

**CRASC Technical Committee  
Meeting Minutes  
June 26, 2007**

**1. Call to Order and Approval of Minutes from Previous Meeting**

Chair Caleb Slater called the meeting to order at 10:15 am and adjourned at 11:25 am.

Members of the Technical Committee reviewed the Minutes from the November 6, 2006 meeting. Mr. Steve Roy motioned to approve the Minutes, Mr. Gabe Gries seconded the motion and the Minutes were approved.

**2. Status of the Run**

Ms. Janice Rowan reported on the Connecticut River Migratory Fish Counts, referring to the most recent report from Sunday June 24, 2007. To date, 128 Atlantic salmon have been counted with 10 of the 101 salmon at Holyoke released upstream. This compares with 214 salmon returns last year (16 released). Mr. Jay McMenemy reported that three salmon have been documented at the Bellows Falls fishway.

A total of 163,198 American shad have been counted back to the river so far. It was noted that this count is incomplete as counting videos are still under review. This compares with 156,532 shad last year. Mr. Slater noted that the 4,475 shad counted at the West Springfield project is the second highest shad count documented at that fishway. Mr. Bob Stira reported that the revised shad count at Gatehouse was 2,244 shad as of June 20, the date of the most recent passage video count. Mr. Novak observed that most of the shad passage at the Holyoke dam occurred over an eight-day period. Mr. Steve Leach explained that the Holyoke Gas and Electric Company employed a "sonic boom box" to send a silent sonic blast into the flume promoting a quick exit of shad. The sound system was not used when salmon were known to be in the flume. It was observed that the sound (in the cetacean frequency range) apparently has no impact on the movement of lampreys and smallmouth bass.

Blueback herring numbers are up this year with 74 herring counted compared to only 21 herring last year.

An extraordinary return was documented at the West Springfield Project this spring: One shortnose sturgeon was observed below the Denil ladder there and 48 hours later passed up the ladder into the trap. Mr. Boyd Kynard transferred that sturgeon to the mainstem Connecticut River.

Other Connecticut River counts include over 42,000 sea lamprey, 59 gizzard shad, and 218 striped bass. Mr. Tim Wildman said that sea lamprey counts will increase on the Farmington River once passage video is reviewed. Mr. Stira reported 15,436 sea lampreys passing Gatehouse. Mr. McMenemy reported 700 sea lampreys currently counted at the Bellows Falls fishway.

In other New England programs, Mr. Tom King recently reported 470 salmon counted in the Penobscot River in Maine and Mr. Joe McKeon reported over 50 salmon in the Merrimack River. In both of these river systems, the run is ongoing where the run in the Connecticut River is probably near its end.

Mr. McKeon also noted that the Merrimack River has documented about 16,000 shad returns so far. The hatchery is spawning shad and has produced about 300,000 fry this year. Mr. Slater added that an inflatable dam board, like at the Holyoke dam, will be added to the Lawrence dam this year. This should facilitate fish passage by preventing delays for dam board installation after high river flows.

### **3. Fish Culture Subcommittee Update**

Mr. Mickey Novak reported 117 Atlantic salmon on site at the Richard Cronin National Salmon Station including 19 smolt-origin sea runs. The hatchery sea runs were collected at the Holyoke fishway (16), the West Springfield Project (1), and the Rainbow dam fishway (2). The hatchery has maintained five sea-run control fish. Sea-run size ranges from one grilse to one 17.6 pound salmon. Average sea-run weight, excluding the two extremes, is 9.2 pounds. Hatchery staff has observed more physical injuries this year than in the past though there have been no losses to date.

The most recent sea-run captures have been bright and silvery. Moreover salmon have been observed but not trapped at the West Springfield project as well as the Leesville fishway. So, salmon numbers should increase, if slightly, before the end of the run.

Sea-run eggs from the Cronin facility exhibited an 82% eye up last winter and domestics came in at 88% eye up. These eye-ups were higher than usual for the facility.

Last fall, milt from 41 sea-run males was cryogenically preserved. The Northeast Fishery Center expects to reactivate that milt this fall for experimental spawning.

An ongoing Leetown Science Center study to compare different antibiotics for use against furunculosis had no impact on egg quality or eye-up for domestic salmon spawned at the Cronin facility.

There is one upcoming concern: the White River National Fish Hatchery (NFH) has identified a need for 3,600 PIT tags at an estimated cost of about \$12,000. The tags will be needed in November or December to mark future domestic broodstock. The mark is needed to continue the broodstock management and genetics study. However, the hatchery does not have adequate funding to purchase the tags.

Mr. Henry Bouchard said that the Pittsford NFH released 108,000 smolts this spring. About half were released in the Farmington River. The other half was released in the

mainstem Connecticut River (Sportsmen's Marina, Hadley) above the Holyoke dam. The smolts were hauled by four agencies: CTDEP, NHFG, MADFW, and USFWS.

The Pittsford NFH also produced and released 332,000 fry this year. The hatchery is currently holding 90,000 1+ and 95,000 YOY salmon for release in 2008 and 2009, respectively. The Northeast Fishery Center is conducting a Calcein-mark study. Both salmon year classes are marked with Calcein and each will receive a second mark before release.

Last February, four crews from CTDEP, NHFG, USFS and VTFW worked together to complete a smolt fin assessment. Data was collected from a total of 2,376 pre-smolts (out of 108,000 produced at Pittsford) from 18 raceways in a single day. The fish averaged eight inches in length and 94% were judged to be viable smolts - a considerable improvement over last year. A similar assessment will be conducted this coming year when volunteers will be needed again.

Mr. Bouchard is also supervising a two-year smolt program at the Berkshire Trout Hatchery. The USFWS provides technical assistance, help, and a small budget for covering the cost of utilities. This program is conducted by the Berkshire Hatchery Foundation. Berkshire is currently rearing 8,000 1+ and 16,000 YOY for release in 2008 and 2009 respectively. Development of the 1+ year class is being enhanced through application of heated water to promote accelerated growth. This technique will also be applied to the YOY salmon. The Berkshire smolts will receive a total of three Calcein marks prior to release. The study will allow researchers to determine if the Calcein mark will persist such that it can be distinguished on returning adults. If the mark persists, it will allow managers to distinguish between contributions of different smolt sources.

An Earth Day event at the Berkshire facility attracted several hundred visitors over a two-day period. Exhibits on the USFWS and Connecticut River programs were on display.

Mr. Novak provided information on fry mortality at the Roger Reed State Fish Hatchery. The hatchery lost 250-300,000 salmon fry this spring to cold water disease caused by bacteria. Losses were curtailed when the hatchery obtained an INAD permit for the use of Chloramine-T and then treated the fish. It is unknown whether the exposed broodstock are carriers of the bacteria. Mr. Rocco Cipriano of the Leetown Science Center has long theorized that salmon losses to cold water disease exceed losses to furunculosis though furunculosis is something that hatcheries routinely address with preventative vaccines. Mr. Slater added that this was the first season in which the hatchery had used a recirculating water system. The system had been operated and shut down temporarily and then reactivated. The fish health problems cropped up after the system was put back on line. As a precaution against future problems, the State had added an ultraviolet water sterilization component to the reuse system.

Mr. Larry Lofton reported that the North Attleboro NFH is currently holding 98 Connecticut River kelts. Last year, staff successfully reconditioned about 70 kelts. A little over ¼ of the remaining kelts were small in size and have not yet returned to feeding. Mr. Lofton indicated that the hatchery would cull these non-feeders. He also projected that the hatchery would have limited capacity to accept new kelts this year. He proposed taking only 40 kelts but acknowledged that there may be other ways to manage the numbers. This will likely be discussed at a pre-spawning meeting.

#### **4. Salmon Studies Subcommittee Update**

Mr. McMenemy reported that 10 sea-run Atlantic salmon were radio-tagged and released above the Holyoke dam as part of the annual Deerfield River Fish Passage Study. Of these, four salmon were monitored in the Deerfield River and one of these was documented in the Green River. One salmon made it to Turners Falls then turned around and went back downstream. Five salmon passed the Vernon fishway and, of these, three passed Bellows Falls and two were trapped at the in Townshend dam in the USACoE trap on the West River. These are the first two salmon to be trapped at the redesigned Townshend trap. It is not known if any salmon have made it past the Wilder dam yet.

Mr. Bob Stira commented that the smolt recapture study was successful in capturing and marking 1,800 emigrating smolts at Cabot. There were 29 recaptures at Holyoke this year. Final estimates will be calculated and available in another month or so.

Fry stocking estimates were slightly higher this year than last year but releases remain below the goal identified in the *Strategic Plan*. Final stocking numbers will be reported once the data can be received and entered. Most of the States juggled a day or two in the fry stocking schedule to accommodate high flows. The CTDEP had to postpone the highest number of days and stocked into the first week of June, late for that reach of the basin. Mr. Tim Wildman noted that the CTDEP also operated an experimental streamside incubation facility. It produced 51,000 fry, enough to stock the entire Eightmile River system plus a few fry for the Salmon River.

#### **5. Fish Passage Subcommittee Update**

Mr. John Warner was unable to attend the meeting [he broke his arm]. So, it was suggested that he provide highlights to the Technical Committee electronically, if possible, prior to the Commission meeting.

#### **6. Shad Studies Subcommittee Update**

Mr. Slater was happy to report that American shad sampling at Holyoke was much improved this year. Biological sampling was conducted on about 500 shad. Scale samples have been provided to Mr. Tom Savoy, CTDEP, for age assessment.

Ms. Rowan reported that the NHFG reported that it successfully transferred 828 shad to Ashuelot River from the Holyoke fishlift. The agency had the advantage of using a new double-tank truck for this purpose. The USFWS transferred 60 shad to the Ashuelot River and another 363 shad to the Vernon Pool at Norm's Marina in Hinsdale, NH. Additional transfers were made by the CTDEP and USGS but numbers were not available for this meeting.

## **7. NASCO Meeting Update**

Ms. Rowan attended the 24<sup>th</sup> annual meeting of the North Atlantic Salmon Conservation Organization from June 4-8 in Bar Harbor, Maine. The bottom line to report is that the West Greenland commercial fishery remains closed with subsistence fisheries permitted, as in the past.

There was considerable discussion about the Next Steps process initiated by NASCO to improve accountability through periodic review. Participating countries are preparing implementation plans against which they will report in the future.

The Salmon at Sea Research Program is gaining some traction. An example of research with far-reaching benefits was described: Ireland made progress in genetic stock assessment, helping to inform the management decision to eliminate the coastal driftnet fishery there. It was agreed that sampling in West Greenland would continue. Research results from studies assessing marine survival of Pacific salmon conducted in the Pacific Ocean were presented. This effort was very successful and is similar to the work proposed by SalSea for which some funding has already been raised.

## **8. Status of Hiring and Budgets at State and Federal Facilities**

Mr. Bill Archambault reported that the USFWS-Fisheries Program received \$500,000 in Recovery funds in 2007 which helped to offset budget shortfalls throughout the region. One field position will be filled this year - an Office Assistant position at the North Attleboro NFH. There are no year-end funds expected this year since the Fisheries Program is currently managing a \$250,000 deficit. In 2008, Mr. Archambault is hopeful that a slight increase in funding will offset expected increases in fixed costs.

Mr. McMenemy reported stable funding in VT with one position to be filled in St Johnsbury.

Mr. Slater noted that there were funds to fully staff the hatchery, provide seasonal hires and purchase equipment in MA.

Mr. Gries stated that Mr. Jon Greenwood had retired and that the position would hopefully be filled before fall but that this position would now serve anadromous fish programs throughout the State. He pointed out that the Director, Mr. Lee Perry, would be leaving in August and that Commissioners are interviewing potential

replacements. As regards the budget, there is \$1.6M deficit effective July 1. The General Fund will not be used to address the deficit though there is some interest in tapping existing dedicated funds within NHFG. The outcome remains to be seen.

Mr. Wildman reported that the CTDEP funding was stable. He pointed out that the State is making an effort to create a saltwater fishing license, something that must be approved by the legislature.

Mr. Roy said that the USFS is fully staffed with a flat budget.

## **9. Other Business**

Mr. Archambault reported that the Sustainable Ecosystem Institute had conducted a review in Maine and produced a report, *Review of Atlantic Salmon Hatchery Protocols, Production, and Product Assessment*. The review cost about \$75,000 to implement. An electronic copy of the review was made available to the Technical Committee. Mr. Archambault thought it would be instructive for the Technical Committee to look at the review since the SEI recommendations may also be applicable to the Connecticut program. Mr. McMenemy pointed out that the review recommended that evaluations, like the PIT tagging and broodstock management at the White River NFH, should be included in the base budget, not as a separate research item. The work is essential to broodstock management but is perennially short of funds for needed PIT tags. As another example, Ms. Kitty Griswold reported that genetic samples were taken from emigrating smolts at Cabot but not Holyoke this year. This represents a lost opportunity and a gap in the data set. She also noted that the Cronin facility was in need of new cable to connect the PIT tag reader to the computer, a problem with the cable last year created a glitch in managing pairings during spawning.

Mr. Alex Haro reported on research underway in the flume looking at passage of multiple species in a nature-like fishway. Similar work is underway at Guilford Lake to test passage of herring there.

Mr. Haro noted that the new entrance structure at Gatehouse would be constructed this summer with completion expected for the spring migration. The USGS-CAFRC plans to evaluate the structure once it is installed.

Mr. Haro offered T-shirts for sale from the recent AFS diadromous fish symposium in Halifax. Proceedings from the meeting will be published and available in the future.

Ms. Rowan reported that the Governor of NH had appointed Mr. Richard Shelton to serve as the new Public Representative to the Commission.

