Monthly Hatchery Report November, 2016

Report by: Zach Sheller

A report of monthly activities and events

A Report on activities from the *Peter Gray Hatchery*, East Machias, ME.

With all of the salmon having been stocked out of the hatchery in October, November was focused on redd counts throughout the East Machias watershed. The East Machias River along with all of Downeast Maine was extremely dry this whole summer and fall season. DSF staff breached some beaver dams throughout the watershed in early November to help any Atlantic salmon in the watershed move into spawning habitat. Due to the low water, beavers had built dams in some new areas, including across sections of mainstem river.

Due to low water levels, the majority of our redd counts this year took place by foot, instead of a canoe. Spawning areas were surveyed multiple times throughout November and the beginning of December. DSF staff also surveyed areas of the river that were unlikely spawning areas to be as thorough as possible. Our last redd count survey via canoe included breaking ice in some of the dead water sections of the river (see picture below).

In the East Machias River watershed we found 12 redds this year: 3 redds were in Northern Stream, 3 redds in Beaverdam Stream, and the remaining 6 redds were in mainstem sections of the river. Last year (2015) 9 redds were counted in the East Machias River. The East Machias River had the second highest number of redds in the Downeast Region. Below is a table with redd numbers in the Downeast SHRU.

River	Number of Redds in 2016
East Machias River	12
Machias River	14
Narraguagus River	4
Denny's River	6
Pleasant River	0 (incomplete count due to water levels – more counts to come in the spring)

Although not a large number of redds, the smolt produced from fish stocked from the Peter Gray Hatchery seem to be returning at a higher rate than naturally reared fish from the Narraguagus and smolt stocked fish in the Penobscot. Of course this is a preliminary observation of one year and is subject to change. The longer we continue our process and the more data we gather in the East Machias River, the more we learn about this species!

Also during November, 6 Washington Academy students along with their teacher (and DSF board member) Don Sprangers, attended the Atlantic Salmon Conservation Schools Network conference in Scotland. Washington Academy's students have been involved with DSF and the Parr Project since the project's inception. This conference brings 11 different schools together from around the North Atlantic to learn about the mighty Atlantic salmon. Among the student's activities were visits to the Almond River Hatchery, fly casting on the River Tay, and a visit to the Pitlochry Dam and Fish Ladder.

At the Pitlochry Dam, the group also had the pleasure of meeting Peter Gray's daughter and son, Jill and Allan (see picture on the first page of this report). Please see the attached document for details on the scholarship Jill and Allan have established in the name of their father for Washington Academy students to continue work and studies in hatchery operations and fisheries biology. A big thank you to them for this generous gift! Pictures of the Washington Academy student's trip are scattered throughout this report.

The Maine Department of Marine Resources is currently working to assess the data collected during electrofishing this year. Although we don't have definite numbers the preliminary data seems promising that the population of juvenile salmon in the East Machias River is at one of its highest amounts in recent history. Stay tuned for more information on juvenile populations as it comes available. The Maine DMR has also finished its 2016 smolt report and that report is attached in this email.

I hope this report finds you and yours well this holiday season and may it be a most joyous time! Best wishes from us here at DSF.