**Project Title:** Atlantic Salmon Freshwater Assessments and Research

**Project Location:** Jonesboro office of the Maine Department of Marine Resources Division of Sea-run Fisheries and Habitat

**Project Leader: Ernie Atkinson (**[ernie.atkinson@maine.gov](mailto:ernie.atkinson@maine.gov))

**Project Time Frame:** May 2020 – September 2020

**Total Hours:** up to 520

**Semester Hour Allocation:** 40 hours per week as available

Gulf of Maine Atlantic salmon are the last wild populations in the USA, and are listed as endangered under the Endangered Species Act. Continued management based research and assessments are necessary to document population responses to management action and habitat improvements and restoration.

ME-DMR Division of Sea-run Fisheries and Habitats have been in a cooperative agreement with NOAA-Fisheries for several years with the purpose of preserving Atlantic salmon within the Gulf of Maine. Under this agreement, ME-DMR staff conducts smolt trapping operations, operate adult salmon traps, perform juvenile assessments using electrofishing, and conduct spawner surveys. ME-DMR staff also works with other diadromous species such as river herring and rainbow smelt collecting data and counts. They work with other partners on habitat connectivity and restoration projects. This intern would be exposed to a variety of fisheries techniques and management over the course of their term. A clean driving record is a requirement as there may be a need to use a State of Maine vehicle for project needs.

The intern would be involved in:

* Development of a water temperature monitoring project to examine spatial variation of water temperatures and areas of thermal refuge
* Operation of rotary screw traps for the purpose of enumerating out-migrating Atlantic salmon smolts in the Narraguagus and East Machias Rivers
* Operation of an adult trapping site on the Narraguagus River in Cherryfield, ME
* Surveying habitat quantity and abundance in various Downeast streams
* Assist in habitat connectivity and habitat restoration projects such as coarse wood additions and other habitat manipulations
* Assist in annual juvenile salmon assessment work using electrofishing
* Depending on availability also could assist in adult salmon spawner surveys

Opportunities Include:

* Getting to know and work with scientists from state and federal agencies
* Exposure to fisheries science and enumeration techniques like smolt population estimate models
* Practical experience in fisheries techniques like electrofishing and habitat surveying