filled.

Fish culture chief Tom Wiggins retired earlier this year, but he is back on contract for special projects, including rebuilding of the Roxbury Hatchery, which was devastated by Irene.

Vermont Fisheries biologists expended a big effort dealing with the aftermath of Irene, which caused severe damage in two thirds of the state. There were substantial impacts to stream fish habitat, which were made worse in many areas by the “big yellow machines” working in the streams without proper guidance. It has been a challenge to keep open communication with VTDEC stream alteration engineers to ensure that fish habitat is considered in flood remediation activities. 77 miles of streams were directly impacted by big yellow machines. VTrans found areas that were “fixed”, now will be involved with DEC in correcting those areas.

The Fish and Wildlife Board has worked with us well on a number of regulations, including a new separate bear tag for the early season (prior to deer rifle season), extended bear season by 5 days, extended snowshoe hare season, and a new rule regulating public activities on Fish and Wildlife Department lands. The baitfish regulation has been re-opened for amendments. There will be public hearings on it this fall.

### **USFWS - Deb Roque**

Deb is attending the meeting for Wendi Weber. The Service has been in a declining budget situation for several years. The current budget will likely be under a continuing resolution through March 2013. The Fisheries program is undergoing a nation-wide reorganization, but the Region doesn't anticipate losing capacity and will continue to focus on current high priorities.

Bill Archambault added that funding for hatcheries, and monitoring and assessment is declining, but the habitat program is growing, with an increase in support for the fish passage engineering section with Great Lakes Restoration Initiative (GLRI) funding. GLRI is also contributing funding to invasive species management and lake trout restoration through 2013. Future funding of GLRI is uncertain.

### **SEA LAMPREY CONTROL**

#### **Overview, budget and accomplishments – Brad Young**

Three lampricide treatments were conducted in 2011, including the Ausable River Delta, the Boquet River and the Poultney/Hubbardton River system, and there were few problems or controversies.

The surface area of the Ausable Delta treated with granular Bayluscide was expanded from previous years with the discovery of high larval densities beyond the drop-off into depths of up to 80 feet. The delta is probably contributing about one half of the entire lake-wide sea lamprey population based on larval surveys, and its treatment used close to \$500K of chemical.

The Boquet River is the first Lake Champlain tributary to be treated with the TFM-niclosamide combination. The addition of niclosamide (active ingredient in liquid bayluscide) results in about

a 40% reduction in the amount of TFM required, which is a substantial cost savings. The treatment was estimated to result in a 90% reduction in larval abundance in the Boquet River.

A scheduled treatment of Beaver Brook was cancelled after finding the recently installed trap was successful in preventing sea lamprey reproduction. No larvae were found upstream of the trap.

Larval detection surveys found new populations in Rea Brook, tributary to Scotion Creek in Plattsburgh, NY, and in Potash Brook, South Burlington, VT. Trapping was initiated in both streams in Spring 2012.

A specialized Granular Bayluscide application boat was ordered. This boat employs a GPS-controlled agricultural-type sprayer system. It will enable faster, more efficient delta treatments than we have previously done with our two existing Bayluscide boats.

We also purchased a specialized SONAR bottom habitat mapping system called Rox-Anne. The system will identify and map river deltas larval habitat types based on substrate size, which will enable directing larval assessment survey sampling to areas of preferred habitat and more accurate targeting of Bayluscide applications.

The 2011 budget had \$150K in savings, from the Boquet combination treatment and late hiring of new term staff. About \$400-500K savings is expected in 2012 due to the Boquet Delta survey finding too few larvae to warrant treatment.

The Saranac River now requires treatment; high larval densities were found in the Saranac for the first time since it was last treated in 1992. Treatment will be scheduled for 2013, and may cost around \$150K.

We are currently debating whether or not to treat the Lamoille River in 2013. Very low larval abundance was found and it's a large and expensive treatment.

Given the current budget situation and annual \$700K appropriations, the current program should remain solvent until through 2018. The goal for a more stable funding mechanism is to add \$1 million annually to the USFWS base budget dedicated for Lake Champlain sea lamprey control.

### **Wounding rate assessment – Brian Chipman**

Sea lamprey wounding rates for lake trout and salmon are at or near the lowest levels ever. Lake Trout averaged 30 wounds per 100 fish in 2011, but still have not reached the target of 25 wounds per 100 fish. Lake-wide wounding rates for Landlocked Atlantic salmon increased slightly to 19 wounds per 100 fish, after meeting the objective of 15 in 2011; however wounding on Inland Sea/Mallets Bay salmon declined to 14 wounds per 100 fish.

### **2012 treatments/permit status – Mike Calloway**

The 2012 fall treatment season will be busy with treatments scheduled for the Saranac River delta, Mt. Hope Brook, Mill Brook and delta, Winooski River, Missisquoi River, and Great Chazy River.

New York permits are in place for the 2012 treatments (NYSDEC freshwater wetlands and pesticide permits, and the APA wetlands permit). NYSDEC submitted the SPDES Notice of Intent (NOI), which covers Lake Champlain treatments, as well as treatments in the Finger Lakes and Lakes Erie and Ontario. The NY SPDES permit meets EPA's NPDES Pesticide General Permit requirements.

In Vermont, endangered and threatened species taking permits are in process for the Missisquoi and Winooski river treatments, as well as the aquatic nuisance control (ANC) permit for the Missisquoi. The Winooski treatment is already authorized under the current 5-year ANC permit. The process for submitting the NPDES NOI is still unclear in VT; we are continuing to work with VTDEC on this.

### **Alternatives Workgroup, RFP process and funding – Ellen Marsden**

RFPs for sea lamprey alternative control research have traditionally been released annually, and funded for \$50K each year. RFPs in 2010 and 2011 attracted only one proposal each. To attempt to encourage more proposal submissions, a one-time change was approved for the RFP process to solicit proposals for \$100K over two years. Since there have been very few alternatives proposals submitted recently, the Fisheries Technical Committee (FTC) is considering the following options regarding the Alternatives Workgroup:

1. Status Quo – continue to solicit alternatives-related proposals only.
2. Hybrid approach – RFP's would place priority on alternatives research, but if no good alternatives proposals come in, FTC would reissue the RFP for a broader range of sea lamprey control-related research.
3. Disband the Alternatives Workgroup.

Pat Berry stated that the Alternatives Workgroup is essential for moving forward, and suggested another option: If no viable proposals are submitted for a 1-year \$50K study, then roll the funding over and issue a \$100K proposal for the following year. Patty Riexinger suggested the hybrid option, but added that the RFP should be administered by the FTC (responsible party) since the Alternatives Workgroup is advisory to the FTC. The FTC would then forward any proposals to the Workgroup for review and recommendations.

Ellen added that we can work to leverage larger amounts of GLFC research funds with the Alternatives money. GLFC may find collaboration with Lake Champlain on larger research projects to be beneficial. The Champlain basin can provide smaller and more manageable test sites for some projects than can be found on the Great Lakes.

**Action Item:** Ellen will draft a new process and forward to FTC for review: RFPs would be issued on alternate years for a maximum of \$100K; if no proposals are accepted, funds for the current two-year cycle will revert to the general sea lamprey control budget.

### **Finger Lakes sea lamprey control MOA – Phil Hulbert, Brad Young**

NYSDEC is developing a formal agreement with USFWS that would give USFWS the lead role in conducting the next round of Finger Lakes lampricide treatments. NY is looking into covering the FWS operational and travel costs with federal aid funds (FWS staff salaries would be ineligible).

### **LaPlatte River sea lamprey control – Brad Young**

The LaPlatte River (about 10 miles south of Burlington, VT) is known to be a relatively low sea lamprey producer, but it is still uncontrolled. A barrier was originally pursued due to concerns about potential adverse effects of TFM on the resident stonecat population (state-listed endangered species). In 2010, the US Army Corps of Engineers (USACE) estimated the cost of a seasonal barrier to be about \$1.5M, and the Cooperative would be required to pay 35% match under the current funding structure, which has since been cut from the USACE budget.

Recent toxicity test results show that stonecats are more tolerant of TFM than previously thought, so the FTC is now recommending chemical treatment. Treatment at an estimated cost of about \$10K every 4 years is much more cost effective than construction and operation of a barrier. The LaPlatte River is proposed to be included in the next 5-year ANC permit, with the first treatment in 2016.

Pat Berry is not prepared to act on the LaPlatte proposal at this time. The proposal will be brought up again next year for the Policy Committee's consideration.

## **INVASIVE SPECIES**

### **Spiny water flea – Dave Tilton, Meg Modely**

The Lake Champlain Basin Program Rapid Response Task Force (RRTF) completed an invasive species rapid response plan in 2009. This year's discovery of spiny water fleas (SWF) in the Champlain Canal system prompted the first implementation of the rapid response plan. SWF was later found in Lake George.

A consultant was hired to assess SWF control feasibility. Chlorine treatment was suggested, but would be very costly, has high risk of non-target impacts, and success is questionable (Chlorine may not be effective on SWF eggs). Another finding suggested that SWF would probably not survive in the canal, but this was later proven wrong when SWF was detected throughout the canal, although numbers still appear to be sparse. After review of the findings, the RRTF determined that control is not feasible, and that spread prevention should be strongly stressed.

The RRTF is actively working with the NYS Canal Corporation to develop spread prevention measures in the Champlain Canal. The USACE is conducting a feasibility study for a potential aquatic invasive species (AIS) barrier in the Canal.

The RRTF also implemented control of variable leaf milfoil in South Bay this year.

## **Other AIS updates – Meg Modley**

Barrier mats are being used in 4 sites in Lake George that are infested with Asian clams, at a cost of \$600K/year. A dramatic increase in algae blooms has occurred in Lake Tahoe since Asian clams became established.

## **FISHERIES MANAGEMENT**

Chet Mackenzie presented the 2011 FTC Annual Report.

### **Forage fish assessment – Nick Staats**

Hydroacoustics surveys in 2011 indicated that rainbow smelt abundance declined to very low levels in the northern portion of the Main Lake, but the mid Main Lake remained at the highest levels seen in 7 years of sampling. There was a large increase in smelt abundance in the south Main Lake, but the levels still remain lower than seen in 2005. Smelt abundance remains very low in the Inland Sea and Malletts Bay, but abundance of targets above the thermocline (mostly alewife) was among the highest seen in these areas.

Nick discussed some preliminary information from the ongoing 2012 forage fish sampling. The age 1 smelt cohort comprised nearly all of the Main Lake midwater trawl catches. Then mean length of age 1 smelt has declined by about 30 mm since the alewife invasion. Inland Sea trawl catches continue to be very low. Floating gill nets were deployed for the 5<sup>th</sup> year to sample alewives high in the water column, where acoustics do not pick up well. The gill nets produce alewife age and growth data, but don't appear to be useful for discerning trends in abundance.

### **Salmonid assessment – Brian Chipman**

River runs of landlocked salmon and steelhead are improving, with large increases in numbers returning to the Boquet and Winooski river fishways in 2011. A record number of 189 salmon was collected at the Winooski One fish lift, and the catch of 69 salmon at the Willsboro fishway was the highest since 1998. Spring steelhead returns to the Winooski One fish lift steadily increased in 2010 and 2011, after being almost nonexistent during the previous years with very high sea lamprey wounding rates. Salmon survival appears to be improving, with larger, older salmon appearing in samples for the last two years. The frequency of the smaller size class of lake trout in fall spawning population assessments has risen over the past two years, after several years of continuous decline. This suggests that survival of smaller lake trout is improving in response to lower sea lamprey abundance.

## **SALMONID RESEARCH**

### **Landlocked Atlantic salmon studies – Nick Staats**

VTFWD initiated a multi-year study to evaluate returns of stocked Sebago strain salmon smolts produced from feral vs. captive broodstock. The two groups are differentially marked and

stocked in the Lamoille and Missisquoi Rivers, Inland Sea, and Hatchery Cove. The first year class of evaluation fish from the Ed Weed FCS was stocked in spring 2012.

Several other studies are underway to improve our understanding of salmon smoltification, imprinting, and migratory behavior, under direction of Bill Ardren (USFWS). The goal of this research is to improve river runs of adult salmon. The effects of rearing conditions and timing of stocking on imprinting and adult returns will be assessed. Experimental groups of smolts reared at Eisenhower NFH under different winter water temperature regimes (constant temperature well water vs. natural condition stream water) are stocked in the Winooski River. Effects of timing of stocking are being assessed in the Boquet River, with groups of smolts stocked in either March or May. All smolts in this study are genetically marked to differentiate their experimental groups, and the first of three experimental year classes was stocked in 2012. Physiological indicators of smoltification are being investigated with assistance from the Steve McCormick of the USGS Conte Lab, and Dartmouth Ph. D. student Marcus Welker is studying olfactory stimuli that trigger homing behavior in spawning adults.

#### **Thiaminase – Ellen Marsden**

Thiamine levels in salmon and lake trout have been steadily declining since the alewife invasion. There is still high production of naturally spawned lake trout fry, but the fry have been sampled at emergence, before thiamine deficiency may be detected. These fry will survive and grow well in the hatchery after thiamine treatments. Next steps are to collect later fry stages in the wild for thiamine analysis.

#### **OTHER UPDATES**

##### **Salmonid stocking rate indicators – Chet MacKenzie**

A workgroup of Fisheries Technical Committee members was formed to develop a salmonid stocking assessment plan that would provide information to manage stocking rates. A standardized suite of predator and forage fish population indicators will be developed for this purpose. The workgroup is examining data from existing monitoring programs that may provide useful trend information, such as growth, condition, abundance, survival, and returns to anglers.

##### **Post-tournament movements of black bass - Jeff Lokumas**

There are concerns about the effects of increasing numbers of Lake Champlain bass tournaments, particularly out of Plattsburgh. The effects of stockpiling released bass, and post-tournament movements and mortality need to be assessed. The number of tournament permits lake-wide increased from 57 in 2006 to 127 in 2009. However, there has been no change in average total weights caught by the top 10 anglers in each tournament from 1997 to 2010.

Tim Mihuc, Mark Malchoff and graduate student George Maynard at SUNY Plattsburgh are conducting the study. Eight tournaments in Plattsburgh were monitored and about 3,700 bass were examined. Preliminary results show a 13.9% tag return rate from 2,300 bass that were tagged prior to release. Most radio-tagged bass stayed within 10 km of the Plattsburgh release site, and no bass returned to the area of their initial capture.

### **Petition for ESA listing of American eel – Krishna Gifford (by phone)**

American eel listing is again being proposed. Listing can be range-wide or specific portions of range. There are two listing processes: 1) Candidate - initiated by FWS based on scientific findings, or 2) Petition process – initiated by citizens (most petitions come from organizations). There is a Congressional funding cap on ESA listing reviews, so petitions are prioritized, and findings can be conducted only when specific funds are available

The first eel petition submitted in 2004 was found to be not warranted. A second petition was submitted in 2010, introducing new information that climate change may be negatively impacting glass eel recruitment (the only issue accepted for review). A 12 month eel status review was not funded in FY 2012, and it may or may not be funded in FY2013.

### **Status of White River NFH re-orientation – Dave Tilton**

Estimated cost to rebuild the hatchery is \$5 million. White River bank stabilization is underway on hatchery grounds, incorporating woody habitat enhancement structures. Several brainstormed ideas for re-orienting production were discussed:

1. Production for NY: salmon (L. Champlain), lake trout (L. Ontario and Erie), lake sturgeon (St. Lawrence R.), sauger (L. Champlain);
2. Production for VT: salmon (L. Champlain and inland lakes), brook trout (statewide);
3. Maintain VT captive broodstock;
4. FWS National Fishery Research Center quarantine facility;
5. Nongame, T&E species culture.

## **INTERNATIONAL AFFAIRS**

### **Morpion Stream sea lamprey barrier construction – Brad Young**

All permits and easements are in place for the barrier construction but there has been difficulty with getting firms to submit bids. Only one bid was received and it was for over twice the estimated project cost. There is a construction boom in Quebec, mainly rebuilding from damage sustained in the 2011 floods, so most construction firms are full of work. Another request for bids will be released later in the year.

### **Quebec fisheries updates – Steve Garceau and Pierre Dumont (by phone)**

Quebec's ecological monitoring network is focusing on Missisquoi Bay and the Richelieu River, with a standardized fish community assessment (gill nets and seining). They are trying to assess the impacts of the extreme flooding in 2011 on fish communities. Field work will be done in fall 2012 and results should be available in spring 2013.

Round goby is now abundant in the St Lawrence River down to Quebec City, and in the lower Richelieu River (below the St. Ours dam). About 2,000 St. Lawrence River round gobies have been tested for VHS and all were negative.

Following the 2001 floods, tench have spread down the Richelieu River and are now common into the St. Lawrence River (Lake St. Pierre area).

A study suggests that silver eels in the St. Lawrence River may not have enough lipid content to migrate all the way to the Sargasso Sea for spawning.

A new baitfish rule was passed in Quebec. Use of all baitfish is prohibited in northern Quebec, and is allowed in southern Quebec only in winter.

## **WILDLIFE**

### **Colonial waterbird update – Joe Racette**

In 2011, NY, VT and USDA shot 6,000 cormorants, which is about 30% of the lakewide population (preliminary estimate). There is some level of disagreement as to the accuracy of cormorant population models.

There is an EA underway to use PR funds for cormorant control, but there has been no progress on it since 2011. An EA may not be necessary if control remains authorized under the current depredation order.

### **NY marsh bird monitoring – Kate Yard (by phone)**

The NYSDEC Wildlife Diversity Unit is doing marsh bird surveys throughout the state. The Objective is to estimate species-specific population trends of game and non-game marsh birds to inform management decisions. Randomized sampling was completed on the following Lake Champlain wetland WMA's: Kings Bay, Monty Bay, Putts Creek, Chubbs Dock, and East Bay/Poultney River. Preliminary results show Virginia rail to be most abundant at these sites. Others include pied-billed grebe, least bittern, American bittern, sora rail (uncommon, only in northern sites), and king rail (only in Kings Bay, which is a new occurrence for this species).

## **POLICY COMMITTEE CHAIR**

Pat Berry's 2-year term is up. Wendi Weber becomes the chair for the next 2 years.

Meeting adjourned.

## **Lake Champlain Fish and Wildlife Management Cooperative Policy Committee**

### **August 9, 2012 Meeting Attendees:**

#### Policy Committee

Patrick Berry - Commissioner, Vermont Fish and Wildlife Department

Patricia Riexinger - Director, NYSDEC Division of Fish, Wildlife, and Marine Resources

Deborah Rocque - Deputy Regional Director, U.S. Fish and Wildlife Service (for Regional Director Wendi Weber)

#### Other Attendees

NYSDEC: Phil Hulbert, Gordon Batcheller, Jeff Lokumas, Robert Fiorentino, James Pinheiro, Emily Zollweg-Horan, Lance Durfey, Joe Racette, Kate Yard

USFWS: Bill Archambault, Dave Tilton, Henry Bouchard, Mike Calloway, Madeleine Lyttle, Nick Staats, Bradley Young, Krishna Gifford (by phone)

VTFWD: Eric Palmer, Brian Chipman, Chet MacKenzie

Quebec Ministry of Natural Resources and Wildlife (by phone): Pierre Dumont, Steve Garceau

University of Vermont: Ellen Marsden

VT Cooperative Fish and Wildlife Research Unit: Donna Parrish

Lake Champlain Sea Grant: Mark Malchoff

Lake Champlain Basin Program: Meg Modley

SUNY Plattsburgh: George Maynard