

Egg Planting



Nearly every winter since 2014, the Downeast Salmon Federation (DSF) has worked with the Maine Department of Marine Resources (DMR) on a unique stocking effort that plants Atlantic Salmon eggs directly into the stream bed in an effort to help restore this amazing species. DSF assisted project biologists from the Maine DMR to plant salmon eggs in spawning shoals of the upper Pleasant River (DSF

has its original salmon hatchery at the head of tide of the Pleasant River).

Each year over 100,000 eyed eggs are planted into the ice-lined spawning shoals. DMR biologists also have egg planted in the Machias and Narraguagus Rivers.

The egg planting technique has been very successful in the Kennebec drainage in Western Maine. Paul Christman, a fisheries biologist with DMR, has been using this method for more than ten years. The results of his plantings have been well documented, showing high juvenile salmon abundances from egg planting.

The main objective of egg planting is to put eyed eggs into a natural environment for the eggs to incubate, hatch, and grow into juvenile salmon. To accomplish this, the first task is to find an area of the river that is not ice covered and contains quality spawning and rearing habitat. Once the location has been chosen, a water pump setup, specifically designed for egg planting, is used to insert funnels made of stove pipe and PVC several inches into the river bottom. Eggs are placed into these funnels and fall directly into the gravel.



As the funnels are removed, gravel lightly covers the eggs, where they will remain until mid-spring. This process mimics a [redd](#), or a nest, created by a female Atlantic Salmon in the fall. Using her tail, she will dig a pit into the gravel to lay her eggs. After laying her eggs, the female covers them with gravel, protecting the eggs through the icy winter and high water flows of early spring.

Because juvenile salmon abundance in our Downeast rivers is consistently low, the Downeast Salmon Federation is working with state and federal agencies in exploring and assessing different stocking and rearing techniques.

In addition to ongoing unfed and fed [fry](#) stocking through our Pleasant River hatchery, DSF is rearing fall parr at the Peter Gray Hatchery to stock into the East Machias River. If assessments over the next few years show higher numbers of juveniles in the stocked river sections, these new techniques could be the foundation for the recovery of the Atlantic Salmon populations in the Downeast rivers.