

Using environmental DNA to monitor the presence or absence of Atlantic Salmon, *Salmo salar*, in the Penobscot River, Maine, in relation to dam removal

Atlantic salmon, *Salmo salar*, have been populating the Penobscot River, Maine, for thousands of years. But due to many factors, their numbers are dwindling. Dams play a huge role in the fact that *S. salar* are rarely seen up the river. In order to determine their absence or presence at certain locations, environmental DNA was collected from water samples at four different site locations. Two sites had hydroelectric dams and the other sites recently had dams removed. A polymerase chain reaction was used to amplify the DNA with species specific primers. When analyzing the data, a detection of *S. salar* was observed at a site where a dam was removed. This helps researchers determine that dams are hindering migration patterns of Atlantic Salmon.

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