Reef survey

Shaun Lee
25 Jun 1:30pm – 3:30pm
Low tide
Depth : 0-2m
Visibility 5-6m

Te Haruhi Bay East, Shakespear Regional Park, Auckland

PATH

The coastline was explored at low tide without breathing apparatus. The reef consisted of patches of kelp (mostly *Ecklonia radiata*) and coralline turf surrounded by sand flats. Eleven crevices were explore with no crayfish (*Jasus edwardsii*) observed. Nine red-rock crabs (*Guinusia chabrus*) were found.

Fish observed:

Name	Species	No.	Comments
Goatfish	*Upeneichthys lineatus*	18	All <15cm
Spotty	*Notolabrus celidotus*	23	All <20cm
Parore	*Girella tricuspidata*	7	All <25cm
Triplefins	*Forsterygion*	6	Multiple species
Silver drummer	*Kyphosus sydneyanus*	3	All <20cm
Yellow-eyed mullet	*Aldrichetta forsteri*	3	All <20cm
New Zealand eagle ray	*Myliobatis tenuicaudatus*	1	Adult

No Snapper (*Chrysophrys auratus*), Leather Jacket (*Parika scaber*) or Red moki (*Cheilodactylus spectabilis*) were seen.

A few small (<6cm) Green-lipped mussels (*Perna canaliculus*) were found above the low tide line, none were seen in the subtidal zone except for a very large old shell. A few small blue mussels (*Mytilus galloprovincialis*) were also seen above low tide. The oyster species actively being harvested on the rocks were not able to be identified.

Thousands of introduced Parchment tubeworm (*Chaetopterus*) tubes were piled up with seagrass (*Zostera muelleri*) on the high tide line of the Te Haruhi Bay. However they were not dominant on the reef where Mediterranean fanworm (*Sabella spallanzanii*) were the most visible invasive species. The fanworm were found in the rock pools down to the deepest areas explored but did not form large clumps.

Thirteen lead fishing sinkers were counted. There was nylon in the kelp. One fishing rod and one makeshift Ikejime tool were found on the seafloor.

Photos:

Heart urchin (*Echinocardium cordatum*) on sand flats

Lead fishing line sinker

Mediterranean fanworm (*Sabella spallanzanii)*

A developing Kina barren

Lemon doris (*Dendrodoris citrina*)