



THE CONNECTICUT RIVER SALMON ASSOCIATION N·E·W·S·L·E·T·T·E·R

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SUMMER 2006

Some Interesting Numbers

By Robert A. Jones, President, CRSA

Since the measure of success in the Connecticut River Anadromous Fisheries Restoration Program is defined by numbers, let's look at those numbers associated with this year's returns.

- 210** The known returns of adult salmon to the Connecticut River as of August 4, including:
 - 16** Salmon River
 - 42** Farmington River
 - 34** Westfield River
 - 116** Connecticut River at Holyoke, MA
 - 2** Connecticut River at Vernon, VT
- 14** Salmon tagged and released at Holyoke, including:
 - 6** Detected in the Deerfield River
 - 3** Detected in the West River
 - 1** Detected in the Mill River
 - 1** Detected at Bellows Falls
 - 1** Detected in the Deerfield but returned downstream
 - 1** Detected in the Deerfield and later downstream at Turners Falls
 - 1** Not detected after release
- 185** Known returns of adult salmon to the Connecticut River in 2005
- 12%** 2006 increase in returns over 2005
 - 86** Salmon counted at the Essex Dam on the Merrimac River by July 14
 - 983** Salmon counted at the Veazie Trap on the Penobscot River by August 7
- 154,715** Count of American shad at the Holyoke Fish Lift
 - 73** Count of American shad at the Rainbow Dam Fishway
- 1,534** Count of American shad at the West Springfield Dam on the Westfield River
 - 21** Count of Blueback herring at the Holyoke Fish Lift

So what do all these numbers mean? Salmon returns have increased significantly for the second year in a row, perhaps

2006 Stockout



US Congressman Rob Simmons (R-2nd) joins students from Lyme Consolidated School at the school's 10th annual salmon fry stockout on May 8. Please see pages 4, 5 and 6 for more news from CRSA's 2005-2006 School Program. [Photo: R. Jones]

reflecting the 95,000 smolts that were released in 2004. The numbers of salmon returning to the Farmington River increased somewhat over previous years, perhaps due to high river flows. Shad numbers remain low but increased somewhat over last year. Shad continue to find the Rainbow Fishway difficult to negotiate underlining the need for redesign and reconstruction. Blueback herring numbers are still disastrously low despite stiff conservation measures locally and regionally.

Returns to the Penobscot River in Maine are apparently sufficient to allow for a limited catch and release fishery this fall. Maine's Congressional Delegation has been instrumental in securing more than \$4 million in federal funds for the Penobscot restoration project. The Senate Appropriations Committee recently approved \$2.5 million more for the program in the Department of the Interior's Fiscal Year 2007 Appropriations Bill (yet to be approved by a Senate House Conference Committee). The Connecticut River salmon restoration program could use this level of Congressional support. ♦

NASCO Meets in Finland to Consider 'Next Steps'

By Stephen Gehpard, US Commissioner to NASCO

States can promote Atlantic salmon restoration and conservation and when larger watersheds are at issue, multiple states can band together—as they have done within the Connecticut River Atlantic Salmon Commission. Nations can do the same within national waters. However, when it comes to international waters or considering fisheries within national waters that can

negatively affect salmon stocks from other nations, an international body is needed and that is what NASCO is all about. The North Atlantic Salmon Conservation Organization was created by an international treaty, which the United States signed, to deal with conservation of Atlantic salmon at the international and multi-national scale. It meets during the first week of June annually. This year, the meeting was held in Saariselka, Finland, which is about 200 miles north of the Arctic Circle. NASCO likes to meet in areas where wild Atlantic salmon are found and this area in Lapland is near the grand Tano (or Tenno) River, which forms the Finnish-Norwegian border as it flows north to the Arctic Ocean. The Tano is Europe's largest producer of wild Atlantic salmon.

One of the first orders of business for NASCO is to receive Scientific Advice from the International Council for Exploration of the Seas (ICES). This year, ICES reported that stocks from most regions (including all of North America except Newfoundland) were well below their conservation limits. The stocks in Newfoundland are considered to be "at risk." In Europe, the southern stock complexes are below conservation limits and the northern stock complexes are considered to be "at risk." Therefore, ICES provided catch advice that amount to "zero catch" (i.e., no fisheries). This is the same advice given to NASCO during the past four years and in response, its West Greenland Commission (WGC) set a commercial quota of zero but allowed a subsistence fishery for internal consumption (no export of salmon) that typically equates to about 20 tons. The stock assessment technique that ICES uses to determine the pre-fishery abundance is much too complex to attempt to explain here. However, since it relies on the numbers of spawners that have returned to home waters in recent years, the forecast ability extends several years. This means that NASCO knew with certainty that the ICES forecast for 2006 would be "no catch" and it now knows that advice will be "no catch" through 2008. With that knowledge, commis-

sioners and staff recognized that much of the deliberations at annual meetings in upcoming years would be unnecessary and not the best use of NASCO's brief time. Noting that there are many other concerns for wild Atlantic salmon at sea, there was an effort this past year to move toward "multi-year regulatory measures." If the status of the stocks will not change much over the next three years, could not NASCO agree to fishery quota that covered the next three years, thus freeing up time to focus on other issues? Guided by US leadership, bolstered by scientific advice, and supported by multi-national cooperation and trust, NASCO's WGC adopted the same regulatory measure for West Greenland as in 2005 and as described above, for the years 2006–2008. While the Northeast Atlantic Commission did not set a quota for the Faroe Islands fishery (as typical since 2001) because the Faroese wish to reserve their right to fish, in fact that has been no fishery since 2001 and no one expects one during 2006–2008.

Among the many other things discussed at the annual meeting were reports on the dangerous salmon parasite *Gyrodactylus salaris*; reports from the Liaison Group with the Salmon Aquaculture Industry; discussion of the impacts of acid rain; data from the fishery at the French islands of St. Pierre et Miquelon; a meeting of the International Atlantic Salmon Research Board, which promotes research in the ocean and specifically, a NASCO-endorsed research program labeled SALSEA; and lots of housekeeping chores such as a meeting of the financial committee and election of officers. One agenda item of particular importance is the so-called "Next Steps," which is the process through which NASCO is considering changes to make itself more efficient, transparent, and effective. The multi-year regulatory measure was one component of the "Next Steps" recommendations from the previous year. Another key component was a modification of the terms under which Non-Governmental Organizations (conservation groups like the CRSA) can participate. The changes that were

(See NASCO, page 7)

THE CONNECTICUT RIVER SALMON ASSOCIATION

The Connecticut River Salmon Association (CRSA) is a nonstock, nonprofit Connecticut corporation. Our mission is to support the effort to restore Atlantic salmon in the Connecticut River basin, a joint undertaking by the states of Vermont, New Hampshire, Massachusetts and Connecticut, together with the US Fish and Wildlife Service of the National Marine Fisheries Service, pursuant to an act of Congress in 1983.

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Atlantic Salmon Federation Report

By Robert Wolter, President, Western New England Council and Director, CRSA

The Atlantic Salmon Federation (ASF) is an international, non-profit organization dedicated to the conservation and wise management of Atlantic salmon. It consists of seven regional councils made up of over 150 river organizations and 40,000 volunteers. The ASF held its Spring Board of Directors Meetings in Toronto, Ontario on April 25–27, 2006.

The attendees at the meeting were members of the Board of Directors and the National Council as well as ASF staff. All of the regional councils were represented by their presidents, who are also members of the board. The schedule was intense, engaging and well attended. For 1 1/2 days, various committees discussed the problems involved with Atlantic salmon restoration and conservation. On the last morning, the full Board met to pass resolutions and act upon the recommendations of various committees.

Major problem areas that were addressed included:

GREENLAND CONSERVATION AGREEMENT: Efforts are being made to negotiate an extension of the present agreement for as long as possible and for as little cost as possible. The present agreement, which expires at the end of 2006, calls for an annual payment of US \$330,000 so that the Greenland commercial fishery will not harvest Atlantic salmon. Since the present agreement went into effect, there has been a noticeable increase in returns of Atlantic salmon to North American rivers.

PENOBSCOT RESTORATION: In order to restore the Penobscot River in Maine so that sea-run fish have access to the entire scope of the river, The Penobscot Trust was established. The Trust is a partnership which includes the federal government, the state of Maine, The Nature Conservancy, the ASF, and Trout Unlimited. The Trust must secure approximately US \$60 million from private and public sources to accomplish its goal. The money will be used to purchase and remove dams and to build fishways. The ASF, as a major partner, is providing leadership in seeking and obtaining private donations for the Trust.

NASCO *(continued from page 2)*

adopted will allow more participation by these groups under a broader set of circumstances. The Council and Commissions also agreed to hold more of their deliberations while in session (in the presence of the public) and less behind closed doors in 'Heads of Delegation meetings.'

NASCO can be confusing to the uninitiated due to its strange blend of science, diplomacy, and European traditions but it has a track record of important contributions to Atlantic salmon conservation and I believe the 2006 annual meeting continued and strengthened that record. In June of 2007, the annual meeting will be held in Bar Harbor, Maine and perhaps more American salmon conservationists will have an opportunity to observe and participate. ♦

RESEARCH INTO THE DECLINE OF ATLANTIC SALMON STOCKS AT SEA: Finding an answer to this long-standing phenomenon requires extensive research efforts by the various Atlantic salmon producing and harvesting countries as well as non-governmental organizations such as the ASF. At the April board meeting, the ASF passed a resolution stating in part that they support NASCO's SALSEA Project, which will coordinate research efforts to find reasons for the decline in Atlantic salmon stocks during their migration at sea.

ATLANTIC SALMON AQUACULTURE: The ASF has been a major watchdog for this industry. They brought to the attention of the public an escapee situation which occurred last November, when vandals released 100,000 farmed Atlantic salmon into Passamaquoddy Bay. ASF researchers found that 43 of 45 caught escapees were sexually mature. The response of the federal and provincial governments was poor and they admitted to not having mandatory containment standards, escape reporting or escape mitigation plans. Problems like this underscore the need for international cooperation and regulation. This is where NASCO should be used as a forum.

ACID RAIN: The ASF filed a Friend of the Court brief supporting a petition filed by the US Environmental Protection Agency in the Court of Appeals for the District of Columbia. On March 17, 2006 the Court of Appeals ruled on this appeal, striking down a rule that would have made it easier for coal-burning power plants to make equipment changes without installing controls to fight emissions that cause acid rain. This was a big win for ASF and the many rivers in Maine and Nova Scotia that are affected by acid rain.

The ASF has also supported an experimental liming project on the West River in Nova Scotia where lime is added to the river in order to increase the pH and lower the acidity of the water. This project has been in operation for six months and the initial pH reading of 4.1 has increased to 5.1. All are encouraged by these results. ♦

Chiller *(continued from page 6)*

That cut things pretty close, and was a good piece of work by all concerned. Thanks to Mike, Gary, and Cynthia! Next year, if the budget can possibly be stretched, we'll have two spares in the system!

There is another lesson here. All our chillers are growing older, and except for brand new purchases, we are well beyond the reach of any warranty. We have long recommended that schools have their equipment examined and checked out at the beginning of the school year by a competent cooling or air conditioning technician. A small investment on the front end could save a lot of headaches — not to mention your \$600 plus investment — later on. ♦

The CRSA School Program

Rhode Island Senator, Connecticut Representatives Join Stockouts, Visit Schools US Legislators Get a First-Hand Look at CRSA School Programs

RI Senator Chafee Stocks Salmon Fry With Thompson Middle School Students

On Monday, June 19, 2006, seventy students from Thompson Middle School in Newport, RI, excitedly piled off a bus onto Dow Field in Hope Valley, RI. They were releasing 500 salmon fry that they, with the help of their teachers, Beth Small and Elizabeth Gibbs, had raised from the egg stage. US Senator Lincoln Chafee and Rhode Island Department of Environmental Management (DEM) Chief of Staff Robert Ballou joined the students to help them test the water quality of the Wood River and release the fry.

Students eagerly donned chest waders and took nets to search for macro invertebrates and, depending on which ones they found, were then tasked with deciding whether the water was good for their salmon or bad. After finding many group one taxa macro invertebrates such as caddis flies and stoneflies, and also doing some water chemistry, the Wood River water was found to be perfect for their salmon fry. Kim Sullivan, the director of the Rhode Island DEM Aquatic Education Program, gave each student a cup of water with a salmon in it, which they then gently poured out into the river. "These kids are having so much fun, and at the same time, are helping and learning about their environment," said Kasey Patenaude, a student researcher who was present at the release.

Senator Chafee released fry, and then stayed with the students along the riverbed to watch the tiny salmon begin their journey in their new home. Chafee, who helps oversee the Atlantic salmon program on the Senate Environment Committee said, "This

is a great experience for the children, and I hope it will nurture a new generation of environmentalists." The other guests at the event were William Archambault, program supervisor for all US Fish & Wildlife (USFWS) fishery programs in New England, and Larry Lofton, manager of the USFWS hatchery in Attleboro, MA that raises Atlantic salmon for Rhode Island.

Thompson Middle School and 24 other Rhode Island high schools and middle schools were the participants in the Aquatic Resource Education Program, "Salmon in the Classroom" during 2006. "Salmon in the Classroom" is a program run through the Rhode Island DEM. Three months before the salmon fry are released, salmon eggs are sent to the schools involved in the program. Over the next three months, students and teachers watch the eggs grow and change into salmon fry.

"To do this program takes a lot of time and effort from the students and teachers, but the end result is absolutely worth it. Some of these kids would never have the opportunity to be out in nature, and through this program, they are able to learn about nature and help preserve it," said Jessica Redinger, a student researcher who helps with the Aquatic Resource Education program.

— by Katherine Patenaude

CT Congressman Simmons Joins Lyme Consolidated's 10th Annual Salmon Stockout

Fifth grade teacher Rebecca Pote and principal James Cavaliere hosted a visit by Congressman Rob Simmons



Sen. Lincoln Chafee of Rhode Island with salmon fry he helped release in June. [Photo courtesy of T. Mooney]

(R-2nd) and DEP Natural Resources Bureau Chief Edward Parker to the Lyme Consolidated School's 10th annual Atlantic salmon fry stockout May 8 on Eight Mile River. This elementary school is unique among the 63 schools in Connecticut that use the CRSA School Program: the entire school participates in academic exercises during the year and in the spring stockout field trip.

As part of the school-wide salmon rearing project, students designed posters and banners, and teachers used academic exercises as natural science teaching tools throughout the year.

"Lyme Consolidated School does a tremendous job in teaching young people on the importance of conservation and the salmon program is an example of their commitment. It's especially important that our children grow up with a respect for the environment and the realization that they can make a difference," said Simmons.

Simmons, who has been one of the leaders in an effort to have the Eight Mile River designated as a National Wild & Scenic River, said his interests in environmental issues as well as educational programs are well represented in the Lyme school program.

His district has the largest number of schools in Connecticut participating in the CRSA program. Simmons has also been an effective supporter of the Connecticut River salmon restoration effort in Congress.— *by Jim Carroll*

CT Congresswoman Johnson, DEP Commissioner McCarthy Join Avon Stockout

Chris Jones, a science teacher at Avon Middle School, and other faculty at the school took about 100 eighth grade students to Stratton Brook Park in Simsbury on May 8 to stock out Atlantic salmon fry they had raised. Chris organized the day with academic field assignments for each student in addition to the planned fry stocking. With the approval and help of principal Jody Goeler, Chris also acted as host for a visit to the day's event by **Congresswoman Nancy Johnson** (R-5th) and Connecticut DEP Commissioner Gina McCarthy.

Johnson talked to the students about the importance of their contribution now and in the future as guardians of our environment, not only in the state but also in our oceans. McCarthy, who kicked off her "No Child Left Inside" program this spring, spoke to the importance of environmental education and being an active participant in our "out of doors." Several students made oral presentations of science assignments.

The Avon Middle School's \$800 aquarium system cost was supported through a grant from the Avon Education Foundation that, in turn, was generously funded by a donation from the Farmington Savings Bank.— *by Jim Carroll*



Rep. Nancy Johnson, left, and CTDEP Commissioner Gina McCarthy, center, listen to an oral presentation by an Avon Middle School student during the May 8 stockout. [Photo courtesy of Gayle Bieluch]

CT Congresswoman DeLauro Visits Vo-Ag Students in April

Agriculture & Natural Sciences teacher Andrew O'Brien arranged for **Congresswoman Rosa L. DeLauro** (D-3rd) to tour Middletown High VoAg School, a CRSA School Program participant, on April 24, 2006. It was the first opportunity for the Congresswoman to see and hear how aquaculture and salmon rearing are now science courses in some of Connecticut's vo-ag schools. The visit was of special interest to DeLauro because she is the ranking member of the US House Appropriations Agriculture subcommittee. She and her staff have been very helpful in supporting legislation aimed at furthering the restoration of Atlantic salmon to the Connecticut River Basin and the salmon science program. "This (See Legislators, page 6)

News from the Southern VT Museum of Natural History

The Southern Vermont Museum of Natural History has received new grants from the Connecticut River Joint Commission and The Windham Foundation to expand their Adopt-a-Salmon school program into eight more schools in southern Vermont. The grants also include funds for an interpretive educational exhibit centered on the Connecticut River ecosystem. "We will be developing fun, informative displays to educate museum visitors about Atlantic salmon and trout, their ecology, their place in the Connecticut Valley Watershed ecosystem and conservation of these wild fish. Parts of this exhibit will be portable so that we can go out into schools and communities to provide watershed stewardship education," said the museum's executive director, Ed Metcalfe.

The museum also announced the appointment of Jason Saltman as assistant director. Jason, who ran a business for a number of years, now teaches science at Mount Snow Academy and is pursuing his masters in environmental science at Green Mountain College. He is charged with many projects, including managing the Adopt-a-Salmon school program, updating and maintaining the website, creating map and trail guides, expanding the environmental education programs, exhibit enhancement, and developing a monthly natural history lecture series. For more information, see www.vermontmuseum.org ♦

From left: teacher Andrew O'Brien, Jim Carroll, student, school director Rebecca Ratte, and Rep. Rosa DeLauro, flanked on the left and right by other students.



A Stitch in Time, Or How CRSA Got the Most Out of One Spare Chiller!

By Dick Bell, Education Committee Chair and Vice President, CRSA

In past years, the Connecticut River Salmon Association (CRSA) has kept between two and four spare chillers on hand to deal with chiller failures in various schools. These failures have occurred for a variety of reasons: glitches with new products, wear and tear, defects, etc. Most have occurred very early in the game, testifying to the effect of being idle over the summer. These have been used to good effect, rescuing stricken tanks on more than one occasion and saving the crop of eggs or alevin, as the case may have been. Not infrequently, imaginative and innovative teachers have played key roles in these rescue efforts. Witness the actions of Caron Stebinger and Alan Concilio at Beecher Road Elementary School (now a Middle School) in Woodbridge a few years ago: Three tanks were operating at the school. One failed shortly after the eggs were delivered. While awaiting the delivery of a spare chiller, the eggs were simply put into Ziplock bags, and transferred to a “good” tank. Simple and effective! However, for one reason or another, by 2005 our spare chiller supply had dwindled down to a precious few — one, to be exact. And it was a used one at that, stored in Jim Carroll’s basement in West Hartford.

Mike O’Connor, a veteran science teacher at Watertown High School, called me in mid-January. He was having trouble and needed to remove his chiller for a couple of days to effect repairs. The old one worked and could limp along, but needed fixing. He was confident that he knew what was wrong and how to fix it, but he had to disengage the chiller to do so. Could he borrow a spare to keep the tank stable and going during this process? Mike had been in the program for many years, and knew what he was doing, so I said “Of course, that’s what our spares are for.” I mentally corrected that to read “...what our *spare* is for” and at that point, it occurred to me that these casualties always come in pairs, so what are we going to do if someone else calls in after this gets loaned to Mike? Well, there was nothing to do, except to worry about that later.

USFWS, VT & NH Agencies, CRSA Join Forces

Ken Gillette, manager of the White River National Fish Hatchery in Bethel, VT, announced that the US Fish and Wildlife Service would be joining forces with CRSA, New Hampshire Fish and Game, and the Vermont Department of Fish and Wildlife to administer, coordinate and provide teacher training for the salmon-in-the-schools program in New Hampshire and Vermont. The transition partnership became necessary when the Vermont Institute of Natural Science ended their Environmental Citizenship Program in June. Ken said, “Schools can still expect to receive their Atlantic salmon eggs and an October teacher orientation is planned so that the classroom program can continue” (date and location to be announced). In the meantime, teachers will be receiving a complimentary copy of the CRSA newsletter this fall. ♦

W. Archambault

Supervisor of New England Hatcheries and Fishery Field Offices



Bill Archambault took over as Program Supervisor for the USFWS Fisheries Program in late 2005. Prior to that, Bill was Program Supervisor for the southern section of the Region 5 Fisheries program. Bill came to the Service in 1999, working in Ecological Service on hydropower relicensing and federal projects. Before joining the Service, Bill worked for NOAA in Washington, DC, in the UnderSecretary’s Office and Office of the Chief Scientist, working primarily on commercial fishing regulations and aquatic nuisance species. Bill started his federal career with the National Marine Fisheries Service in 1992, working in fish statistics at the Narragansett Bay Lab in Rhode Island. Before that, Bill worked as a commercial fisherman out of Point Judith Rhode Island. Bill has a BS in Animal Science from Delaware Valley College in Pennsylvania and a MA in Marine Affairs from the University of Rhode Island. ♦

I picked up the chiller at Jim’s the next day, and delivered it to Watertown the day after that. That went smoothly enough, so maybe this would be a routine exercise after all. Not so.

A week went by, and I almost forgot about Mike. Then the other shoe dropped. Gary Bogli, a retired teacher from South Windsor, CRSA consultant, and also liaison for a number of our schools, called with the worst possible news. Cynthia Foster, at Tolland Middle School, had a complete chiller failure. She had been on the telephone to the Glacier Company, the California manufacturer, and there was nothing obvious to do; the unit would have to be returned or turned over to a professional. Cynthia had enough “clean” ice to last a day or so, but a replacement was clearly needed. Did I have one available? The best answer I could give was “maybe.”

A quick call to Mike revealed that he was making the substitution of the repaired old chiller for the spare that afternoon. The spare would be available by late afternoon. Moreover, Mike was willing to help deliver it, by meeting whoever was going to Tolland halfway. Another phone call confirmed that Gary would effect the delivery to Tolland, and I left it to him to work out the rendezvous with Mike. That was accomplished in Colchester in the late afternoon. The spare was installed at Tolland Middle School the next morning without a single casualty.

(See Chiller, page 7)

Legislators (continued from page 5)

is exactly the kind of collaboration we in the federal government should be fostering in our communities – partnerships that serve the public at the same time they get young people energized and involved,” said DeLauro. —by Jim Carroll

Advances in Science, Technology Benefit Restoration Efforts

By Jan Rowen, Connecticut River Coordinator

Salmon Fingerprinting

Kitty Griswold, geneticist from the US Geological Survey Conte Anadromous Fish Research Center in Turners Falls, MA, is working to conserve Atlantic salmon throughout the basin by analyzing their DNA. A small clip of fin tissue is taken from every adult salmon that returns to the river. Scientists use the genetic information obtained to design a mating plan that protects against inbreeding and promotes healthy progeny which are adapted to this river. The genetics of the young salmon fry also serve as a marker which can be detected later. That same sort of information is being collected from emigrating smolts in the spring except, with smolts, the information can be used to back-track to the successful emigrant's family tree. It can also be used to assess productivity of the habitat in which the smolt was stocked. The Restoration Program has been working on this management and marking project for a number of years and results are expected to answer management questions in the future. According to Kitty, "One day, these results may allow managers to direct stocking efforts to the most productive tributaries in the watershed. In addition, by monitoring the genetic health of the population, alternative management practices can be developed which may better serve locally adapted stocks of salmon."

One Shad, Two Shad, Three Shad, ...

Human fish monitors sit on the outside of fish windows counting the numbers of shad, salmon, herring, lampreys and other species that swim up the Connecticut River and a few of its tributaries every spring. They count fish swimming upstream and subtract fish swimming downstream from April through July. At the Holyoke fishlift, counting can keep a person pretty busy, especially if a salmon has to be trapped for transport to the hatchery or if shad will be transferred elsewhere in the basin. Counting at other locations is a little bit more therapeutic and often not very economical.

As a result, humans have been replaced in a number of locations by videotape systems. This way someone can be working productively elsewhere, and return later to count fish by fast forwarding the tape rather than counting the fish in real time. Still, this was tedious work until Jeff Fryer, from Salmonsoft in Portland, Oregon, created FishTick. Alex Haro, a researcher from the US Geological Survey Conte Anadromous Fish Research Center in Turners Falls, MA, decided to try out the FishTick software. In partnership with Northeast Generating Services and the US Fish and Wildlife Service, a pilot study was conducted at the Cabot fishway in Turners Falls this spring.

Fish passage is still videotaped, but the computer automatically edits frames that do not include fish. The smart sensors can recognize fish shape/size and distinguish them from routine flotsam and jetsam even when the water is muddy or the lighting is limited. The viewer sees perfect fish silhouettes that are easily recognized and counted. And, the program reduces counting time by almost 90%. ♦



2006 Grand Prize Winner Bert Van Sciver

CRSA Life Member Bert Van Sciver with the \$1,000 Winston 5 wt, 4 pc rod and Abel trout reel that he won at the 2006 CRSA Dinner.

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DATE!**

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**31st Annual Dinner
& Raffle/Auction**

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