

**Small Mammal Trapping
Lower Tolay Creek and Tubbs Island Restoration Project
San Pablo Bay NWR**

Thank you for volunteering your time! Included here is information you need to know for the trapping effort. Please read through. If you have any additional questions you can contact Giselle Block at giselle_block@fws.gov.

Please also read the “Walking in the Marsh” document. This is a useful guide for safety and avoiding disturbance to wildlife/plants when in tidal marsh.

Objectives. The objectives of this effort are to

1. Sample small mammal populations within the project area and control sites to determine the relative abundance of the endangered salt marsh harvest mouse (SMHM) and other native tidal marsh small mammal species
2. Contribute to existing small mammal monitoring efforts on the Refuge
3. To avoid mortality of small mammals or disturbance to other wildlife and plants in our effort to achieve objectives 1 and 2.

The data collected this year will be used as baseline against which future, post-construction data will be compared. One of the goals of the restoration project is to improve habitat for SMHM and other native small mammal species.

What to Wear/Bring: hat, sunscreen, food, knee boots, bug juice (mosquitoes may be present). The Refuge will bring all other needed supplies.

Conditions. Expect to walk through thick marsh vegetation, jump over small channels and get muddy or wet. Ticks are present. Everyone will assist with carrying traps and other supplies.

Where to Meet: San Pablo Bay NWR Refuge office at 2100 Highway 37 (approximately 1/4 mile east of the Lakeville Hwy (116) intersection.

When to Meet:

Trapping sessions. There are two planned trapping sessions. The first is August 4-7 and the second is August 11-14.

Day 1 of trapping we will meet at **2pm** to set out all the traps (this is when we need the most people). These traps will remain in the same place for 3 consecutive nights. Traps are then opened and baited within 2 hours of sunset (6:30-8:30pm). Plan on meeting at **6:15pm** at the Refuge office for opening and baiting traps.

Day 2: check traps for captures within 2 hours of sunrise. We will meet at the Refuge office at

5:30am. Plan on meeting at 6:15pm at the Refuge office for opening and baiting traps.

Day 3: same as day 2

Day 4: check traps for captures within 2 hours of sunrise. We will meet at the Refuge office at 5:30am. Traps will be picked up this morning.

Methods to avoid injuring or causing mortality of small mammals

- ❖ Leave traps closed during the day.

When we are setting traps out on the first day it is easy to forget to shut the trap door because we are checking the door function before we lay the trap on the ground. Trap doors are only open between the 2 hours before sunset and the 2 hours after sunset. So, don't forget to shut the trap door after checking for live animals in the morning.

- ❖ Setting traps that are not working properly. Trap doors need to open and close freely. If the trap door seems to not snap shut due to a bend in the sidewall or other reason, do not use it. Traps door that do not shut quickly can entrap and kill a small mammal.
- ❖ Placing traps. Place traps in vegetation to avoid the late day sun. If you have the option, place the trap on the east side of a bush. It's generally cooler in the morning. If the ground is wet, try to place the trap up in the vegetation and off the ground.

CHECKING TRAPS (morning)

1. Each person or pair will be assigned a particular set of traps to check.
2. There is a trap at the base of each marked flag. Flags and traps are laid out in grids or a series of transects with traps at regular 10-m spacing (we will provide details in the field on the location of traps).
3. Look to see if the trap is closed or open
4. Each time you check a trap, write down the flag number

IF TRAP IS CLOSED:

5. If closed, assume you have an animal in the trap. Write down the flag number and ID the flag as a possible capture site and place the trap upright at its location.
6. Check remaining traps and provide closed trap information to the handler who will ID and measure the animals.
7. Return trap to its original location, check that baiting is present, and check that the trap door is closed.

IF TRAP IS OPEN:

8. If trap is open do not assume an animal is not present (it may be small or hidden under the treadle-common with juveniles or shrews). Carefully check the inside of the trap and

- tap the treadle/trap door to make sure an animal is not present.
9. If you find an animal. See step 4.
 10. After confirming the trap does not contain an animal, push the batting to the back of the trap, close the trap door, and place the trap in its original position.
 11. Before going on the next trap, double check that you **CLOSE THE TRAP** and have recorded the flag number.

SETTING TRAPS (afternoon)

1. Each trap should have cedar above and below the trap and a piece of polyester batting pushed to the back of the trap.
2. Set the trap by depressing the door to latch it under the treadle. Check treadle to make sure it is latching correctly (not too hard or soft-we will go over this in the field).
3. Toss in bait. This includes about ½ tbsp of seed/walnut mix and a dried grasshopper (grasshoppers are for the shrews). Use less bait on subsequent days, especially if animals were not captured in the trap you are setting. In this case, you may just be putting a sprinkle near the door instead of inside the trap.