

*In-ter-vale n. [a blending of INTERVAL + VALE] [Americanism, Chiefly New England] low, flat land between hills or along a river. Webster's New World Dictionary



DOWNEAST SALMON FEDERATION
P.O. Box 201
COLUMBIA FALLS, MAINE 04623

\$25,000 NONPROFIT AGENCY FUND MATCHING GIFT CHALLENGE

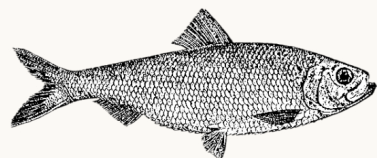
DSF has received a generous \$25,000 1:1 Matching Gift Challenge from an anonymous donor! This challenge will enable Downeast Salmon Federation to increase our long-term financial stability and ensure that our rivers and fisheries in Downeast Maine are stewarded for years to come.

Through numerous discussions with the donor, other Maine nonprofits, and the Maine Community Foundation (MCF), DSF came to the decision that MCF would be the best foundation to financially steward the funds that are raised. DSF has had a long relationship with this reputable Maine foundation, and we are excited to work with the Maine Community Foundation in

the establishment of this fund.

If you would like to help DSF establish a nonprofit agency fund with the Maine Community Foundation, please send a check to DSF, P.O. Box 201, Columbia Falls, Maine 04623, and mention the Matching Gift Challenge. You can also donate to the challenge online at www.mainesalmonrivers.org/donate.

We hope you will consider doubling your donation and helping us to meet this \$25,000 challenge!



THANK YOU TO OUR BUSINESS PARTNERS



For more information on how your business can become a DSF Business Partner, please contact our Membership and Development Coordinator, Heather Andrews, at heather@mainesalmonrivers.org.

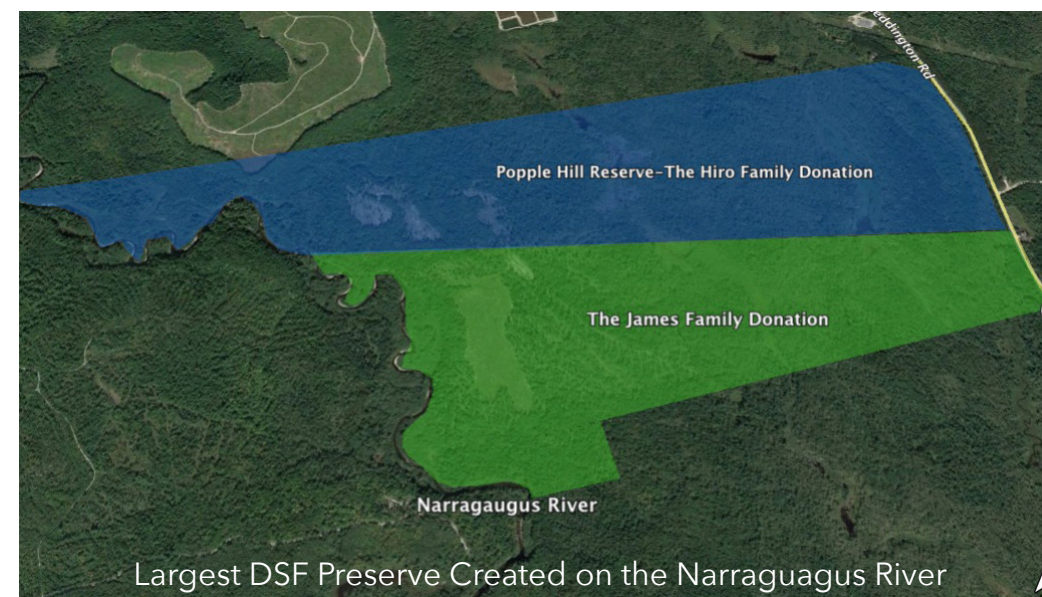
PROTECTING RIVERS AND WILD ATLANTIC SALMON SINCE 1982

INTERVALE

DOWNEAST SALMON FEDERATION

Spring 2018

35 MILE CAMPAIGN KICKS INTO FULL GEAR



Popple Hill Preserve on the Narraguagus River is now DSF's single largest land holding.

Through two recent gifts of land from Bill James and his family, DSF's Popple Hill Preserve has been expanded from 420+ acres to 750+ contiguous acres in Deblois and Cherryfield! The Preserve was first established by DSF as the result of the initial 420 acre property donated by the Hiro family in 2002. The two recent gifts by Bill James and his family are very important additions along the south of edge of the Preserve.

The James family gifts now mean that over two miles of riverfront along the east side of the river

will be protected forever. The vast wetlands, beaver flowages, and three cold tributary salmon and trout streams running through property are also secured as wild habitat and will remain open to public access.

Bill James' life has led him through many outdoor adventures and professional accomplishments since his childhood days during the Depression. Growing up poor in Maine "means I spent many days entertaining myself fishing with homemade safety pin hooks for gorgeous little brook trout. I have remained an active angler for most of my 94 years and love the beauty of Maine's rivers and streams. I am so inspired and impressed with

MEANDERS

"If, when queried as to my destination and intent, I answer, 'To the Pleasant River, fishing,' the questioner is content. It is socially acceptable for a man to go a-fishing. Should I speak more truly and say, 'To the Pleasant River, dreaming,' the questioner would doubtless be consternated and speedily pass it on to others that I was at last become quite daft. It is not socially acceptable for a man to go a-dreaming. This seems rather strange since surely far more people dream than fish."

-Dale Rex Coman
from his book *Pleasant River*

the work of DSF. You have done a wonderful job with all of your efforts - your work to preserve the smelt fishery is particularly important. Salmon love to eat them and they are my very favorite as well!"

Bill is a Professor Emeritus of Physics, at the University of Missouri, Rolla, a WWII veteran navigation instructor and holds patents on materials and inventions that we all use daily.

DSF is in the midst of our 35 Mile Campaign to continue working to protect river frontage and conserve this important ecological, recreational, and scenic resource. If you have property on one of our Downeast rivers that you would like to conserve, please contact us!



BUSINESS PARTNER SPOTLIGHT

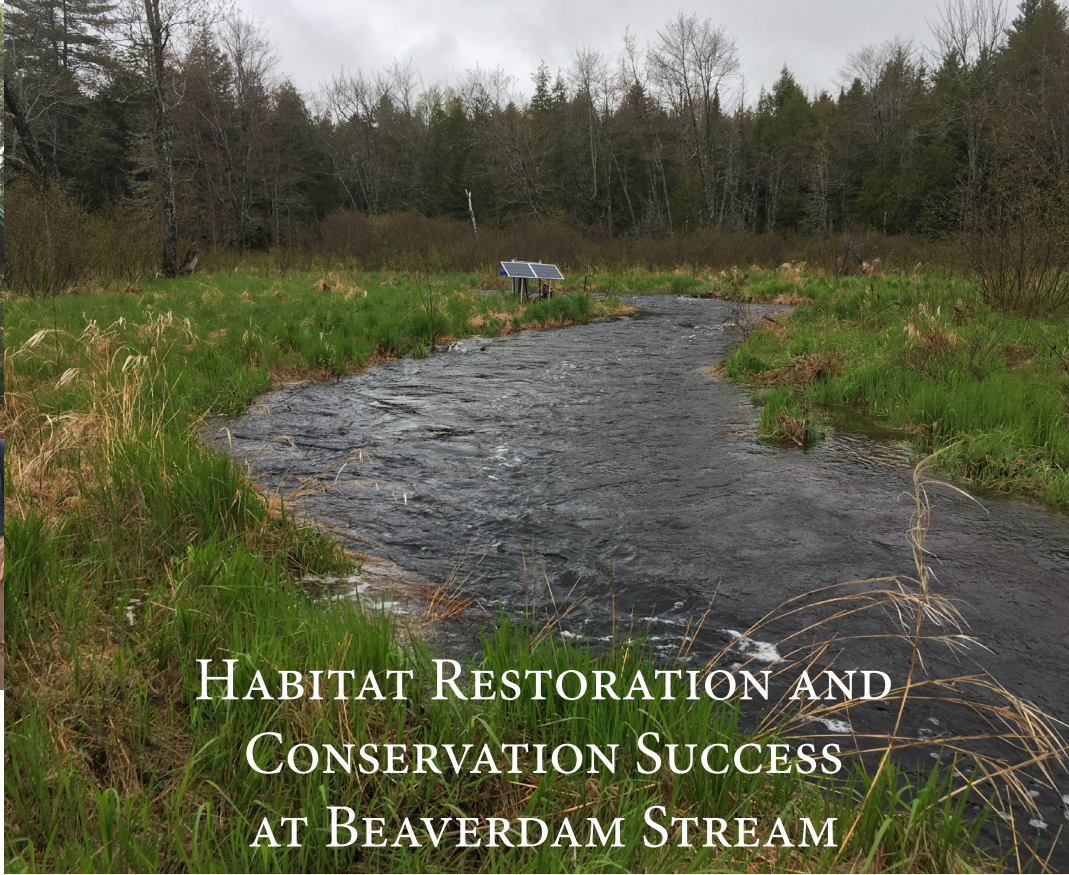
Emera Maine spokesman Judy Long sat down to talk with us about why it chooses to donate to Downeast Salmon Federation.

"Emera Maine staff deal with environmental issues daily, and we are committed to the responsible use, protection and preservation of our natural resources. Environmental responsibility is an important part of being a member of the community."

Our team uses environmental science, among many other sciences, every day in maintaining and improving our transmission and distribution system. For example, Emera Maine crews may encounter endangered or threatened species in the course of their work, and the utility has a program outlining how to maintain safe and reliable power while working to protect wildlife. During construction activities, we take many measures to protect natural resources."

Emera Maine wants to help build a stronger Maine by supporting programs that engage young people, particularly in the areas of safety, science and wellness. We believe such contributions make a difference in the communities in which we live, work and play."

Thank you, Emera Maine, for your commitment to the health and vitality of our environment and communities!



HABITAT RESTORATION AND CONSERVATION SUCCESS AT BEAVERDAM STREAM

In 2017, the Downeast Salmon Federation acquired two very important pieces of property in Wesley on Beaverdam Stream. With help from The Nature Conservancy, the Maine Natural Resource Conservation Program, The Bailey Wildlife Foundation and many other private donations, over 100 acres of land and greater than 1,500 feet of river frontage have been conserved. These acquisitions will now allow us to proceed with rerouting the second of two problematic road - stream crossings to a new gravel road we are constructing that approaches from the east without crossing the stream at all!

Beaverdam Stream is a very habitat rich tributary of the East Machias River. This stream consistently produces some of the highest salmon parr densities of all the streams we stock and monitor. It is one of the most productive streams in Eastern Maine. But the stream and upstream lakes have long been impaired by road crossings and associated small dams, the first of which we removed in Phase 1 of this project in 2016.

Salmon, alewife, trout, and other native fish have regularly been blocked from access upstream of these crossings for at least twenty years.

During the summer of 2018, we will remove the two remaining undersized and impassable culverts, thereby significantly improving Beaverdam Stream's free-flowing connection to the sea. We will also finish building a new gravel road around the stream to maintain cooperating landowner access to their farm and forest land and a classic hunting camp.

This complex project has involved six landowners and has been in the works from concept to culmination for approximately ten years at a cost of approximately \$300,000. Because this project is within the East Machias watershed it was a high priority and has positive benefit to our major investments in both the Peter Gray Parr Project and the DSF 35 Mile Campaign.

Thank you to all those who have helped make this challenging project and our ongoing work in the East Machias such a great success!

SPRING AND SUMMER EVENTS

ANNUAL SMELT FRY & WORLD FISH MIGRATION DAY CELEBRATION

Saturday, April 21st from 11am-4pm - Main Street, Columbia Falls - The Annual Smelt Fry is a wonderful way to welcome spring. Come learn what projects are happening within the fisheries and about DSF's regional involvement. Local foods will be featured with smelts, alewives, and mackerel being smoked at the DSF smoker, venison stew and a seasonal fried smelt dinner and dessert made with local blueberries at the Wreaths Across America gym. Airline Brewing Co. will also be offering their locally brewed beer this year. Come join us for a day of fisheries fun!

SIPPING SUDS FOR ATLANTIC SALMON

Wednesday, April 25th at 6:30pm - Mystic Brewing Co., Chelsea, MA - We are excited to announce the 2nd annual Sipping Suds for Atlantic Salmon! Have you wanted to learn more about Atlantic salmon fishing and conservation? To meet with experts who are leading efforts to protect and restore the species, and to maybe win a trip Atlantic salmon fishing? Then this event is for you! Visit mainesalmonrivers.org/events for tickets and additional information.

UNION RIVER DAY

Saturday, May 5th from 12:30pm-2:30pm - On the banks of the Union River at Ellsworth's Harbor Park, DSF will be joining Our Union River--a subcommittee of the Ellsworth Green Plan--to celebrate the Union River. In the morning Frenchman Bay Conservancy will be hosting a clean up on Card Brook--a Union River Tributary. After the clean up there will be a gathering and music along the river at the Ellsworth Harbor Park. DSF will be there with our smokehouse in tow.

GET TO KNOW YOUR TRAILS: PLEASANT RIVER COMMUNITY FOREST

Wednesday, May 16th from 6pm-7:30pm - Get to know your DSF trail at the Pleasant River Community Forest in Columbia Falls. DSF's Land Trust Director, Tanya Rucosky, will be leading a group hike through the community forest.

OPEN SMOKEHOUSE AND RIVER HERRING MIGRATION CELEBRATION

Wednesday, May 23rd from 3:30pm-6:30pm - 13 Willow Street, East Machias - Visit the East Machias River as thousands of river herring head upstream, providing cover to out migrating salmon smolts. DSF will have our traditional smoke houses fired up and open for a tour.

FINS AND FEATHERS TALK AT THE ACADIA BIRDING FESTIVAL

Sunday, June 3rd at 10:30am - 1157 Main Street, Mount Desert, ME - DSF Executive Director, Dwayne Shaw, will explore the relationship between birds and the fish of Maine that have faced steep population declines in recent decades. Dwayne will discuss how we can enhance food stocks for birds through the restoration of our rivers. Learn more at www.acadiabirdingfestival.com.

PLEASANT RIVER FISH COOKOUT AND COMMUNITY GATHERING

Friday, June 15th at 5:30pm - 187 Main Street, Columbia Falls - Join the Downeast Salmon Federation to celebrate the start of summer and the annual return of river herring to the Pleasant River. DSF will have our smoker and grill fired up and will provide smoked smelts and river herring. Bring anything else you'd like to add to the grill.

STEWARDSHIP WORK PARTY

Saturday, July 14th at 10am - Join us for a few hours of old fashioned stewardship work out on DSF's Spragues Falls Preserve in Cherryfield. We'll meet at the parking lot near the end of Spragues Falls Road in Cherryfield. Don't forget to pack a picnic lunch!

SMELT BROOK PADDLE AND PICNIC

Friday, July 20th from 5:30pm-7pm - Join DSF at the newly purchased Smelt Brook Preserve in Sullivan. Bring your own kayak or canoe and life jacket, and be dressed to go out on the ocean. We'll take off from the preserve, paddle around the upper part of Flander's Bay, and head back for a low-key picnic on the shore.

WILD & SCENIC FILM FESTIVAL

Saturday, July 28th at 6:30pm - Knowlton Park, 11 Shore Rd, Ellsworth - Downeast Salmon Federation has partnered with numerous area nonprofits to host the first Wild and Scenic Film Festival in Downeast Maine! The Wild & Scenic Film Festival is the largest film festival of its kind. It will leave you feeling inspired and motivated to make a difference in your community and the world. Learn more at <https://www.wildandscenicfilmfestival.org/>.

GET TO KNOW YOUR TRAILS: SPRAGUES FALLS

Sunday, August 5th from 1pm-2:30pm - Join DSF's Land Trust Director Tanya Rucosky for a hike at Spragues Falls Preserve. We will start at the parking lot near the end of Spragues Falls Road in Cherryfield.

Visit mainesalmonrivers.org/events or call 207-483-4336 for more information on our summer events.



Hatchery Manager Zach Sheller, and Assistant Hatchery Manager, Rachel Gorich, releasing fall parr into the East Machias River.

WHAT ONE CONSERVATION HATCHERY CAN DO FOR A SALMON RIVER

At Downeast Salmon Federation we operate the Peter Gray Parr Project in what was once a green cinderblock building that the town of East Machias deemed a “slum and blight.” Today, the building has been completely renovated and now houses the Peter Gray Hatchery—a unique and innovative conservation hatchery designed to recover the endangered Atlantic salmon.

Listed in 2000 as an endangered species, Maine’s Atlantic salmon are the last survivors of the wild salmon runs that once stretched as far south as the Connecticut River. Of the eight remaining salmon runs in the U.S., five are in Downeast Maine. These five rivers, and the salmon swimming in them, possess the potential to reverse the decline of the “king of sport fish.” Along with many partners, state, and federal agencies, volunteers, and community members, the Downeast Salmon Federation decided to dive head first into restoring salmon by building DSF’s second privately run hatchery raising endangered Atlantic salmon.

Using techniques developed by the late Peter Gray on the River Tyne in northern England, DSF’s hatchery is challenging the conventional understanding of fish hatcheries. Traditional hatcheries raise fish in an artificial swimming pool like environment—and then expect that they’ll survive when released into the wild.

Peter Gray argued that fish should be raised in an environment that replicates the natural environment

as closely as possible. So we raise our fish in unfiltered water piped in straight from the East Machias River; the fish, once they’ve hatched, settle into incubation boxes that mimic a natural salmon redd or nest. Once they leave their “nests,” the young fish swim into black-bottomed tanks that match the color of the river bottom; and, in the tanks, they swim into a current that increases in speed as the salmon grow.

Peter Gray’s nature-like techniques develop salmon into “little athletes”—fit little fish well adapted to the wild. Our little athletes are better able to survive, not only in the river, but the long trip to Greenland—where they live as adults—and back to Maine to spawn.

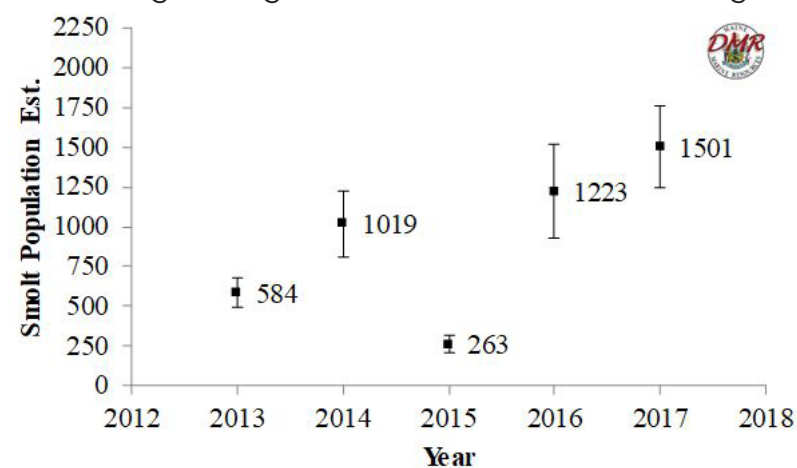
So does the Peter Gray Hatchery actually work? We have had higher numbers of juvenile fish per unit of habitat in the East Machias River since the start of the project. In 2016, we had the highest density seen since 1984, and three times higher than the density at the start of the project. These numbers are even more encouraging considering the record-setting droughts that

Downeast Maine has suffered the past two years. Here’s to a cool wet summer for 2018!

Another way to evaluate the success of the project is by counting the number of salmon smolts leaving the river for the sea. The combined smolt population estimate for 2017 is 302% higher than the number produced from traditional stocking methods in 2013. With smolt production approaching one smolt per habitat unit, the East Machias River is now producing more smolt per unit than the other Downeast rivers.

All in all, the Peter Gray Parr Project has tripled the amount of Atlantic salmon parr in the river and tripled the number of smolt headed to sea. Although we have only two years of adult return data, we are seeing smolt to adult return ratios equivalent to—or higher than—the return ratios on neighboring rivers. Excited by our success, we are expanding our hatchery to increase its capacity and the strength of our “little athletes.”

If you would like to learn more about the Peter Gray Parr Project or how you can help, please visit www.wildatlanticsalmon.org.



DOWNEAST FISHERIES PARTNERSHIP: MAKING THINGS HAPPEN

There are a lot of organizations doing good things in eastern Maine, but for the most part they work independently and without much cross-fertilization. A few years ago, thinking that they might be able to do more if they coordinated their projects and fundraising, DSF and the Maine Center for Coastal Fisheries (back then it was the Penobscot East Resource Center) decided to form a partnership focused on restoring fish populations and fisheries in eastern Maine. It became the Downeast Fisheries Partnership (DFP) and since then, the partnership has grown to nine organizations. Not all are as fully involved with fisheries as DSF and Maine Center for Coastal Fisheries are, but all have an interest in seeing fish return to the fresh and saltwater environments of Hancock and Washington Counties. DFP has excited the attention of several major funders to support the Manomet Center for Conservation Sciences and Sunrise County Economic Council’s coordination of the partnership.

DFP’s vision is “fishing forever” and focuses on four main strategies: 1) restoring sea-run fish, 2) promoting ecosystem-based fisheries management, 3) preparing the next generation of fisheries stewards, and 4) capturing the benefits of fisheries for local communities. By knocking ideas around, collaborating, and coordinating fundraising, DFP

has made each of the individual partners more effective in fulfilling their missions than they would have been operating alone.

In this past year, DFP has been exploring how it can grow in size and reach and how it can become more effective in realizing its vision. DFP held a retreat in 2017 to begin tackling these issues.

There are extraordinary opportunities in this part of the

world to restore natural resources that have been depleted, to craft an economy that provides jobs while sustainably managing these resources, and to create communities that enrich the lives of the families and individuals who live here. The Downeast Fisheries Partnership—through its vision of Fishing Forever—is intent on making these things happen.



Left to right: Board Directors Gerald Zegers, Barbara Witham, George Leinbaugh, and Executive Director Dwayne Shaw.

DSF is pleased to welcome its newest member, Barbara Witham, to the DSF board! Barb is a resident of Lamoine and hails from East Millinocket, Maine. Having a father who was a game warden gave her an appreciation for the outdoors and what it takes to protect it. Barb graduated from the University of Maine with a BS in Veterinary Sciences. Barb has now retired after 33 years of service for The Jackson Laboratory in Bar Harbor, Maine where she most

recently worked in International Customer Relations. Barb has been active in Atlantic salmon restoration since 1992. She has been a long-time secretary of the Union Salmon Association, President of the Friends of Green Lake National Fish Hatchery, Secretary of the Maine Council, ASF, and director Maine Council, ASF. Barb was also DSF’s 2017 *Pass the Paddle* Recipient. We are thrilled to have Barb join our ranks as a Board Director!



Alewife harvest in Dresden, Maine.



UNION RIVER UPDATE

The federal relicensing for the Union River dams is entering its final year of review and DSF continues to advocate for local fisheries and communities in the watershed. DSF has provided community, state, and federal partners with documentation showing the impacts of these dams on the river fisheries and the water quality of Graham Lake. Our monitoring work has shown that these dams and their operations must be modernized.

All of the Union River's native fish species need safe, timely, and highly effective up and downstream passage at both Leonard and Graham Lake dams. Salmon, shad, alewives, blueback herring, sturgeon, brook trout, tom cod, smelt, eels, and lampreys should have free passage within their historic habitats.

Graham Lake's annual draw downs must be reduced from the nearly 11 feet currently allowed. Managing Graham Lake with a more limited draw down will increase the value of lake front property, reduce turbidity from shoreline erosion, and improve water quality and fish habitat.

The river is facing a critical decision point. DSF will continue to push that decision in the right direction and work to get a better deal for the Union River.



DSF JOINS NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

Peter Gray's daughter Jill Brookbanks during her visit with DSF's Executive Director, Dwayne Shaw, on the River Tyne.

ALEWIFE HARVESTERS OF MAINE AND DSF: WORKING TOGETHER

As river herring started to make their way upstream to spawn last May, Sarah Madronal, DSF's Fisheries Biologist and Regional Organizer, made her way down to Mid-coast and Southern Maine to work together with harvesters in conjunction with The Alewife Harvesters of Maine (AHM). From Winnegance Lake, a river herring harvest jointly managed by the Towns of Bath, West Bath and Phippsburg to Orland River in Orland, she traveled to river herring harvests to meet with the hardworking and passionate fishermen and community members that make the river herring fishery a beacon of hope for fish and habitat restoration efforts in Maine.

Many river herring runs and harvest sites, like the one on Nequasset Stream in Woolwich, depend on community members who volunteer to count alewives passing upstream while harvesters collect weekly scale samples from fish to determine their age, sex, and reproductive status. These data collection initiatives and monitoring efforts are essential to assessing the overall health of river herring populations. Working alongside

and listening to harvesters and community members also gives Sarah a sense of the continued and evolving importance of our river fishing heritage in Maine.

In her time down south, she worked closely with Jeffrey Pierce, Executive Director of AHM. AHM was founded to defend Maine's river fisheries and to work with scientists and fishery managers from the Atlantic States Marine Fisheries Commission and the State of Maine to manage the harvest of alewives under high standards of sustainability. AHM also focuses on sharing current news and background information on Maine's river herring fisheries, conducts outreach, coordinates citizen science initiatives, and supports alewife harvesters and their communities.

Sarah's work with DSF, is also conducted in partnership with The Nature Conservancy, ME DMR and others and is focused on developing citizen monitoring of all sea-run fish. This spring she will coordinate smelt studies and this past winter she worked with volunteer monitors and harvesters of tomcod. To get involved or learn more, just drop us a line.

We had some excitement and a flurry of activity in the office in mid-March. We learned that DSF had been accepted as an accredited non-governmental organization (NGO) of the North Atlantic Salmon Conservation Organization. From NASCO's website:

"NASCO is an international organization, established by an inter-governmental convention in 1984. The objective of NASCO is to conserve, restore, enhance and rationally manage Atlantic salmon through international cooperation taking account of the best available scientific information."



There are six parties to the convention—including the U.S. and Canada, various other Atlantic salmon-related commissions and some 38 accredited NGOs. The organization has accomplished

some major victories. Chief among them is substantially reducing high seas fishing of salmon.

It is important for DSF to be part of NASCO—where critical international policies are hammered out and implemented. We have a tremendous amount of experience and expertise that needs to be part of the international effort. At NASCO, we can extend our impact and our partnerships beyond the state of Maine.

When we learned that we'd been accepted into the NASCO fold, we also learned that DSF was invited to a NASCO meeting the following week—in Scotland. Dwayne, our executive director, only had days to clear his schedule and organize travel arrangements to make it happen. The NASCO NGO meeting focused largely on how commercial salmon aquaculture can be modernized to limit impacts on wild fish. The following two days included about 50 people from all around the northern hemisphere to plan the 2019 International Year of the (WILD) Salmon. People from the Pacific and Atlantic were joined together in this effort!

Dwayne was able to take the last two days of the week to visit the River Tyne and to be hosted by Peter Gray's daughter Jill and

husband Bud Brookbanks. The international partnership around the DSF Peter Gray Parr Project is modeled after the Kielder Hatchery that was designed and managed by Peter. The successful restoration of the Tyne salmon fishery is arguably the most substantial recovery of Atlantic salmon in history. Dwayne met many very happy fishermen who never believed they would fish this river. Approximately 5,000 salmon have been caught by rod each year on this river in recent years—on a river that was declared dead in the 40's. It can be done, and the people along the Tyne credit Peter Gray and his methods for much of the success!



DSF Executive Director, Dwayne Shaw at the Kielder Salmon Centre on Kielder Burn in the UK.