Peter Gray Hatchery Update

Head of tide (at a June 21, 2020 low tide) just outside the Peter Gray Hatchery in East Machias, Maine. Source: Sheller
**Please follow the hyperlinks throughout this update for more information**

Good morning all and depending on what day you are reading this update, happy Independence Day (hence the red, white, and blue theme) to those followers in the USA. I hope you and yours are well and thank you for reading this update about the Downeast Salmon Federation's Peter Gray Hatchery and the Peter Gray Parr Project.

Downeast Maine has experienced hot and dry conditions that have led to low river water levels. Unfortunately, weather that happens to be good for hanging out by the lake or grilling burgers in the backyard isn't always the best for our salmon friends. Follow the following link to the USGS river gauge on the nearby Narraguagus River (the station is roughly 32 miles southwest of the Peter Gray Hatchery): [https://waterdata.usgs.gov/usa/nwis/uv/?01022500](https://waterdata.usgs.gov/usa/nwis/uv/?01022500). Water temperature has been high in the Narraguagus for this time of year and the discharge (amount of water leaving the river) is hovering just a few CFS (cubic feet per second) above the lowest CFS recorded in 72 years. Along these same lines, the CFS leaving the river today is over 80 CFS lower than the median over those 7 decades on this date. You will find similar low flows across the Downeast Maine salmon rivers so far in 2020, including the East Machias River.

These types of river water conditions also correlate to challenging conditions in the Peter Gray Hatchery since we operate as an extension of the river ecosystem. The temperatures in the hatchery (and East Machias River) went from some of the coldest this spring to now some of the highest we have encountered during June. That rapid shift from cold to hot can create issues with bacteria and protozoans.

All that being said, there is an argument to be made that the salmon growing up in the Peter Gray Hatchery are continually adapting to the current state of climate change outside the hatchery window. Being exposed to the wild river conditions including temperature fluctuations and disease influences helps create a more wild hatchery salmon. This could help prevent the hatchery domestication effect that some worry about with growing fish in a hatchery. The fish at the Peter Gray Hatchery can continue to adapt to the wild, just as the fish in the river are doing. A hatchery that allows for the processes of natural selection to occur within its tanks. Perhaps this will continue to help the salmon populations of the East Machias River adapt to the changing climate, just as they have for thousands of years.

If you are new to receiving these updates and would like to catch up on some
you have missed, please visit our website here. If there are any of your friends you think would enjoy this content please share with them or let us know their email address to add to the list! Be sure to visit and subscribe to DSF's YouTube channel (https://www.youtube.com/channel/UC5ufWzE9qT6C5W3DZy0vijA) for more videos about the Downeast Salmon Federation and all the work we are involved in.

If you like the work we are doing, please considering donating towards the continuation of the Peter Gray Parr Project, every dollar helps directly towards the restoration of this wonderful fish! We hope this update finds you well and you enjoyed reading about the Peter Gray Parr Project. Thank you for all you have done, and continue to do, in the pursuit of Atlantic salmon restoration!

Thank you for your time,

Zach

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Some of our "little athletes" hard at work being Atlantic salmon! Source: Monini

DSF's Peter Gray Hatchery on the banks of the East Machias River at high tide. Source: Monini

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Are you interested in making a Contribution Pledge Commitment to DSF? Click here for the Downeast Salmon Federation Contribution Pledge Form. Thank you!

You can also support the Downeast Salmon Federation by purchasing some swag! Hats, sweatshirts, and t-shirts can be found HERE. Other ways to help are to become a member!

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If you'd like to read more on the Peter Gray Parr Project's beginnings and future please read our Parr Project Booklet.

There is a short Parr Project video on our website HERE.

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DSF is an accredited member of the North Atlantic Salmon Conservation Organization!
Thank you to the Trout and Salmon Foundation for your continued support of the Peter Gray Parr Project!

Thank you to the Sarah K. de Coizart Article TENTH Perpetual Charitable Trust for your support of the Peter Gray Parr Project!

Please support our work by becoming a member of the Downeast Salmon Federation. Together, we can restore sea-run fisheries in Maine.

www.mainesalmonrivers.org