

# Salem Sound Coastwatch Salt Marsh Restoration Project

## The Role of Salt Marshes

Salt Marshes are one of the most biologically and ecologically productive natural ecosystems on earth. They are important because they:

- Provide a critical habitat for many species of plant, bird and marine life
- Provide breeding grounds and protection for fish and other marine animals in various stages of development
- Protect shorelines from erosion and flooding
- Improve water quality by filtering water.

Two-thirds of the Salem Sound's salt marshes were lost between 1965 and 1998. Protecting the remaining salt marshes of Salem Sound is critical for the ecological health of the Sound.

## Invasive Plants Hurt the Wetlands

*Phragmites australis*, also known as Common Reed, is an invasive plant that can spread throughout a salt marsh, crowding out other more productive plants with its dense roots and vegetation. Phragmites degrade wetlands by:

- Changing the structure of the marsh ecosystem
- Altering the hydrology by trapping sediments, which creates a drying effect
- Providing little or no shelter for wildlife.

Control of Phragmites can help restore the productivity of the wetlands ecosystem. Noticeable improvements in habitat conditions for waterfowl and other wetland-dependent migratory birds have been observed when Phragmites is controlled.



## Salt Marsh Restoration

This project seeks to identify the effectiveness of three methods to reduce Phragmites. Different methods will be used on each of three Phragmites stands, and Salem State College students and Salem Sound Coastwatch will monitor the results.

The project is sponsored by Salem Sound Coastwatch, a non-profit coastal watershed protection organization, in conjunction with Salem State College, and is working under a City of Salem Conservation Commission Order of Conditions. We thank the Gulf of Maine Council on the Marine Environment for funding this research.

