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PILOT-SCALE RELEASE OF CULTURED, JUVENILE WINTER FLOUNDER,  
*Pseudopleuronectes americanus* INTO THE HAMPTON-SEABROOK ESTUARY,  
NEW HAMPSHIRE

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Ten thousand cultured, coded wire tagged, juvenile winter flounder were released in August 2003 into the Hampton-Seabrook Estuary, New Hampshire.

Fish sampling began the day after release from the acclimation pens, and occurred daily for the first 2 weeks, and at weekly intervals for the following 10 weeks. Three types of collecting gear were used on each sampling occasion: in shallow water (<1.5m) a 33m x 2m beach seine was used, in mid-depth areas (1.5-3m) a 1m beam trawl was used, and in the deeper areas (>3m) a 4.8m otter trawl was used. The catch from all fish sampling was identified and enumerated. Winter flounder abundance was estimated as catch-per-unit-effort (CPUE), given as number caught per m<sup>2</sup> sampled.

Prey availability was characterized by a weekly series of benthic cores taken at the release site. All prey taxa were fixed, identified, counted and weighed. In addition, the feeding ecology of cultured and wild-caught fish was compared through stomach content analyses each week.

Results from this experimental release including the mortality rate, growth rate, and movements of the released fish, diet comparison between cultured and wild fish, and preliminary insights into the carrying capacity at the release location will be discussed.