**FISHES OF BUZZARDS BAY**

Scup, *Stenotomus chrysops*

Butterfish, *Peprilus triacanthus*

Bay anchovy, *Anchoa mitchilli*

Black sea bass, *Centropristis striata*

Little skate, *Leucoraja erinacea*

Weakfish, *Cynoscion regalis*

Summer flounder, *Paralichthys dentatus*

Winter flounder, *Pseudopleuronectes americanus*

Tautog, *Tautoga onitis*

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**SUMMARY**

- This study was the first to assess intraannual characteristics of the fish community of deeper Buzzards Bay waters; the study improved our understanding of fish ecology in Massachusetts waters.
- Buzzards Bay supported a relatively diverse fish assemblage, including 57 fish species and species with both boreal and temperate affinities.
- Mean weight (kg) per tow for all species combined peaked in June and was dominated by mature adult fishes.
- Mean number per tow for all species combined peaked in August, predominately comprised of juvenile fishes.
- Buzzards Bay provided a relatively diverse fish community, particularly for scup, butterfish, bay anchovy, black sea bass and weakfish (many other species collected at lower numbers).
- Adult and older juvenile fishes dominated spring, late fall and winter catches, and young-of-year fishes were largely collected in summer and fall.
- Mud and sandy mud habitat seemingly provided similar functions and values; landscape features and seasonal occurrence of algae appeared to influence catches.
- Study results facilitated the identification of environmentally sensible dredged material management approaches. The fish study, along with existing literature, provided a baseline assessment to evaluate potential impacts associated with dredged material disposal.

**FISH ILLUSTRATION CREDITS**

Juvenile fish illustrations were illustrated by Susan Kaiser and Nancy Arthur and reproduced from Able and Fahay (1998). Adult fishes illustrations are from Mundy et al. (1997).


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Adult fish length is maximum size; No. / tow = No. / 0.5 nautical mile; Wt. / tow = Kg / 0.5 nautical mile

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**RELATIONSHIPS IN A LARGE ESTUARINE EMBAYMENT: BUZZARDS BAY, MASSACHUSETTS**

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