

**CRASC Technical Committee Meeting Minutes
Turners Falls, Massachusetts
April 10, 2002**

1. Call to Order and Approval of Minutes from the Meeting on January 9, 2002.

Mr. Jay McMenemy, Technical Committee Chair, called the meeting to order at 10:10 a.m.

Mr. Steve Gephard motioned to approve the Minutes from the January meeting. Mr. Steve Roy seconded the motion. All approved and the Minutes were accepted as final.

A quorum was present for the meeting although there was no representation from the National Marine Fisheries Service nor the Massachusetts Division of Marine Fisheries.

2. Fish Culture Subcommittee Update

Mr. Ken Gillette reported that the Subcommittee had met on January 18, 2002 to assess the results of the spawning season and he summarized the issues:

The eggs of kelts treated with hormones eyed-up at a lower rate (40-50%) than the eggs of untreated kelts. Another exception was observed at the North Attleboro NFH where kelt eggs were shipped green and fertilized at the White River NFH (eye-up 88%).

Discussion: Sea-run eye-up was unchanged by hormone implants. The decrease in kelt eye-up may have been a result of increased handling and/or pushing egg maturation in the kelts. The Committee was encouraged to test both green egg transfers and hormones again in 2002.

Formalin use at hatcheries is expected to be restricted by EPA discharge limits necessitating a review of options. Currently, hydrogen peroxide is in consideration at a number of facilities and in use at a couple of hatcheries.

Experimental design for the kelt diet trial is under development between USGS, the Northeast Fishery Center and the North Attleboro NFH. Good kelt condition, including health, behavior and eye-up improvements, is the objective for changes in the diet though male milt production may also improve. Currently, there are too few male kelts available for any sort of statistical diet study. Unfortunately, feed companies have been reluctant to produce the new diet because of the cost and availability of ingredients. This has delayed plans.

Fry production in 2002 totaled about 7.1 million fry:

Location	Number Fry
Roger Reed SFH	1,100,000
Roxbury SFH	250,000
Kensington SS, Hogsback	950,000
White River NFH	4,855,000

The stocking schedule commenced in Massachusetts on March 23 and will conclude in Vermont on May 28.

Vaccination of pre-smolts at the White River NFH was completed during the second week of March. About 90,000 fish were inoculated in three days with total losses of about 150 fish. The new year-class of pre-smolts have been separated from the other production fish and will be ready to transfer to the Pittsford NFH.

The White River NFH has 460 surplus broodstock. The Leetown Science Center will take 50 of these for an ISA study. One hundred thirty-one males, which are PIT tagged in the body cavity, will be sorted from the total and provided to the MAFW for stocking. The remaining 270 fish will be destroyed absent additional requests.

Discussion: The hatchery has retained 863 of these surplus broodstock as a cushion against poor returns in 2002.

The White River NFH Water Improvement Project is expected to begin construction in July 2002. The project will include installation of a reservoir tank, rehab of plumbing, pipes and circular pools and installation of a recirculating system for eight pools.

The White NFH has been level funded despite increased electric costs. The station has managed these costs successfully in 2002. The existing vacancy is expected to continue through the year. An additional vacancy is expected in June but this position will be filled. Given that there will be one vacancy next winter, there are two management options: reduction of egg incubation from 10 million to 8 million eggs or provision of assistance from outside sources.

Discussion: The Technical Committee recommended that the White River NFH plan for full incubation and fry production and suggested that the cooperating agencies would provide staff assistance as required to maintain production. Mr. Gillette indicated appreciation for assistance from VT and NH but also pointed out that consistent help is the key to making this work. The potential for establishing an agreement between the hatchery and the U.S. Forest Service in advance was discussed as a way to facilitate potential funding for a position.

Mr. Henry Bouchard reported that construction on the new water treatment facilities at the Pittsford NFH is underway and on schedule. Pipeline work and valve replacement started yesterday with completion expected May 7, UV and drum filter delivery is expected on May 1 in time to tie in with new plumbing, and covers for the eleven remaining raceways should be available by mid-May. The entire project is expected to be completed by June 1.

Mr. Bouchard indicated that the hatchery will be ready to accept the recently vaccinated pre-smolts currently held at the White River NFH at the end of the month/beginning of May. The fish will be held in disinfected raceways on well water and later placed on treated water after construction is completed.

The Project Leader position at the Pittsford NFH has been advertised and the application period will end on April 22.

The personnel selection has been made to fill the vacancy, currently addressed through a seasonal hire, at the Richard Cronin NSS. This is a One-Year-Term Biologist position that can be extended for four years. The selection will be announced shortly.

3. Genetics Subcommittee Update

Mr. Gephard provided the following update:

1. Genetically marked domestic fry - This will be the first year that genetically-marked domestic fry are stocked in to the watershed:

Region	River Groups	Estimated Fry	Genetic Families
1	Deerfield, etc.	378,800	11-30
2	Ashuelot, etc.	493,600	1-10, 51-60
3	Farmington	128,100	1-30
4	Ammonoosuc	474,100	1-20
5	West	591,000	21-40
6	Westfield	162,225	46-75
7	Saxtons/Williams/Black	449,200	31-50
8	Passumpsic, etc.	233,700	1-15, 76-90, 16-30
9	White River	449,400	41-60
10	Upper Basin	19,400	31-60
Total		3,363,300	

The estimated fry totals shown above do not include 1,209,900 unmarked fry.

2. Genetically marked sea-run fry:

Fry Yr	Stream	Number	Survival	Smolt Yr	Tissues	Adult Yr	Tissues
1998	Farmington	511,894	Poor	2000	Yes	2002	Planned
1999	Farmington	480,197	Poor	2001	Yes	2003	-
	West	357,000	Fair to Poor	2001	Cabot?	2003	-
2000	Farmington	88,306	Fair to Poor	2002	Planned	2004	-
	West (Rock)	132,000	Fair to Poor	2002	Planned for Cabot?	2004	-
2001	Williams	164,000	Fair to Poor	2003		2005	-
2002	Farmington (Sandy)	50,000	-	2004		2006	-
	Williams	81,000	-	2004		2006	-

3. USGS Research Program

a. PIT tags for domestic broodstock at WRNFH

1. Problem: ventrally tagged PITs are often shed by females during egg taking. In 2001, the fish were re-tagged in dorsal musculature but that precluded stocking the fish for the sport fishery. Fish and tags wasted. Need a better solution in 2002. Don't retag?
2. Problem: tags are expensive and need to be purchased each year for next year class. Hard to find money. Need reliable funding source or innovative way to recycle tags. 2002 appears to be covered. What happens in 2003?

Discussion: PIT tags are expensive and have not been fully reliable. However, other marking techniques like elastomer tags are even less reliable. The current requirement for tags includes 3,400 PIT tags for domestic broodstock at an estimated cost of \$2.85/tag for a total cost of nearly \$10,000. The USFWS, USGS and USFS are purchasing the tags in 2002. Though the cost is covered in 2002, there is a concern

because there is no long term solution for the future. The NHFG is managing the tagging logistics but assistance is required to tag the fish in August/September at the White River NFH.

- b. Tissue samples to provide data from program
 - 1. Problem: Tim King at Leetown is over-committed and has not been able to analyze all stockpiled tissue samples from parr and smolt samples. Help on the way - Conte has hired a woman from Oregon who will establish a genetics lab at Conte to begin analyzing tissue samples. Begins in July. May take a while to get funds to analyze entire backlog.

Discussion: Both the Conte Lab and the Northeast Fishery Center are currently building capacity to analyze genetic samples. Both agencies are setting up labs and hiring staff to address the sample backlog and maintain a genetics monitoring program. Both labs are expected to be up and running sometime this summer.

4. Spawning issues -

- a. Parr collection: This is premature but it seems likely that parr will be needed to fertilize eggs in the fall. Are any changes needed? Will we be able to do this in 2002 as we did in 2001?

Discussion: Sea-run parr collection in Vermont will occur in the Williams River in 2002 rather than the Rock River as in past years. Fish have been screened for disease from this river in (2001) and will be monitored again this year prior to parr collection. Mr. Caleb Slater confirmed that this level of sampling would be adequate to address Massachusetts importation permit requirements.

4. Fish Passage Subcommittee Update

Mr. John Warner provided the following update:

HYDRO LICENSING

Holyoke Project

- Progress on implementing new license fish passage requirements continue
- Full-depth louvers in canal to be installed in October
- Sturgeon exclusion screen at fishway attraction flow intake to be installed in Oct..
- Spill configuration for downstream passage and zone-of-passage flows to be visually assessed on Friday 4/12.

- Zone-of-passage in the bypass channels to be visually evaluated in mid-May to early June
- Designs of the new upstream passage facilities including new lifts, flume, and trapping facilities are being developed
- Phase 2 modeling of Hadley Falls downstream passage underway by Alden Labs

Fifteen Mile Falls Project - Connecticut River - NH/VT

- The FERC issued a revised Environmental Assessment for the project on March 28, 2002. A license was issued this week.

Woronoco Project - Westfield River - MA

- The FERC issued a draft EA for the project last month. Only issue not fully resolved is upstream eel passage. A license is expected this spring/summer. License will include provisions for upstream and downstream eel passage, evaluation of the downstream bypass and contributions to upstream trapping and trucking of salmon from DSI.

FISH PASSAGE ACTIVITIES

Upstream Passage

DSI-West Springfield Project - Westfield River

The DSI paper mill is closing, but the hydro is still operating. The project is on the market, but in the interim they are honoring their past agreements on passage operations.

Turners Falls Project - Connecticut River

Further evaluations of the Cabot ladder, including a revised ladder exit configuration to help prevent milling and stalling, will be conducted. Some limited evaluations of reduced canal flows will be conducted to assess the impact of canal flows on passage success at the Gatehouse.

Downstream Passage

East Barnet Project - Passumpsic River - VT

CVPS will be monitoring their downstream bypass to assess its use, following observations of delays and likely poor passage at the site. We will be trying to get CVPS to help fund a PIT tag reader array to allow for monitoring of already tagged smolts in upstream tributaries.

Deerfield River Project - Deerfield River - MA

PG&E will be evaluating modifications made at the Number 4 station and a periodic big-spill at the Number 2 station. These measures follow prior results that show moderate but not acceptable passage success at Number 4 and very poor passage and overall survival at Number 2 station. The outcome from these studies will shape the course that will be taken in the future.

Discussion: The Holyoke facility is operating though no fish have yet been observed. There was question as to whether this is the earliest that the fishway has operated and if this would result in passage of increased numbers of suckers or other fish species. The DSI fishway is operating though few fish have been observed. The Woronoco bypass was not operating as scheduled until a call was made. Salmon smolts are reported to be migrating in the Westfield River. The Leesville fishway is operating and the temperature is right but there is little flow. The Moulson Dam fishway on the Eightmile River is operating and passing alewife and suckers. The Rainbow fishway will open next week. There have been some unconfirmed smolt observations in the Farmington River.

Concerns about staffing for Massachusetts fishways have been resolved.

There are reports of some shad caught in the commercial fishery and recreational fishery at the mouth of the Connecticut River. The Connecticut River temperature at the Conte Lab is currently at 6° C (almost 43° F).

5. Shad Studies Subcommittee Update

Mr. Caleb Slater relayed the following American shad requests for approval:

Agency	Number Shad Requested
MAMF	150
CTDEP	1,000
NHFG	1,000
NH Coastal	1,000
Agency Transfers Above Vernon	1,500

Mr. Gabe Gries requested late shad for the adult transfers above Vernon to maximize the potential for moving females.

Mr. Slater also noted that the MAFW and NHFG would work with the USFWS to collect and transfer blueback herring to the Westfield and Ashuelot Rivers.

One shad has been reported caught by an angler at the mouth of the Chicopee River.

6. Salmon Studies Update - *McMenemy*

Mr. Bob Stira, Northeast Generation Services, reported that the Mark-Recapture Study is underway. Observations are being made at the Cabot sampler for two hours nightly (starting last night) to key in on the start of the smolt run. On April 25, the Cabot sampler will begin daily operation seven hours/night. The Holyoke sampler will begin operation on April 26 for 13 hours/night, unless smolt movement indicates sampling should begin sooner. The goal is to mark 3,000 smolts at Cabot. The study is being conducted by Greenfield Community College and is funded by the USFWS, NU and HG&E.

The GCC staff will take measurements on a maximum of 25 smolts/night. The USGS (Mr. Steve McCormick) will be sampling 10 smolts/week at Cabot and Holyoke and taking non-lethal gill biopsies. The USGS (Mr. Ben Letcher) will also collect 50 wild smolts at Cabot to test a predator tag. The GCC staff should scan fish for anal fin marks (like last year).

Mr. McMenemy indicated that the PG&E National Energy Group radio-tag fish study on the Deerfield River would be conducted in the same manner as this past season. The first ten salmon will be captured and transferred to the Richard Cronin NSS. The next few salmon will be tagged and released by Normandeau staff. The study fish will be restricted to 2SW salmon. All returning adults with adipose clips (PNFH smolt origin) will be transferred directly to the hatchery. Depending on the conditions, the number tagged may be adjusted as needed.

The radio-tagged fish will be PIT tagged and genetic samples will be taken if the USGS supplies the materials and equipment.

The Richard Cronin NSS should be prepared to scan all returning adults for PIT tags before PIT tagging the fish. Three types of tags may be expected based on USGS releases. Mr. Phil Herzig will work with the USGS to determine if the tag reader can read the expected tags.

7. CRASC Initiative Update

Ms. Janice Rowan provided the following update:

Senator Leahy has added the language from the CRASC bill to the Farm Bill (Section 1069) which is currently in conference. The House Judiciary Committee has been adamantly opposed to the funding authorization in the CRASC bill. As a consequence, the Farm Bill Conference Committee staff agreed to remove the funding authorization from the language in the Farm Bill and has received assurance, in exchange, that the CRASC re-authorization language would remain in tact in that bill. The Farm Bill is expected to be passed by the end of the month and, if it passes, CRASC will be re-authorized. The funding authorization can now be added to another fish bill without concern of interference from the House Judiciary Committee.

8. Other Business - *Rowan*

Mr. Gephard reported that the study proposal for sampling smolts in the estuary would likely be costly with rough estimates starting around \$200,000, based on information obtained from NMFS staff in Maine.

9. The next Technical Committee meeting is scheduled for October 9, 2002.

This meeting was adjourned at 11:45 am

Attendance

Janice Rowan	USFWS
Jay McMenemy	VTFW
Steve Gephard	CTDEP
Steve Roy	USFS
Caleb Slater	MAFW
John Warner	USFWS
Gabe Gries	NHFG
Larry Lofton	USFWS
Henry Bouchard	USFWS
Ken Gillette	USFWS
Ben Letcher	USGS
Bruce Williams	USACOE
Alex Haro	USGS
Bob Stira	Northeast Generation Services
Jon Truebe	Lakeside Engineering
Darleen Cutting	USFWS
Warren Fisher	Volunteer NH/VT
Rosemarie Fisher	Volunteer NH/VT
Stephen D. McCormick	USGS
Curt Orvis	USFWS
Melissa Grader	USFWS
Frank Steplar	Manhan River Fishway Committee
Corey Wright	Student Conservation Association
Ryan Mertz	Student Conservation Association
Phil Herzig	USFWS
Dave Sherman	Dodge Falls Hydro