

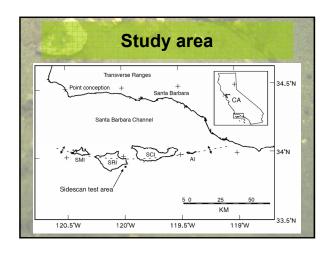
## Side-scan as a tool Not very usable alone - Calibration, GPS etc. The scan results after calibration can be extrapolated in larger areas Useful tool when grain-size analysis, photographs, transects, other acoustic systems etc. are added

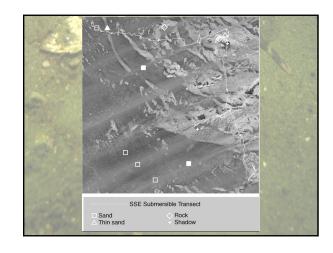
Use of acoustic
classification of sidescan
sonar data
for mapping benthic habitat
in the Northern Channel
Islands, California

Cochrane and Lafferty 2002

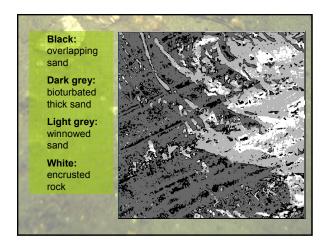
## **Purpose**

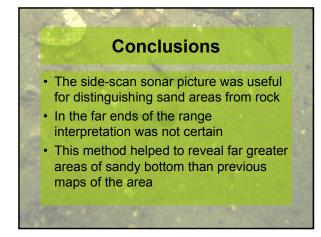
- To study usefulness of side-scan sonar in mapping the extension on suitable habitats for abalone and rockfish
- To assess size and boundaries for the protected area
- Data from this study is to be used in addition to depth, chemistry and circulation patterns





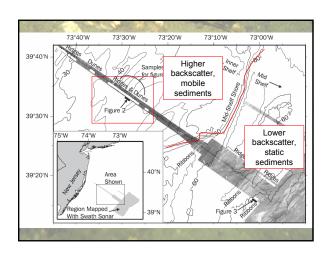


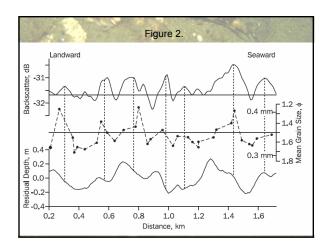


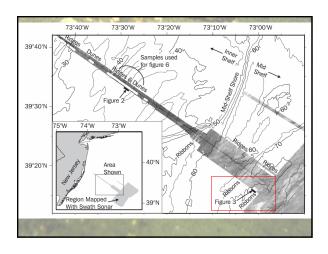


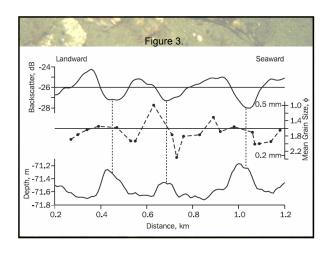


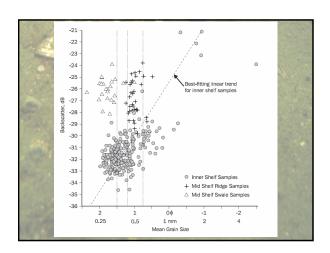
# Purpose • To study correlation between backscatter intensity and sediment grain-size – Quantitative interpretation • To evaluate the accuracy of assumptions made in earlier study by Goff et al. 1999











## Conclusions

- In well sorted sediments a good level of correlation can be obtained
- The presence of unsorted sediments and in trimodal sediments mean grain size is not representative
- Backscatter is the most sensitive to larger grain sizes

### Conclusions&Discussion

- Side-scan sonar is a useful tool with some constraints
  - Other methods needed for calibration
- Sonar surveys can cover larger areas than traditional methods
- Multiple geological and ecological applications

