Welcome to the Northeast Fisheries Science Center
Woods Hole, MA and Orono, ME
Why study Atlantic salmon?

- Endangered species

- Threats?

- The Northeast Salmon Team (NEST)
  - Telemetry, marking, trapping, modeling
Activity 1: Follow that fish

Materials:
- map
- data sheet
- worksheet
- dry erase marker
- classroom pencil
- classroom ruler

Challenge:
Plot the path your fish takes as it travels downriver.

1. Mark each receiver your fish passes on the map.
2. Fill out the worksheet based on your fish’s behavior.
Example: Starting Spot

UTMN = North

UTME = East
Example: Starting Spot

UTMN = 4962

UTME = 5218
Example: Starting Spot

UTMN = 4962
Example:
Starting Spot

UTMN = 4962
Activity 1: Discussion

- These data help us understand factors that influence smolt behavior:
  1. Timing of when the salmon migrate
     a. Understanding timing helps us to know when to build on the river
Activity 1: Discussion

• These data help us understand factors that influence smolt behavior:

  2. Duration of migration
     a. If all the other species have already finished their migration then there is more predation
Activity 1: Discussion

• These data help us understand factors that influence smolt behavior:

  3. Route taken
     a. This helps with placement of structures such as underwater turbines
Activity 1: Discussion

- These data help us understand factors that influence smolt behavior:
  4. Where fish die on their migration
    a. This helps identify locations where predators are abundant
Activity 1: Discussion

- These data help us understand factors that influence smolt behavior:
  1. Timing of when the salmon migrate
  2. Duration of migration
  3. Route taken
  4. Where fish die on their migration
Activity 2: Dams, Bypasses, and Salmon

- What barriers are there to salmon migration?
Activity 2: Dams, Bypasses, and Salmon

• What barriers are there to salmon migration?

• How can dams impact salmon migration?
Activity 2: Dams, Bypasses, and Salmon, Oh My

Materials:
Water (blue blocks)
Dam pieces and turbines
River and banks platform
Fish
Building pieces to represent whatever you can imagine

Challenge:
Build a dam that includes:
(1) 3 turbines
(2) A safe way for salmon to get past the dam going both up and down the stream
(3) Be ready to explain your solution to the class
Activity 2: Solutions

Fish Lift

Howland Dam Bypass

Fishway
Innovative Solutions

Salmon Cannon

Truck Transport

https://safeshare.tv/x/4NkWN7Rcck

• Using innovation and imagination, people are testing many different solutions
Jim Hawkes is a research fishery biologist that works with Atlantic salmon in our Orono office.

He telemetry tags salmon smolts to monitor their movements. Through his research, Jim and other NOAA staff, have been able to identify smolt behaviors, speed, as well as how many die or successfully make it to the ocean.
What Can We Do?

• In ME
  • Visit the river
    • Don’t litter
    • Recycle

• In MA
  • Get to know what is living in your streams and ponds
  • Caring for fish in Buzzards Bay promotes a healthy ecosystem

Spread the word