



Baitfish & Smelt Technical Work Group

Rainbow Smelt Species Author:

Kevin Dunham
Fisheries Resource Supervisor
Penobscot Region

Introduction



Rainbow Smelt:

- *Native to Maine, widely distributed*
- *Not Cultured in Maine's hatchery system*
- *Important forage base for many salmonids*
- *Recreational fishery (hook and line, dip net)*
- *Commercial fishery provides bait supply for anglers*
- *Considered "invasive" in some waters, i.e. Bald Mtn. Pond*

Baitfish:

- *16 legal species for use as bait*
- *None cultured in Maine's hatchery system*
- *Important forage base for salmonids and non-salmonids*
- *Commercial and recreational fishery*

Smelt Management History



- *Original distribution possibly inland only up to 60 miles from the coast, historically MDIFW established new populations by moving adult smelt and/or smelt eggs*
- *Majority of introductions were for salmonid forage, some for recreational opportunities*
- *Presently widely distributed throughout the state*

Smelt Current Management



MDIFW smelt management objectives, in order of importance:

- 1. Provide forage for salmonids*
 - 2. Provide a recreational fishery for smelts where it will not adversely impact salmonid forage*
 - 3. Provide opportunity for commercial smelt fisheries where it will not conflict with salmonid forage or recreational smelt fishing*
- Waters containing smelt are reviewed annually to update the list of waters open to commercial harvest (currently 44% are open to commercial harvest)*
 - Annual reports are required from Smelt Wholesale license holders.*

Baitfish Current Management



- *All waters are open to recreational baitfish harvest under a regular fishing license, unless otherwise specified.*
- *All waters are open to commercial baitfish harvest with appropriate license, unless otherwise specified.*

Some waters with gear type restrictions, some closed altogether
- *Annual reports are required from Baitfish Wholesale license holders.*

Management – Complexities



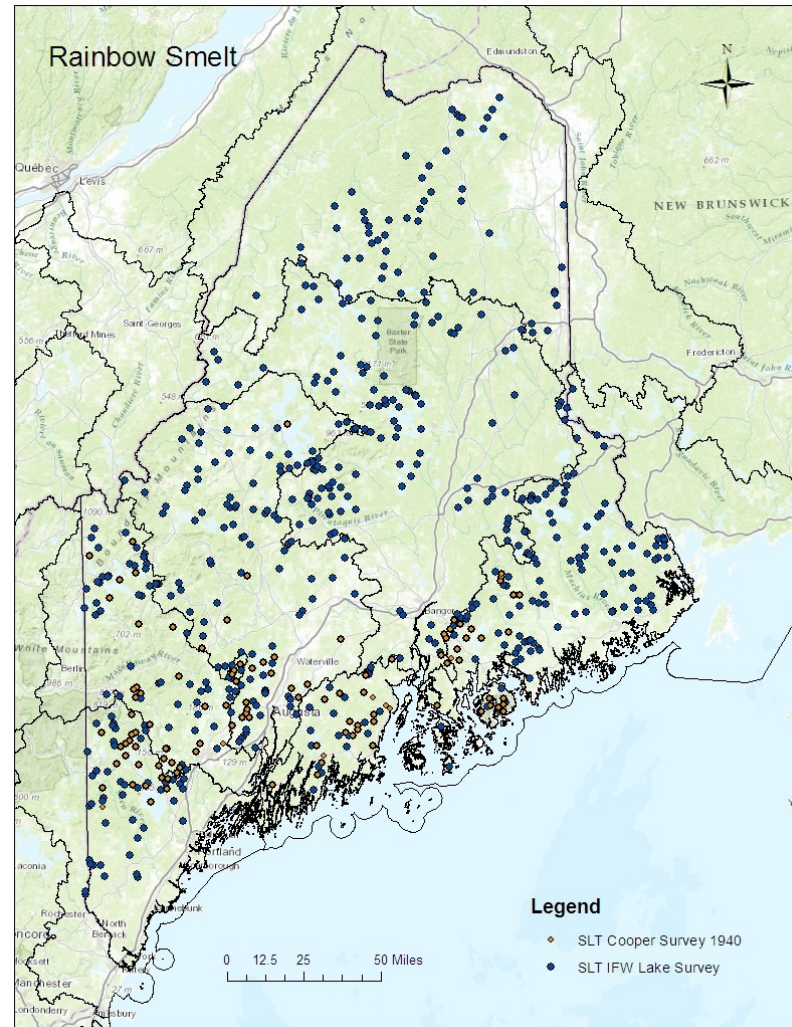
Smelt

- *Numerous user groups and different needs for smelt.*
- *Smelt are renowned for unpredictable and extreme fluctuations in abundance.*
- *A lack of control over many of the environmental factors that impact abundance.*
- *Quantitative smelt population data is difficult to obtain and track on a wide-scale basis.*

Baitfish

- *Long history of “traditional” use of live baitfish, particularly during the winter season.*
- *Water quality, habitat, and predators likely have the greatest influence on baitfish population abundance.*

Current Smelt Distribution



2001 Smelt Plan Goals and Objectives



Goal: *Maintain existing smelt habitat quantity and quality; and increase smelt abundance and availability where feasible to moderate current demands as a forage fish, as a sportfish, and as a commercial baitfish.*

Abundance Objective: *On a statewide basis, maintain smelt populations at or above current abundance levels in 558 Maine lakes, totaling 749,114 acres. Seek opportunities to increase the distribution of smelts into new waters by 2016, where it will not negatively impact other coldwater species, to mediate demand for sport fishing and commercial interests.*

2001 Baitfish Plan Goals and Objectives



Goal: Maintain a sufficient abundance and distribution of all native non-sportfish species so that the biological integrity of the aquatic systems is undisturbed, and a surplus of preferred species is available for harvest as live bait.

Abundance Objective: Maintain sufficient numbers of non-sport fish, including a complete assemblage of native species, so that predator-prey relationships are maintained and predatory sport-fish are able to reach satisfactory growth potentials.

Harvest Objective: Provide for a harvest of 5 million non-sport fish by commercial and non-commercial users for live bait purposes.

Fishing Quality Objectives: Maintain a sufficient number of waters where baitfish may be harvested so that ample numbers of healthy fish are available in various size ranges and so that baitfish harvesters are not subjected to excessive competition.



Previously identified items to consider...

- Evaluation and possible revision of current license and fee structure
- Consider avenues to distinguish between recreational and commercial bait harvest
- Review current law and rule for consistency, simplicity, and necessity
 - Bait holding
 - Use of graders
 - Baitfish sorting
- Explore opportunities to further reduce the list of legal baitfish species (particularly native baitfish, low in abundance)
- Consider including questions related to recreational baitfish harvest to angler surveys and questionnaires