



# Monthly Hatchery Report

May 2015

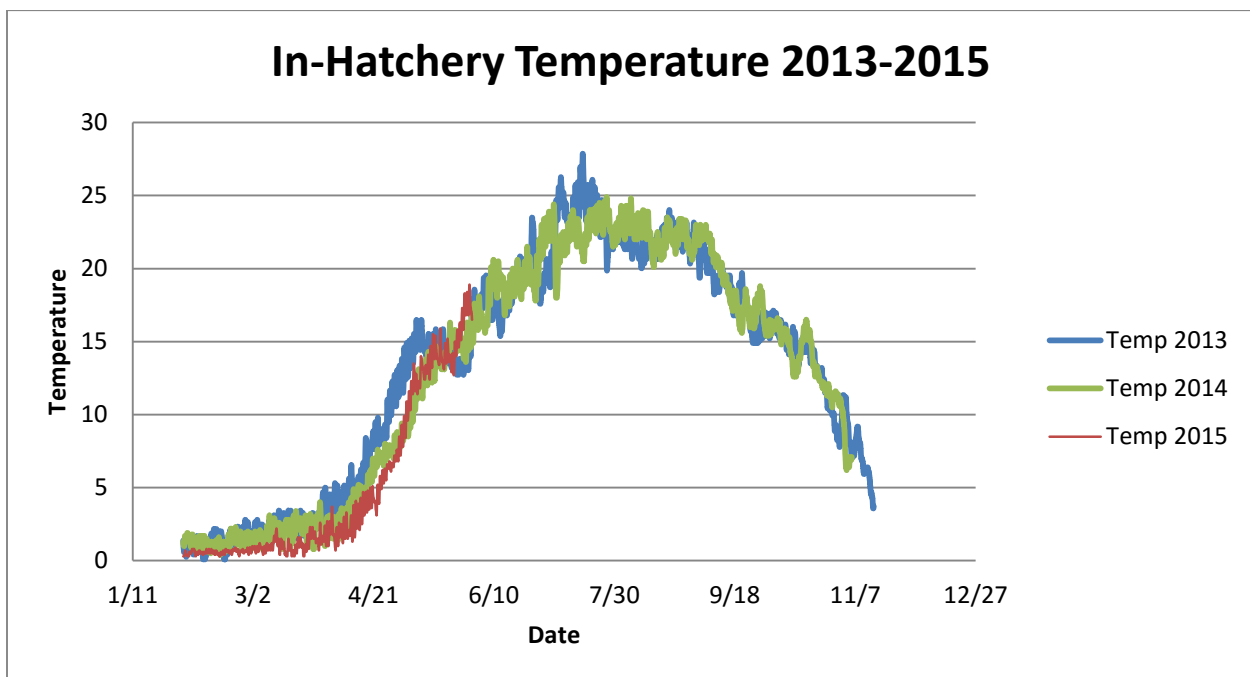


Report by: Kyle Winslow; Hatchery Manager

A report of monthly activities and events

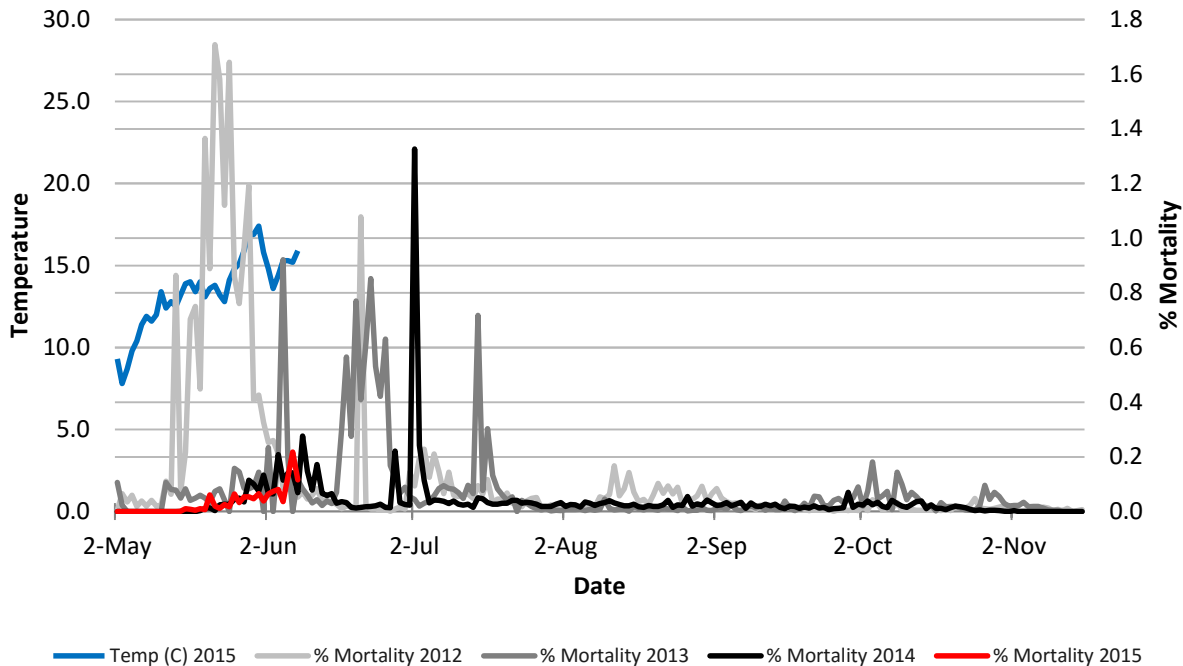
May is an exciting time here at EMARC. Fry have emerged from their boxes and are beginning to feed, the hatchery is set up for rearing parr for the remainder of the season, all of the fry that will be stocked have been; the rearing season is in full swing.

The weather patterns this winter and spring have been one for the books. Following 12 feet of snowfall, and prolonged cold temperatures, we are now in need of some rain. Temperatures rose rather dramatically in May, jumping from 7C to 18C in just 3 weeks (see graph below). With this increase in temperature, the fry developed rapidly at the end of their stay in the incubation boxes, and we had some emerge, without consequence, a bit prematurely.



Since emergence, the fry are doing quite well. It seems as though they have taken to feed and are growing quickly now that temperatures are in their optimal feeding range. Post emergence mortalities have been about where they should be thus far, as you can see in the mortality graph below.

## EMARC % Mortality 2012 - 2015



We generally see a small bump in mortality rate immediately after emergence, as the fish that will not feed begin to die off.

This year we stocked 10,300 fry into the East Machias watershed in Harmon Stream and Creamer Brook. We have stocked fry in these two streams for the past couple years as they are quite small and they seem to grow parr from fry fairly well. All remaining fry are being held at EMARC until the fall.

Smolt trapping has continued through the month. I have attached the most recent smolt trapping report sent out by the Maine Department of Marine Resources. Numbers this year are quite low, and not near where we had hoped they would be. There could be several reasons for this. The spring was quite abnormal, as mentioned, with cold temperatures late into the spring, a quick warm-up, and very little rain. This could have had an impact on smolt timing, with more fish staying in the river. There could be flaws in trapping technique and we are not capturing the portion of the population we think we are, or some fish



could have migrated out of the river before the traps were deployed and fishing. It could be that this winter was very hard on the fish, and the survival rate through the winter was very poor. Whatever the cause, it will be hard to make any judgements on survival until we can get out this summer and do our population assessments to see what is still in the river. We are also planning to get out and do snorkel surveys this summer to see what we can find for juvenile salmon. On a positive note, we have heard from several trout anglers that there are many juvenile salmon in the river, so we are optimistic.

We stocked fry from our Pleasant River Hatchery in Columbia Falls this May as well. This year we had ~210,000 fry, which was more than we expected, as about 120,000 or so were slated to be planted into the gravel as eggs this past winter. Due to heavy snowfalls, we were not able to get to the river where the eggs were going to be planted, so we held them at our Pleasant River Hatchery until this spring to stock as fry.

We put on the 3<sup>rd</sup> annual Smolt Bolt and Bloater Bash this May. It was a great event with about 60 participants in the race, and even more joined us for the Bloater Bash after the run. Jill Brookbanks, Peter Gray's daughter, participated from abroad. She ran a similar distance, on the same day in the U.K. A big thanks to Jill for the support, and for still running on what sounds like was a rather drab weather day!

May marks the end of the Salmon in the Schools program for the season. Most of the participating schools came to EMARC for a lesson about macroinvertebrates, and how they can help to identify good quality salmon habitat. We worked with eight school groups this year, all of which successfully released salmon.

With May comes the alewife run in Downeast Maine. The East Machias River has a phenomenal alewife run, bringing with them a flux of nutrients from the ocean to the river. These fish were traditionally smoked, preserving them for through the coming year. This year, Bucket Davis, the East Machias Head Selectman, put in a huge effort in smoking alewives at his smokehouse just up river of EMARC, as



well as at the smokehouse at EMARC. We had many students from local schools involved in the process, and was a great opportunity to get locals down to the smokehouse to talk about the significance of the species, and the important role they play in the ecosystem.

Finally, Dwayne Shaw, our Executive Director, traveled to New Mexico early this month to receive the River Network's River Hero award. This is a prestigious award honoring leaders in river restoration and conservation. Dwayne was one of five individuals from all over the country honored with this award, and one of two from Maine. Laura Rose Day from the Penobscot River Restoration Trust was the second Mainer dubbed a River Hero for her contributions in dam removal on the Penobscot River.