#### Be a Maine Midden Minder!

# Help preserve and document Maine's eroding shell middens

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## Maine's Heritage at Risk

Maine's rich cultural history spans thousands of years. Maine's first coastal residents were indigenous families who relied on the rich resources of the region's forests, marshes, and coastline. The shells, bones, and artifacts preserved in these middens are an archive of past lifeways and coastal environments.

These valuable features are disappearing as a result of erosion, freeze/thaw activity and looting. As sea levels rise, waves reach higher and higher, and wash away coastal bluffs and middens. Freeze/thaw cycles break apart the midden surfaces. Collectors digging into middens increase erosion and remove the record of past people and conditions.

Every year, more material erodes, and with it more of Maine's ancient cultural heritage is lost to the sea.



The Maine Midden Minders Network was founded through a collaboration of the following organizations:

**University of Maine** 

Maine Sea Grant

Senator George J. Mitchell Center
for Sustainability Solutions

Maine Historic Preservation Commission

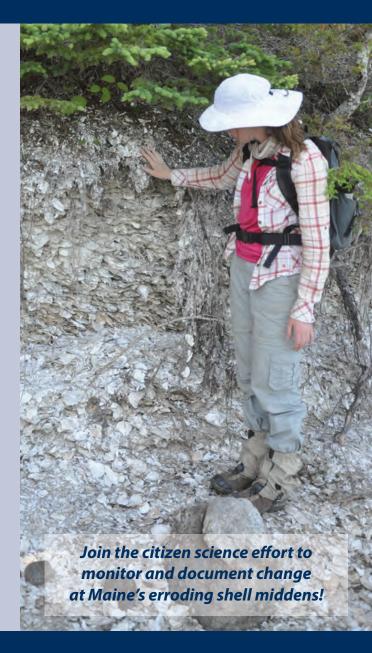




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#### What Are Shell Middens?

Shell middens are cultural accumulations of shells, bones, and artifacts located along Maine's mainland and island coasts. Most were created by Maine's first residents, the Wabanaki, before the arrival of European colonists.

Maine's appoximately 2000 shell middens are composed largely of clamshells. However, the middens in the Damariscotta area contain primarily oyster shells.

Once thought to be simply trash heaps, archaeological excavations of shell middens help researchers understand the lifeways of Maine's early indigenous people. Food remains reveal diet information and the seasons when people lived at each site. Stone tools and ceramics suggest hunting, fishing, and cooking methods. The associated bones and plant remains record environmental conditions on the western Gulf of Maine during times of different conditions from those experienced today.

### **Minding Middens**

Maine's coastal shell middens are eroding, and with them irreplacable cultural and environmental information. Rapidly rising sea level, combined with increasing numbers of freeze/thaw cycles are threatening these important archives of the past. The Maine Midden Minders is a citizen science program designed to work with conservation groups and individuals to monitor and document erosion at middens around the state.

Using simple equipment and recording information in a dedicated database, volunteers will help preserve our knowledge of the past and provide science-based information for the future. Midden Minders can work with a conservation organization or as individuals.

Contact your local group to see if they are participating, or see the Midden Minders website (umaine.edu/middenminders) for details on participation, information about equipment and our specially designed database.





#### How to Help

- \* Be a Midden Minder. Visit Maine's coastal middens once a month to record changes and document any archaeological materials that appear. Easy to follow instructions are included on our website.
- \* Conduct an Annual Survey. Use simple equipment to measure erosion and quantify change. Information is easily loaded into the database.
- \* Be a "Storm Chaser". Storms can cause a great deal of erosion. Documenting storm impacts will help researchers and resource managers understand threats to these features and plan for data rescue and conservation.

#### **Interested?**

See the Midden Minders website at: umaine.edu/middenminders or by email at: middenminders@maine.edu