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 important nursery habitat for a relatively diverse fish community, particularly for soup, 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 sensitive 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 species were illustrated by Susan Kaiser and Nancy Arthur and reproduced from Able and Fahay (1998).
Adult fish illustrations are from Murdy et al. (1997).

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