Electrofishing

To check in on our fish, Downeast Salmon Federation, working with lead project biologists from the Maine Department of Marine Resources (DMR), use a couple of different techniques. One of these techniques is called “electrofishing.” This involves a special backpack, a battery, and a wand. The backpack is equipped with a metal tail that acts as a cathode and a wand, and is hooked up to the backpack, which acts as an anode. The battery is plugged into the backpack and charges the whole system. When the tail and the wand are both in the water and the wand is turned on, an electrical current between the tail and wand pulses, temporarily stuns the fish, and pulls the fish out from their hiding spots in the stream bed.

Waiting workers carefully and gently net the fish and put them into pails until they can be measured and counted. When done properly, this method does not hurt the fish and is very effective in helping to estimate fish abundance and population size. Electrofishing also allows us to check up on our fish and see how healthy they are by measuring their length and weight, and also gives us an idea of the abundance and presence of other fish species.

This is an important part of the project as this helps us identify any issues that may have resulted from our stocking strategy. If the salmon collected are too skinny, or if we see a decrease in other species, that may mean too many parr are being stocked and we will adjust our strategy.

Alternatively, if everything looks good we will move forward with the project as planned. Electrofishing usually takes place in September when stream temperatures start to decrease.

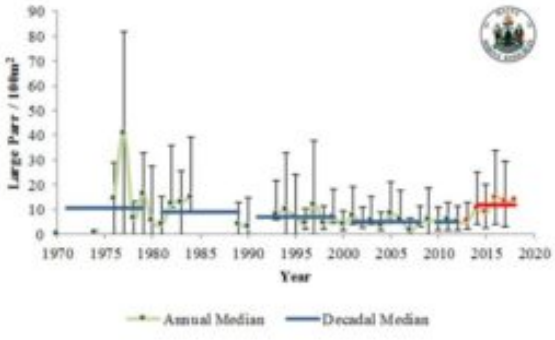

Figure 7 Median large parr density and associated 95% confidence interval, East Machias River, ME (1970-2018). Red markers indicated years that resulted from fall parr stocking and the Peter Gray Parr Project. Source: Maine DMR