Redd Counting

As the Parr Project moves forward, an important piece of assessing the success of our efforts is determining the number of adults that have returned to spawn in the East Machias River. Some rivers have adult fish trapping facilities on them, usually associated with a dam or weir structure.

This makes getting accurate adult salmon counts a little easier, but at the cost of having an impediment in the river. Because the East Machias River does not have an adult trapping facility, redd counts must be conducted. A redd is basically a nest that a salmon creates on the river bottom. The female will excavate a pit with her tail creating a depression in the gravel for her to lay her eggs. Once her eggs are laid and fertilized, she covers the pit with gravel to protect them and lays more eggs in the resulting pit.

A redd may consist of several of these pits. The result is a disturbed section of stream bed about 7 feet long. This disturbed gravel stands out very well against the dark, undisturbed stream bottom, and makes it easy for surveyors to see. Each female will generally make two of these redds in a spawning season.

Because there will be at least one male per female making the redd, it is generally accepted that one redd = one fish.

Redd counts are conducted around November when fish will be close to finished with spawning. Poling a canoe is generally the best way to survey; it gives a great vantage point, moving around in deep water is much easier, and your feet stay dry and out of the cold November water, unless of course you fall in!