

**2020 Juvenile Atlantic Salmon Stocking
COVID-19 Pandemic Contingency Planning
Post-stocking summary**

Stocking Emergency Ad Hoc Committee

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Committee Charge

The Stocking Emergency Ad Hoc Committee (Committee) was formed in April 2020 by the Atlantic salmon Implementation Team (IT) to undertake cross agency contingency planning for the release of endangered juvenile Atlantic salmon during the COVID-19 pandemic.

The primary goal of the Committee was to guarantee the health and safety of agency staff while ensuring juvenile Atlantic salmon are released in a manner that promotes survival, facilitates the recapture of family groups during age 1+ parr collections, and mitigates potential deleterious effects to the captive broodstock lines held at Craig Brook National Fish Hatchery (CBNFH). As the releases of smolts from Nashua and Green Lake National Fish Hatcheries (NNFH and GLNFH, respectively) were initiated prior to the formation of the Committee, the focus was on the release of fry from CBNFH and the two hatcheries operated by the Downeast Salmon Federation (DSF).

The Committee developed possible scenarios, including best and worst case, for stocking of fry from Craig Brook NFH, including any differences in timing and methods necessary to ensure the safety of staff. Each scenario identified the potential program impacts and potential means, if any, to mitigate these impacts

Smolt Releases from GLNFH and NNFH

Prior to the formation of the Committee GLNFH and NNFH initiated the late March/early April release of smolts into the Penobscot and Kennebec rivers, respectively. This action was deemed necessary due to the rapidly unfolding pandemic situation and uncertainty related to future personnel restrictions or illness that may have impacted hatchery operations.

NNFH released 88,753 smolts into the Kennebec River, below the Lockwood dam. The release location deviated from original stocking plans which included several release sites in the Sandy River, a tributary to the Kennebec. The early release timing also deviated from original stocking plans.

GLNFH released 647,557 smolts into the Penobscot River, below the Milford dam. The release of Penobscot smolts in 2020 occurred approximately three weeks early.

Given that stocking occurred several weeks earlier than the normal migratory period for wild smolts, it is anticipated that there could be some survival effects on this cohort of smolts. Returns from the 2020 smolt cohort will be recaptured at Lockwood and Milford as grilse in 2021 and multi-sea winter adults in 2022; assessments of the cohort can be made at that time. No mitigation strategies were identified.

2020 Stocking Scenarios

The Committee opted to release CBNFH fry at the earliest development feasible in 2020 and in larger groups to condense the number of trips necessary. For 2020 DSF will solely conduct fry stocking operations. DSF is self-sufficient in terms of equipment and personnel needs.

The Committee developed a matrix (described in detail in the planning document) that guided fry stocking operations under three possible scenarios (Status Quo, Reduced Operations, No Operations) based on personnel availability. Each scenario addressed shifting personnel availability, stocking protocols, identifies potential consequences and mitigation strategies.

Stocking proceeded under the Status Quo scenario. A few minor modifications included CBNFH personnel were not permitted to participate in canoe releases and only two CBNFH personnel were dedicated to the bulk of the transport and stocking activities.

COVID-19 Preparedness

Guidelines from the Center for Disease Control (CDC), state and federal agency were followed to ensure the health and safety of all personnel.

COVID-19 Preparedness at CBNFH during fry loading, transport and release included assigned vehicles to hatchery staff, vehicles were supplied with sanitizer, disposable face masks and first aid kits. Hatchery staff limited their interaction with the public to the extent possible; used recommended PPE including face masks (disposable or freshly laundered cloth), safety glasses, and nitrile gloves. In addition, personnel maintain physical distancing of >6' whenever possible.

Similar measures were taken by DMR and DSF personnel when in the field, interacting with CBNFH personnel or the public.

Stocking Summary

Fry releases from CBNFH began on May 5th and continued through May 22nd. Fry development ranged from approximately 88% to 96%; all fry were released unfed. Mixing of fry groups was jointly accomplished by either combining groups at the hatchery during loadout or ensuring multiple groups were released in the same location. Favorable river and field conditions, consistently cool hatchery temperatures, and the absence of typically concurrent field activities (i.e., smolt trapping) contributed to

a very stable and efficient stocking season. Hatchery temperatures were better able to be managed for unfed fry due to the absence of rearing age 0+ parr for the Sheepscot, an activity which requires water temperatures to be raised to facilitate feeding of a small cohort of fish.

Fry numbers released from CBNFH, rounded to the nearest 1,000, are listed below:

Dennys:	148,000
Sheepscot:	26,000
Narraguagus:	170,000
Machias:	180,000
Penobscot:	617,000

The DSF released 90,000 Pleasant River origin fry from their Columbia Falls facility.