

Rapid Protocol for Surveying Spawning Horseshoe Crabs

This protocol is used to rapidly assess the spawning densities of horseshoe crabs in place of the standard quadrat method. The purpose of the rapid assessment is to estimate spawning densities quickly to determine when peak spawning occurs or to determine if the beach should be surveyed using the standard quadrat protocol in the future.

There are 4 necessary items that must be recorded for the rapid assessment:

1. Location, date, and time of day of the survey. Time of high tide if known.
2. Length of the beach that is observed.
3. Width of area that is searched for crabs (preferably 2 meters wide)
4. Number of female and male crabs observed – It is important to identify the sex of the crabs observed so that spawning indices (number of spawning females) and spawning sex ratios can be calculated.

Protocol:

1. Record beach location (include town & state), date, and time of survey.
2. Identify the length of beach that will be surveyed. Preferably use easily identifiable start and end points so that the total beach length can be estimated.
3. Walk the beach at the water line/swash zone
4. Count all male and female crabs within 1 meter of the water line. Tally as you go, then circle the total number. Eg.:
1111 1111 1111 (12) Otherwise we don't know if 11 is two or eleven.
5. Return survey sheet to Alison Leschen (address below)

Rapid Survey Data Sheet

Date _____ Start Time of Survey _____ Day or Night _____ Time of high tide _____
(circle one)

Person conducting survey & contact phone number _____

Beach Name _____ Town & State _____

Length of beach walked _____ *(please include the unit of measurement (feet or meters))*

Number of male crabs _____

Number of female crabs _____

Comments: