

Field work summer 2002

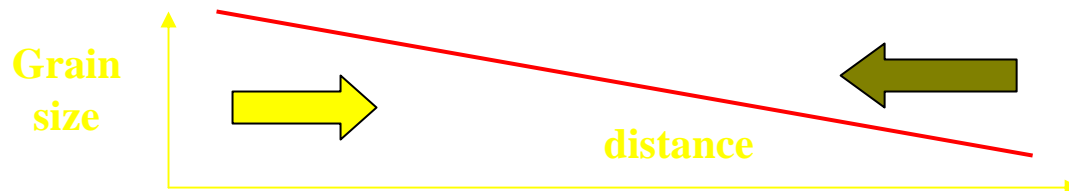
- Sand transport in the Lido inlet
 - Bottom samples
 - Grain size analysis
 - Side scan images
- Submerged beach survey
- Wave resuspension

Sand transport - Lido entrance

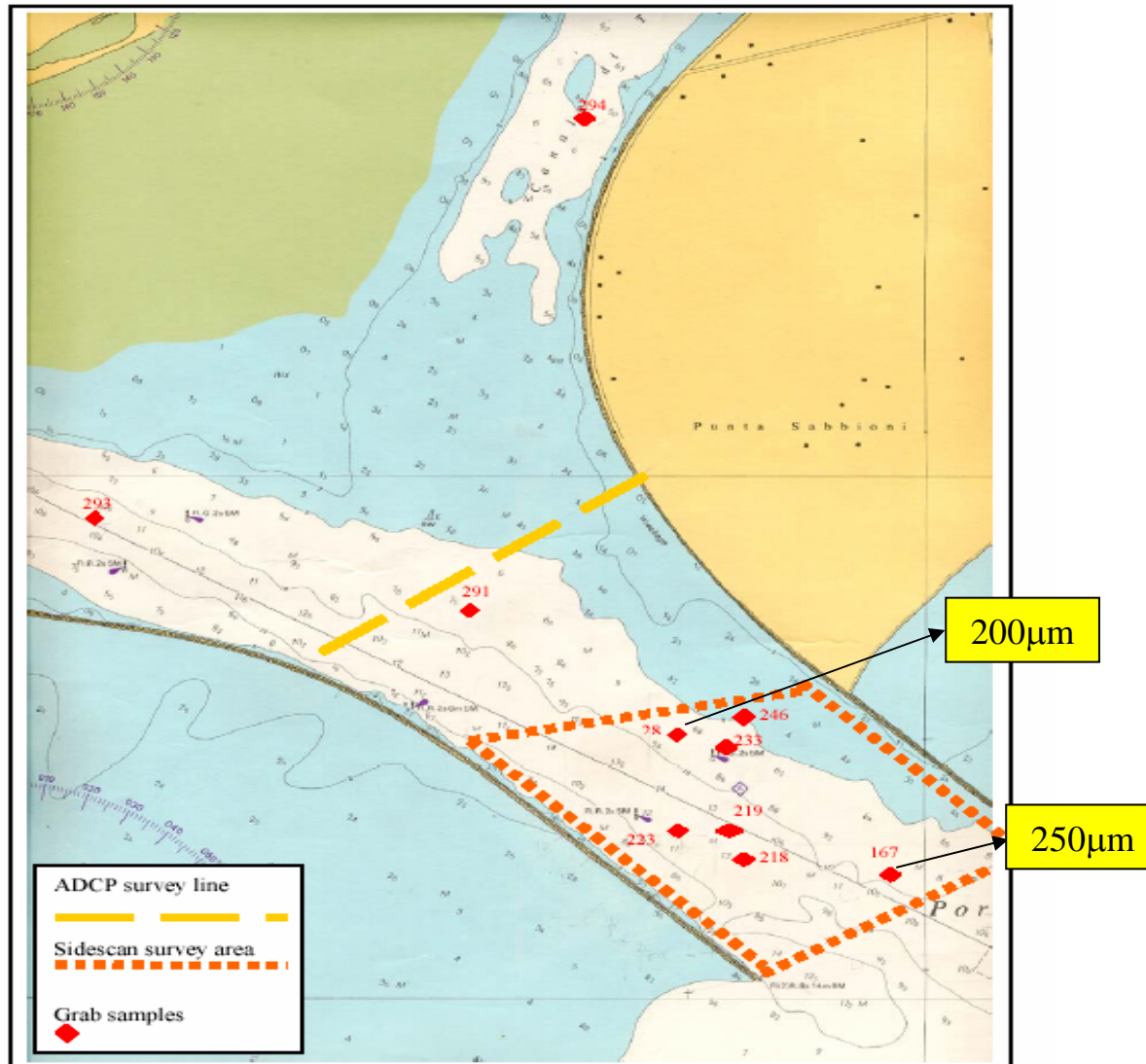
★ bottom sediment samples
composition (carbonate)
granulometry & texture
settling velocity

ADCP survey of inner Lido
velocity structure
backscatter (sand suspension)
input to SEDTRANS

Sidescan mosaic of Lido canal
bedform zonation (6 zones)
bathymetry of outer canal



Bottom samples at Lido inlet



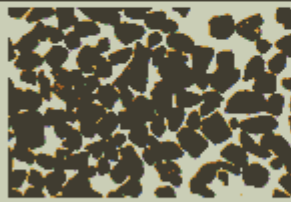
Bottom Samples

SAMPLE 167

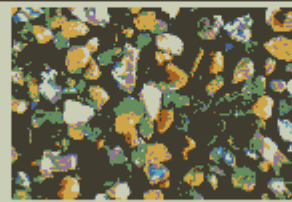
Lots of shelly material present, mainly gastropods and bivalves. The shells are of varying shapes and sizes with different shell thicknesses present. Many of the shells are still in tact, although some broken material is present.

Those shells which are broken are often quite rounded, thus have been subjected to a moderate degree of reworking. Some angular, sharp fragments are also present.

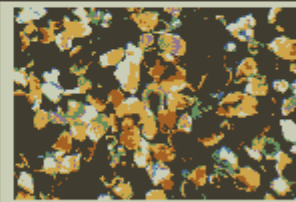
All finer material appears to be reworked biogenic (shelly) material.



Sample 167 - Polariser out,
transmittance only



Sample 167 - Polariser in,
lamps both sides,
transmittance



Sample 167 - Polariser in,
transmittance only

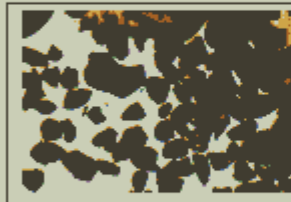
SAMPLE 218

Some organic / woody material is present in the sample.

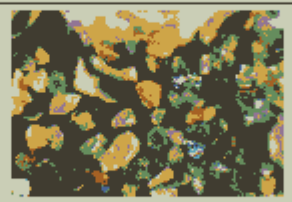
The shells contained are approximately 5 cm in diameter; larger than those in sample 167.

More fines are present in this sample, than in sample 167.

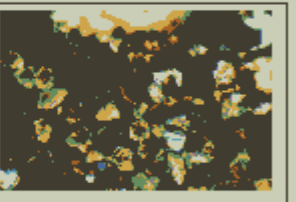
Again material is largely biogenic, consisting of broken shells.



Sample 218 - Polariser out,
transmittance only



Sample 218 - Polariser in,
lamps both sides,
transmittance



Sample 218 - Polariser in,
transmittance only

Sidescan results

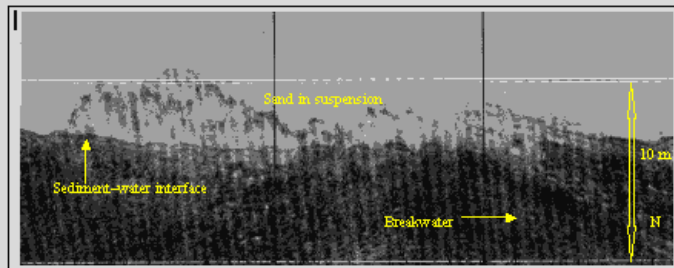


Figure 4.3: Suspended sediment caused by reflection of flow by the breakwater

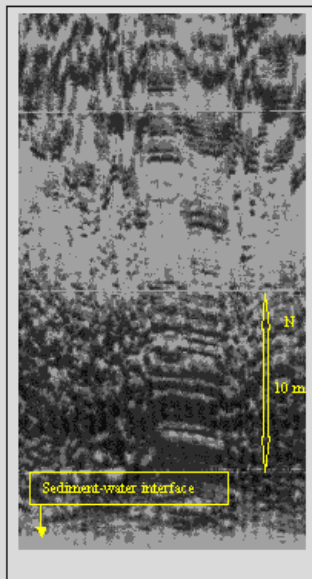


Figure 4.4 Breakwater footings outcrop on the seabed.

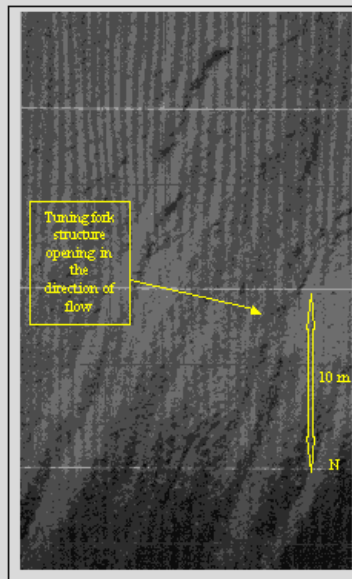


Figure 4.5 Sand ribbons on the eastern side of the channel.

Sand ribbons

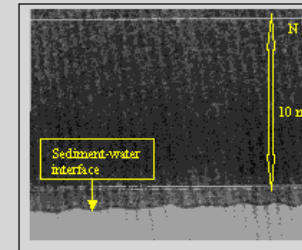


Figure 4.6 Featureless bed.

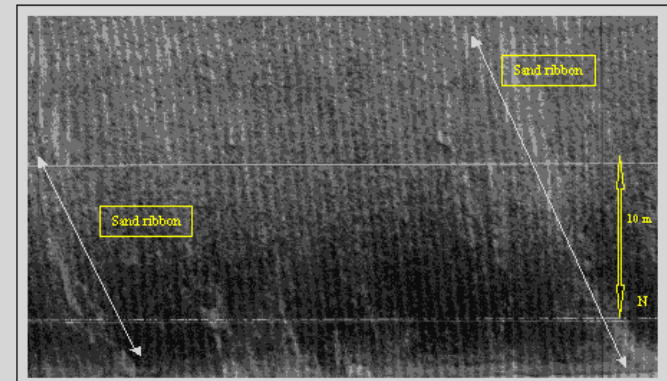


Figure 4.7 Sand ribbons seen in the deep channel.

2D megaripples

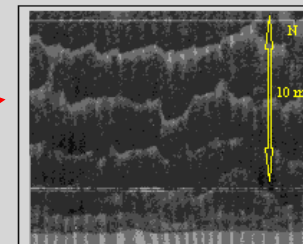


Figure 4.8 2-D megaripples seen in the central deep channel.

More results

2D megaripples

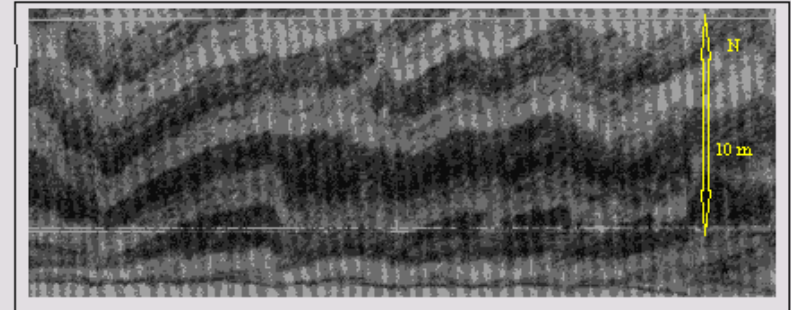


Figure 4.9 Moving upstream 2-D megaripples become more symmetrical with double

3D megaripples

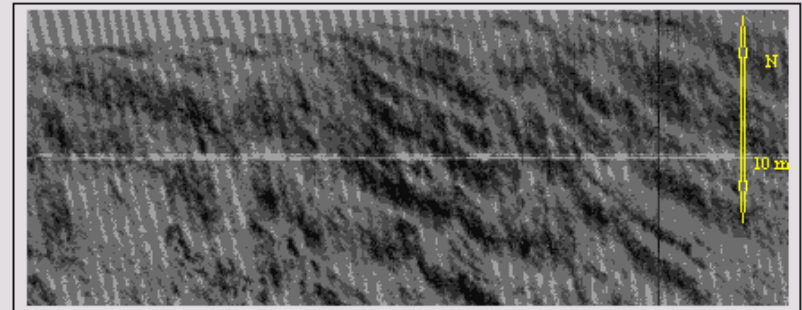


Figure 4.10 3-D megaripples on the eastern side of the channel

The features found
in the Lido inlet
indicate a flood
dominated transport

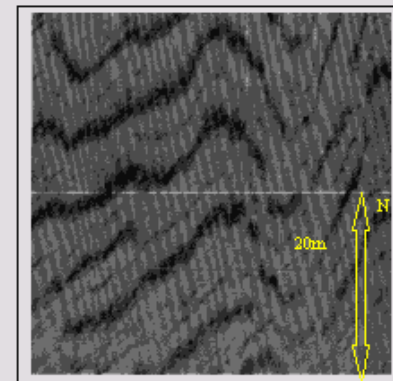


Figure 4.11 Elongate structures seen in
the middle of the ripple field, 750 - 800
m into the lagoon.

Submerged Beach

