

**CRASC Technical Committee Meeting Minutes
Turners Falls, Massachusetts
October 9, 2002**

1. Call to Order and Approval of Minutes from the Meeting on April 10, 2002.

Mr. Jay McMenemy, Technical Committee Chair, called the meeting to order at 10:17 a.m. and adjourned at 2:20 pm.

Mr. Steve Gephard motioned to approve the Minutes from the April 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

Stocking Totals: Vermont - 2.76M
 New Hampshire - 1.19M
 Massachusetts - 1.8M
 Connecticut - 1.49M
 Basin Total - 7.24M

Mr. McMenemy briefly summarized stocking for the Vermont Department of Fish and Wildlife. The state stocked about 2 million fry which was about 700,000 less fry than last year. Of these, about 314,000 fry came out of the Roxbury SFH while the remainder were provided by the White River NFH. About 81,000 fry were of sea-run origin.

The U.S. Forest Service stocked the remainder of the Vermont-stocked fry in the West and White Rivers. Mr. Roy reported that fish were stocked under good conditions and subsequent evaluation has revealed good survival.

Mr. Gephard reported that the Connecticut Department of Environmental protection stocked about 1.4 million fry. He noted that the genetically-marked sea-run fry stocked in Sandy Brook (Farmington River tributary) survived poorly once again.

Mr. Gabe Gries reported that a little over half of the 1.2 million fry stocked in New Hampshire were stocked in the North while the remainder were stocked in the South. In 2002, stocking in the mainstem Ashuelot River was eliminated.

Mr. Caleb Slater reported that the Massachusetts Division of Fisheries and Wildlife stocked the first salmon of the season in March on Easter weekend because of warm winter conditions. The total number of fry stocked (1.8M) was down slightly from 2001. Summer surveys documented

three year classes of salmon in the rivers (0+, 1+, 2+) which is unusual. All of the fish seemed smaller than usual which Mr. Slater attributed to drought or perhaps stocking density.

Mr. Ken Gillette reported that the Subcommittee had a pre-spawning meeting on September 19, 2002:

Mr. Mickey Novak summarized egg production projections for this fall. A production total of 11.1 million eggs is expected - sea runs are expected to produce 200,000 eggs; kelts are expected to produce 732,000 eggs; and, domestics are expected to produce 10.2 million eggs. Current incubation capacity is 11.8 million green eggs including capacity at the Warren SFH.

Discussion: When asked about not meeting program production goals, Mr. Gillette explained that the program had fallen short of producing 15 million eggs once again primarily because the 3+ domestic brood stock at the White River NFH are smaller than their counterparts last year. Smaller fish produce fewer and smaller eggs. He also pointed out that a higher proportion of fish are barren than expected. He speculated that this may be because he is no longer accelerating early growth since he is cutting costs (in terms of heated water) with tighter budgets. He also said that he was short staffed and could not provide adequate care and feeding to all of the brood stock last year. He reminded the Committee that he was incubating eggs, rearing pre-smolts, and conducting the genetic study last year - all of which contributed to over-commitment of station staff. Mr. Gillette said that he planned to retain the barren fish and would likely see an increase in production next year but also pointed out that holding additional fish strained the budget since two wells would be required all summer.

Ms. Janice Rowan asked if the hatchery was using demand feeders. Mr. Gillette said that they were not because they apparently did not work in the past in the circular pools. Mr. Lofton said that demand feeders in combination with hand feeding works in circular pools at the North Attleboro NFH. Mr. Gillette was encouraged to try demand feeders again given ongoing staffing concerns.

Because of low sea-run returns, the North Attleboro NFH and Whittemore Salmon Station retained WRNFH domestic brood stock in 2002 utilizing existing but vacant holding space to preserve genetics. The Whittemore SS can take another 100 brood stock this year. However, the North Attleboro NFH will surplus 250 of these domestic salmon this fall because of a lack of funds (\$5,000) for fish feed.

Incubation capacity is lower than last year because the White River NFH is experiencing and projecting staffing vacancies that limit production capacity. As a consequence, the Technical Committee, New Hampshire Fish and Game and the Lamar Fish Health Unit reviewed the risk associated with use of the Warren SFH for incubation. While a number of fish health concerns at the facility have been addressed, there is still concern about the risk from IPN. The Fish Health Unit gave tentative approval for use of the facility as long as the fry are sampled for IPN prior to release.

The Technical Committee concluded that use of the facility should be limited to late domestic eggs. Recent production projection revisions suggest that the facility may not be required at all. However, the Committee agreed that there may be some value in testing the facility with a token number of eggs (~100,000) to assess risk for future use if the incubation space is not actually needed this year.

Permits are in place for importation of wild parr and salmon eggs in Massachusetts. The VTFW provided 151 wild parr from the Williams River for use in spawning sea runs at the Richard Cronin NSS. Unfertilized sea-run eggs will be transferred from the Whittemore SS to the Richard Cronin NSS for fertilization since there are no sea-run males at Whittemore this year.

The Northeast Fishery Center is coordinating a cryopreservation study using milt from sea runs from the Richard Cronin NSS and domestics from the White River NFH.

Staff from the North Attleboro NFH initiated a kelt diet trial in July in cooperation with the Northeast Fishery Center, Tunison Laboratory of Fish Nutrition, and Abernathy Fish Technology Center. 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.

Sampling for ISA is underway on Penobscot River Atlantic salmon. Last year, one fish tested positive without subsequent confirmation. This year all of the fish are clean so far. The White River NFH transferred a number of 1998 brood stock to the Leetown Science Center for a study on the mode of ISA transmission. Additionally, work is underway there to develop a rapid ISA detection kit.

The White River NFH will have 1,375 surplus brood stock available for out-of-basin fisheries this year. An additional 125 surplus brood stock are available at the North Attleboro NFH for a total of 1,500 brood stock. The White River NFH also has 882 PIT tagged females and the North Attleboro NFH has 125 PIT tagged females for a total of 1,007 PIT tagged brood stock available for research or some other use. About 350 of the 1998 brood stock (24-26" length) are available for immediate transfer.

Discussion: VTFW requested 200 brood stock while CTDEP and MAFW each requested 800 brood stock. The VTFW request was approved. The CTDEP and MAFW were each approved to receive 650 fish.

Mr. Gillette provided an update on the staffing situation at his hatchery. Two biologist positions are currently vacant and the Assistant Manager position will be vacant after November 1, 2002. Mr. Gillette indicated that he had made a selection to fill one of the vacant biologist positions with an early November start date. The other biologist position will remain vacant while the Assistant Manager position will be filled in March or April after a salary-savings delay.

Mr. Gillette described the impact of lack of personnel on his program operations by outlining how various staffing levels affect the total green egg incubation capacity of the facility:

<u>Staffing Level</u>	<u>Incubation Capacity</u>
Existing Staff	3.0 M
+ 1 Biologist	4.0 M
+\$6K ecoteam funded position	4.5 M
+20 hr/wk partner match Dec-March	5.0 M
+20 hr/wk partner assistance	5.5 M
+USFS seasonal hire Dec-April	6.5 M

The physical egg incubation capacity of the White River NFH is 10 million green eggs. Last year the hatchery held 8.6 million green eggs. This year the capacity is estimated at 6.5 million green eggs. The actual incubation capacity is contingent on partner funding and firm commitment of in-kind partner support.

This includes the genetic marking project which would otherwise have to be delayed a year because of lack of staff.

Discussion: The Technical Committee agreed that the genetic marking study is important. Program assessment is needed and the benefit of the marking study is enormous. Mr. Gillette agreed and indicated that the hatchery had already invested a lot in the study and wanted to continue. (He estimated that it would take 20 hours/week of committed volunteer time, beyond the ecoteam match, to continue the genetics work this year.)

The CTR/LIS Ecosystem Team funds are a challenge grant and require a documented state-match of in-kind service. The USFS expects to finalize the cooperative agreement with the hatchery next week regardless of the continuing resolution. The wild card is voluntary assistance from partners.

The hatchery has obtained two travel trailers to house volunteers. A total of eight volunteers can stay in the trailers though more space is available for camping in the office.

Discussion: In-kind assistance (40 hr/wk from December through April) must be firm for additional incubation and genetics work to be considered. Consequently, Mr. Gillette offered to develop a sign-up calendar for the Coordinator to distribute. The hatchery will then serve as the point of contact for making lodging arrangements and scheduling volunteer duty. The partners agreed that they would sign-up according to their abilities.

Mr. Gillette described construction projects (ongoing and planned) for the White River NFH. Currently, the station is replacing the water boiler and upgrading the generators. This winter, an eight-pool recirculating system will be installed with completion expected on June 1, 2003. The project will provide the station with new capabilities in filtering influent, managing effluent, manipulating water temperature and flows.

Mr. Gillette indicated that he had been directed by the Regional Office to retain enough eggs to produce 160,000 smolts. He said that the plan was to produce a two-year smolt with the first year outside the new system and the second year in the recirculating system. He justified the program change at the facility with the construction project.

Discussion: Concerns were voiced over the U.S. Fish and Wildlife Service's unilateral program change. This redirection has been initiated without benefit of consultation with the Connecticut River Atlantic Salmon Commission or state partners. It was recognized that the adult return numbers are low and that this may be an attempt to address that issue. However, it represents a major shift in an arena where the Commission has policy-making authority. And, it comes at a time when the Service and partners are currently having difficulty meeting existing program commitments.

There was some discussion about the quality smolts in general and of pre-smolts transferred from the White River NFH to the Pittsford NFH. The value is not in the number of smolts but in the quality of released smolts. It was recognized as better to produce fewer high quality smolts - especially given staffing concerns.

There was some discussion about how the fins were better in fish reared solely by Pittsford NFH though this may have been because the White River fish were retained there at a higher density and lower flows.

There were unanswered questions, in terms of physiology, about the impact on smoltification of rearing salmon in a closed recirculation system.

There were unanswered questions about how the hatchery would fund a smolt program which is more labor intensive and costly than a fry program. Mr. Gillette indicated that he had originally projected a need for increased funding and more staff but that it was not clear now whether the funding and staff would come via a redirection of existing activities.

Ultimately, it was recognized that the hatchery is expanding capabilities through construction of a new pond system. This could be a benefit and an opportunity for the Program but the key is to find the best use for this new capability. Smolt production may eventually be determined to be the most valuable product but there may be other options of equal or greater value that should be considered.

It was concluded that there would be additional discussion on this proposed program change at the Smolt Advisory Committee meeting and that it would be referred to the Commission for further discussion.

Mr. Henry Bouchard reported that Mr. Steve Jackson was hired to fill the Manager position at the Pittsford NFH.

Mr. Bouchard said that the hatchery was at full production. He thanked staff at the White River NFH for holding smolts for the Pittsford NFH. The White River NFH transferred 190,000 pre-smolts to the Pittsford NFH in July. Of these, the 90,000-5.9" pre-smolts will be released in 2003 at about 7.3". The adipose fins will be clipped in mid-November. The marking program will require volunteers. The 100,000-1.9" pre-smolts that will be released in 2004 are about 3.3" in length now. The 2003 smolt year class was vaccinated before transfer. The 2004 smolt year class has received an immersion vaccine and is slated to receive a multi-valent vaccine in March or after they reach 10g/fish (45 fish/lb). The vaccine cost is estimated at \$7500 or about \$5,000 more than is currently allocated for a routine furunculosis vaccine. All of the pre-smolts are on demand feeders with supplemental hand-feeding.

The Pittsford NFH has an incubation capacity of 675,000 eggs. The 2005 year class of smolts is expected to be taken from these domestic eggs while the remainder will be stocked as fry. Final decisions on vaccination and smolt egg source, etc. will be sorted out at the Smolt Advisory Committee meeting next week (10/18/2002 at 10 am at Pittsford NFH).

Mr. Bouchard described construction projects at the hatchery. About 5-600 feet of pipeline and valves were replaced to improve distribution and delivery of brook water. Twenty-two raceways were covered providing protection against ice, disease and predation in every raceway at the station. A 1,200 gallon/minute water treatment system including a 250 micron drum filter and a 21 micron drum filter, and 20-lamp UV system was installed to provide water to the A-series of raceways. The system came with a new alarm, electrical upgrade, and some new paving. The new system increased operating costs by about \$350/month for electricity and it requires additional staff time for monitoring and adjustments. Inside the hatchery, ten of 12 cement tanks have been demolished and are being replaced with 6-1/2' circular tanks. The light and electrical system are also being upgraded in the hatchery. The remaining cement tanks will be used for egg incubation stacks.

3. Fish Passage Subcommittee Update

Mr. John Warner provided the following update:

HYDRO LICENSING

Holyoke Project

- Progress on implementing new license fish passage requirements continues
- Full-depth louvers in canal to be installed during canal outage in 2 weeks (10/22)
- Sturgeon exclusion screen at fishway attraction flow intake to be installed in 2 weeks.
- Designs of the new upstream passage facilities including new lifts, flume, and trapping facilities in hand - meeting tomorrow (10/10/02)
- Phase 2 modeling of Hadley Falls downstream passage by Alden Labs complete. No great revelations. Further studies on sturgeon are needed to understand behavior at station
- Eel upstream passage evaluations in 2003 - permanent facilities expected by 2004.

Fifteen Mile Falls Project - Connecticut River - NH/VT

- License issued by FERC on April 8, 2002. Includes all Settlement Agreement components including downstream passage implementation and evaluation at McIndoes and at Moore and Comerford when notified of the need.
- Draft letter from CRASC to PG&E on need for passage at Moore and Comerford distributed to Tech Committee
- Modification of McIndoes bypass to be done this winter and evaluation to be done in 2003
- License includes Fifteen Mile Falls Mitigation and Enhancement Fund. \$13- 16.5 Million available over next 15 years for upper basin projects including \$5-10M/year for dam removals, habitat improvements and fish passage. First round of grants to be awarded in January. Grant applications due Oct 31. (Fund Info at: <http://www.nhcf.org/nnhpressreleases.html>)

Woronoco Project - Westfield River - MA

- The FERC issued a license for the project on April 30, 2002. The licensee has been slow to get moving on requirements but we'll be meeting this Friday to discuss flow issues and eel passage facilities.

Turners Falls/IP Project - Turners Falls Canal - MA

- This project runs only during flows over Cabot capacity under agreement w/NU-NGC .
- The agreement is lapsing and if not renegotiated, the project and adjacent project may have to operate full time.
- If this happens, we have downstream passage concerns at the intakes and false attraction problems in their tailraces/bypass reach.
- This needs to be monitored and may need to petition FERC to require passage measures from the owner and/or NU-NGC

FISH PASSAGE ACTIVITIES

Upstream Passage

DSI-West Springfield Project - Westfield River

The DSI paper mill has closed. 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, were conducted. Some limited evaluations of reduced canal flows were conducted to assess the impact of canal flows on passage success at the Gatehouse. Generally poor results were observed. The conclusion is that the cheap and easy options have been exhausted.

Mr. Alex Haro said that a report would be available next month after the Fish Passage Subcommittee has met and discussed results.

Mr. Bob Stira reminded the group that while the ladder remains a major bottleneck for shad, it is still a good ladder for salmon.

Downstream Passage

East Barnet Project - Passumpsic River - VT
Deerfield River Project - Deerfield River - MA

Evaluations conducted in 2002- results not yet received.

Eelways

CTR/LIS Ecosystem Team funded 2 eelways in 2003: Kinneytown on Naugatuck and Lower Mill Pond on Mill Brook River. Two eelways were funded in 2002 by the ecoteam, again through the Coordinator's Office. One is on the Millers River, the other is on the Chicopee River.

DAM REMOVALS

Winchester Dam on the Ashuelot River in Winchester, NH, removed this summer.

CTR/LIS Ecosystem Team funded:

Pizzini Dam Removal - Eight-Mile River (4 miles of habitat)

Planning for Removal Lower Eaton Dam - 1st Br White River, S. Royalton, VT - (5.5 mi habitat)

4. Genetics Subcommittee Update

Mr. Ben Letcher introduced Ms. Kitty Griswold, the new Conte geneticist. She is a graduate of Oregon State University. Ms. Griswold said that the lab is operational up to PCR testing and then is reliant on Mr. Tim King in Leetown to process samples. Ms. Griswold developed the relatedness matrix for sea runs this year.

Mr. Gephard provided the following update:

The first priority of the Genetics Subcommittee is to protect the genetics of the existing population of Atlantic salmon. The second priority is to continue the genetics marking program since this is the basis for program assessment - especially with returns on the decline.

Mr. Gries is supervising the ongoing domestic PIT tagging at the White River NFH this week with assistance from the U.S. Forest Service. PIT tags were funded this year by the USFWS and USGS. There is currently no funding available for PIT tags next year (\$10,000).

Mr. Letcher is working with the White River NFH to select the most appropriate eggs for the Pittsford smolt program. The smolts will all be marked with a fin clip. The clip and scales should be enough to distinguish smolts from fry among returning adults.

This is the first year we might expect to see genetically marked fish return as adults in the Farmington River. Samples from the three sea runs at the Whittemore SS are being analyzed.

5. Shad Studies Subcommittee Update

Mr. Slater provided the following update:

2002 Shad Passage Totals

Rainbow (Farmington R) - 110 down from 153 '01. There seemed to be more shad in the Farmington River this year than last. The lower passage numbers probably reflects poor weather conditions and (mostly) the poor design of the fishway.

DSI (Westfield R) - 2,762 down from 4,720 in '01 probably due to high water in the CT River.

Holyoke - 374,548 up from 273,220 in '01; Sex Ratio 45.2% male 53.8% female.

Turners Falls:

Cabot - 7,922 down from 20,933 in '01.

Spillway - 5,372 up from 2,344 in '01.

Gatehouse - 2,870 up from 1,540 in '01.

Vernon - 356 The worst season since the early 1980's. Total counts for other species were: salmon (2) and sea lamprey (2,210).

Trucked above Vernon, VT - 600

Trucked to Ashuelot R., NH - 687

Trucked to CT (in basin) - 216

Trucked to CT (out of basin) - 638

Mr. Slater reported that lots of juvenile shad and herring were observed above DSI this fall. Mr. Gries said that he and the Sunderland Office of Fisheries Assistance had sampled and documented both juvenile shad and herring in the Ashuelot River indicating successful adult reproduction.

A draft *Management Plan for Blueback Herring in the Connecticut River Basin* was shared with the Technical Committee which agreed to forward the plan to the Commission for their consideration.

6. Salmon Studies Update - *McMenemy*

Mr. Stira, Northeast Generation Services, provided a data summary for the smolt mark and recapture study. No estimate can be made based on the data this year because flows were high and catch was low. This is the third time that the study produced no estimate since 1993. Mr. Stira said that he planned to conduct the study again next spring though funding has not yet been identified. This assessment project is funded by Northeast Generation Services, Holyoke Gas and Electric and the U.S. Fish and Wildlife Service, and then is implemented by Greenfield Community College.

Atlantic salmon index site assessment results were generally good. Survival was down a little in the Northeast Kingdom of Vermont but fine in Southern Vermont. Sea run survival in Vermont was a little low. Salmon survival in Connecticut looked good with the exception of zero survival among sea-run salmon. The concern is that sea runs may be too small and that fry size should be addressed somehow - maybe by feeding or changes in the incubation regime. New Hampshire reported typical survival among stocked salmon.

Mr. McMenemy briefly summarized results of the PG&E National Energy Group radio-tag fish study on the Deerfield River. Four fish were tagged and released above the Holyoke dam. One salmon was later logged at Holyoke and apparently went downstream or died. One salmon passed above Vernon then doubled back and entered the Deerfield River. One entered the Ashuelot River, then passed above Vernon and entered the West River. One passed above Vernon and disappeared - maybe upstream, maybe dead.

Mr. Gephard reported that while no adults were captured at the Leesville dam on the Salmon River, he personally observed a salmon below the dam this spring. Consequently, if no salmon are captured this fall, he indicated that he would propose adding a wild, 2SW fish to the miscellaneous count.

Mr. Slater said that an angler caught an adult salmon south of Cape Cod about three weeks ago. The fish was taken to a MAFW station in Buzzards Bay. Data, scales and tissue samples will be taken to better identify the fish's origin.

7. Congressional Initiative Update

Ms. Janice Rowan provided the following update:

The CRASC Compact was re-authorized as part of the Farm Bill this year. The funding authorization was deleted but can now be reduced to address only state needs and added to another fisheries bill without concern of interference from the House Judiciary Committee.

On 9/4/02, Massachusetts Public Commissioner Tom Menard and Ms. Rowan traveled to Washington, DC to accept the Department of Interior Conservation Service Award for CRASC. The award drew some news coverage and recognition by Senator Kerry on the Senate floor. The Senate commendation and DOI award will be on display at the Conte lab along with the USGS award.

On 9/10-11/02, Acting Commissioner Duncan McInnes, Ms. Rowan, and Mr. Jim Carroll, Connecticut River Salmon Association, traveled to Washington, DC to meet with House and Senate Appropriations staff, Senate Resources staff, legislative aides and USFWS AD Cathy Short and staff. The trio received guidance on format of budget requests and subsequently revised the CRASC funding initiative and strategy.

The draft three-part strategy requests adequate funding through DOI to USFWS; a pass through to states and funding authorization for the same amount; and, provides a habitat initiative to shop among agencies to tap existing habitat restoration funds. This draft plan is currently under review by the Commissioners.

8. Research Forum

Mr. McMenemy proposed that a Research Forum be held this winter. The date for the Forum was set: February 11, 2003 at the USFWS Regional Office in Hadley, MA. A preliminary call for papers will be sent out shortly.

9. Other Business

Eel Management Plan

Mr. Gephard circulated a draft *Management Plan for American Eel in the Connecticut River Basin*. The plan has some information gaps that MA, NH and VT need to address. He asked that the Technical Committees members provide input and review the draft before the CRASC meeting so that it can be submitted to the Commissioners if all agree that it is acceptable.

Sea-Run Return Data

Preliminary age/growth analysis on sea run salmon was provided by the Sunderland OFA. Total returns for the basin were up with 43 fish. Four salmon were released. A fifth was accidentally passed and recaptured. Thirty-five salmon are being held at the Richard Cronin NSS while the remainder are at the Whittemore SS. Forty-one of the sea-run salmon were fry-stocked and 2 were from smolt stocking. The sea-age data indicates that there are 2-1SW; 38-2SW; 1-3SW; and 2-unknowns. Additional scales are being collected to fill these data gaps. Dates and weights are needed from sea runs at the Whittemore SS.

Migratory Fish Returns Summary

<u>2002</u>	<u>2001</u>
Atlantic salmon - 43	40
American shad - 376,818	281,299
Alewife - 55	22
Blueback herring - 1,950	10,606
Juvenile eel - 257	---
Sea lamprey - 78,736	58,993
Striped bass - 806	1,220
Gizzard shad - 2,882	5,514

Fish and Egg Requests

PG&E will be needing about 365 smolts for upper basin studies next spring. The request has not been made officially but was tentatively approved. The company will be encouraged to coordinate smoltification testing directly with Mr. Steve McCormick.

Ms. Christine Lipsky requested sea-run milt for three female kelts. The Committee approved milt for the request but suggested the source will likely be domestic males in which case the request will be honored by CTDEP.

The Technical Committee gave blanket approval authority to Technical Committee members to approve egg requests for educational programs. However, a list of schools and eggs committed should still be provided to the Coordinator.

A draft revision for the brochure and leaflets was distributed to the Technical Committee members for review. The Coordinator requested comments by October 16, 2002 to ensure that the revisions can be completed by Student Conservation Association intern Ryan Mertz before her internship ends. New brochures will then be printed.

10. Future Technical Committee Meeting Dates:

December 16, 2002 - if needed
January 8, 2003
April 2, 2003
October 8, 2003

[With tentative CRASC Meeting dates: January 16, and October 22]

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
Darleen Cutting	USFWS
Warren Fisher	Volunteer NH/VT
Rosemarie Fisher	Volunteer NH/VT
Stephen D. McCormick	USGS
Ryan Mertz	Student Conservation Association
Phil Herzig	USFWS
Maryalice Fischer	PG&E
Ron Heun	Normandeau
Jennifer Griffin	Normandeau
Mickey Novak	USFWS
Kitty Griswold	USGS
Christine Lipsky	RIFW
Keith Nislow	USFS