

SANDY BEACH MONITORING

Potential Research Questions



Zonation and Aggregations

- Do mole crabs form aggregations? Are the aggregations comprised of males, females, recruits, or mixed?
- Are mole crabs distributed evenly throughout the swash zone? If not, are separate sexes or recruits more commonly found higher or lower in the swash zone?

Size Frequency and Sex Ratios

- Are females or males bigger? Females with eggs?
- Are there more males or females? Recruits?

Geographic Trends

- Are long-term trends in mole crab populations different from one beach to the next?
- Does sand crab density differ between highly-visited beaches and isolated beaches?

Temporal Trends

- How does mole crab abundance change from year to year?
- How does mole crab abundance change from season to season?
- How does the abundance of recruits, males, females and females with eggs change from season to season?

Using Additional Data Sources

Oceanographic Influences

- What effect(s) does the El Niño Southern Oscillation (ENSO or El Niño/La Niña) have on sand crab abundance and distribution?

Predators

- Are there correlations between sand crabs and local shorebirds?

Human Impacts

- Is there a correlation between changes in mole crab abundance and a major event like an oil spill or sewage spill?