



Photo by Ivan Parr

The Salt Marsh Harvest Mouse

Life on the edge

Provided by:



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The Salt Marsh Harvest Mouse: Life on the edge

This lesson includes the following:

- ❑ Lesson plan (below)
- ❑ Student [field guide page](#) (or [printable, foldable book](#))
- ❑ [Slide deck](#) for educator and/or students

Objectives

- Salt marsh harvest mice are special animals that live only in the tidal marsh habitat along the San Francisco Bay
- The mice get all their resources from the tidal marsh habitat: food, water, nesting space, and cover from predators.
- Loss of habitat due to urban development and sea level rise threaten the future of the salt marsh harvest mouse, but human activities can help protect habitat.

Introduction

San Francisco Bay, where the waters of the Pacific Ocean flow in to meet the outflowing freshwater of creeks and rivers, is the largest estuary on the west coast. On the edges of this estuary, lapped by brackish tidal waters that move up and down with the tides, is a strip of tidal salt marsh habitat. This habitat, which is in turn inundated by salty water and exposed to parch in the sun, is home to some of the most specialized plants and animals in the world. The endangered salt marsh harvest mouse is one of these specialists, obtaining everything it needs to live in the harsh salt marsh environment. As tough as this animal is to survive the salt and the sun, it needs our protection to survive the threats of habitat loss and sea level rise.

Activity

In this activity, a teacher, parent or educator will guide students through slides about salt marsh harvest mice. Students will complete activities on a printable “field guide” page or foldable book as they learn about this fascinating animal and what it might take to ensure its future survival.

Additional resources

- This [Baylands interpretive map](#) offers stops for a self-guided walk or “field trip” out to the Baylands, where students can see first-hand local salt marsh harvest mouse habitat, and learn more about human impacts to the local bay shore.
- [“Not so picky marsh mouse”](#) is an article by the San Francisco Estuary Institute about current research about these mice’s eating habits. It features [great video footage!](#)
- [Salt Marsh Harvest Mouse brochure](#) from the EPA
- [“A mouse surprise”](#) an article from Bay Nature

NGSS Alignment

Disciplinary core ideas	Science and engineering practices	Crosscutting concepts
ESS3.A: Natural Resources: Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1) ESS3.C: Human Impacts on Earth Systems: Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things. (secondary to K-ESS2-2)	Constructing explanations and designing solutions	Cause and effect