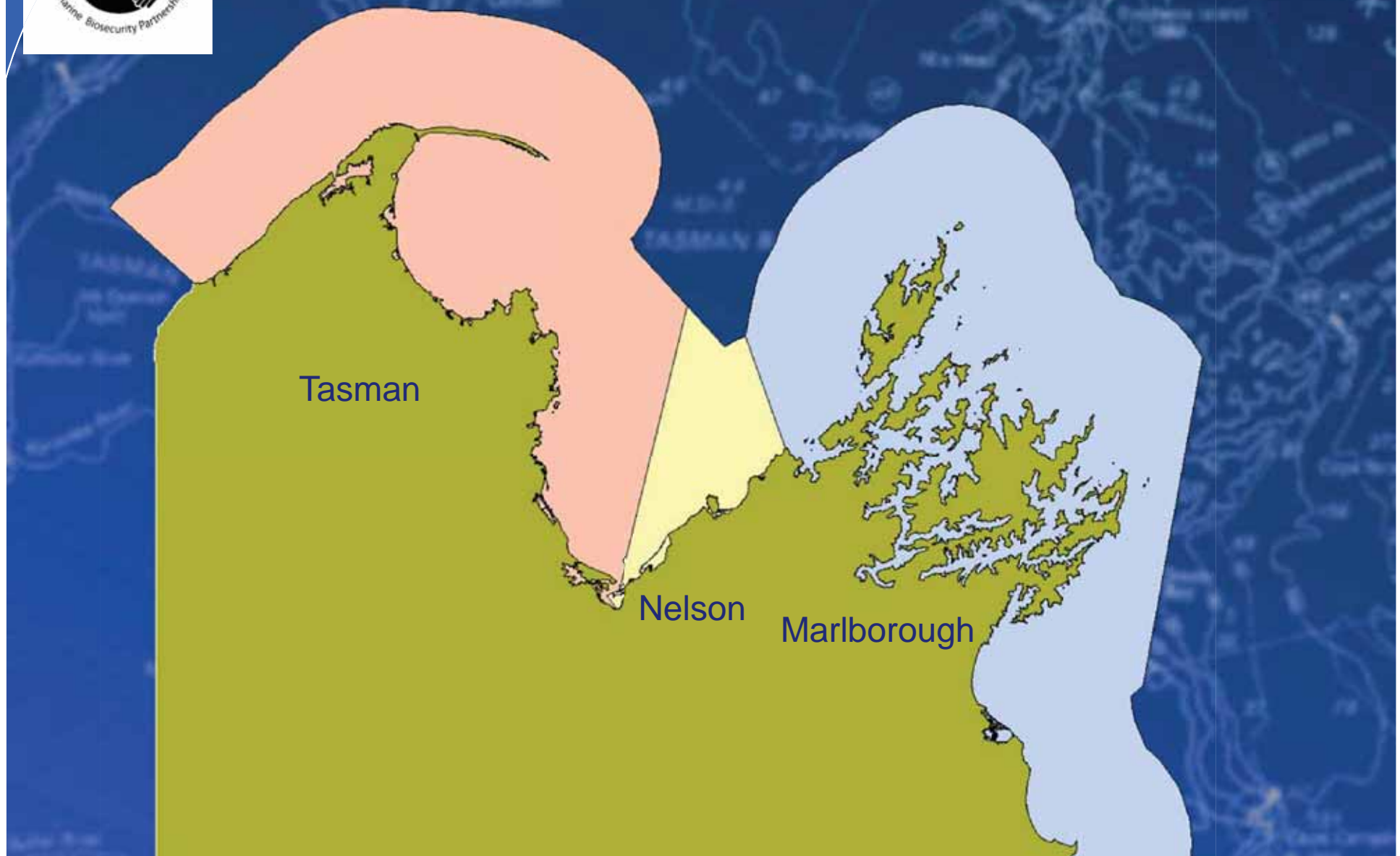


Biosecurity Top of the South





Top of the South area





Seaweek

- *The Cawthron Institute- Jo Thompson*
- *Niwa- Megan*
- *Port Nelson- Thomas Marchant*
- *The Truck- Matt Shipman*
- *NMIT- Charmaine Gallagher*
- *The NZ Sea Cadets- Milo Coldren*
- *University of Otago Marine Studies- Richard DeHamel*
- *Sealord- Alison Sykora*
- *Nelson City Council- Jo Martin*
- *Maitahi Outrigger Canoe Club- Sally Grimmiett*





Seaweek

Hampden Street School

56 pupils

Victory Primary School

52 pupils

Nelson Intermediate School

54 pupils

Clifton Terrace School

53 pupils

Auckland Point School

19 pupils

Broadgreen Intermediate School

58 pupils

Nelson Central School

65 pupils

Kura Kaupapa

9 pupils

Total

366 pupils

Total including teachers and supporters

406



THE





Survey 2012

Overall, all communities were of the opinion that marine biosecurity was important and a worthwhile goal. Everyone, however, wants someone else to resource the work required. It was clear that compelling stories of the consequences of incursion are required to move the softly supportive attitudes into active contributions to risk reduction.

**Collingwood
Waitapu
Tarakohe
Wainui
Marahau
Kaiteriteri
Riwaka
Motueka
Mapua
Monaco
Nelson
The Glen
Okiwi Bay
French Pass
Elaine Bay
Havelock
Shakespeare Bay
Picton
Waikawa
Robin Hood Bay
Ocean Bay
Oyster Bay
Pipi Bay
Port Gore
Marfell's Beach**



Monitoring 2013



NM (477) NP (26) NS (17) WS (50) NM2010 (49) WM2010 (40)

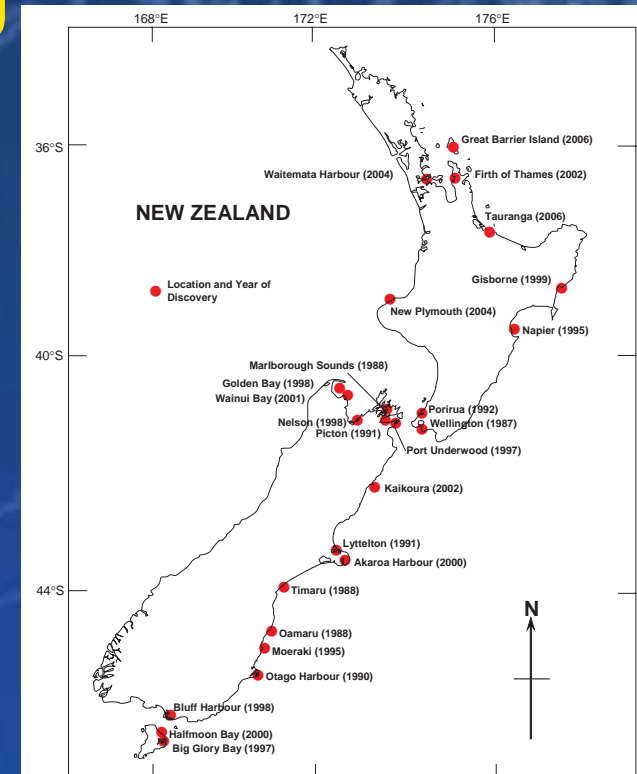
Figure 3. a. Surface mean (\pm SE) LOF scores; b. proportion of LOF scores 1-5, among locations and surveys. Location codes as follows: N=Nelson, W=Waikawa, M=marina, P=pile moorings, S=swing moorings. Survey year was 2013 except where indicated. Brackets after location codes indicate number of vessels.



Japanese kelp / Asian kelp

Undaria pinnatifida

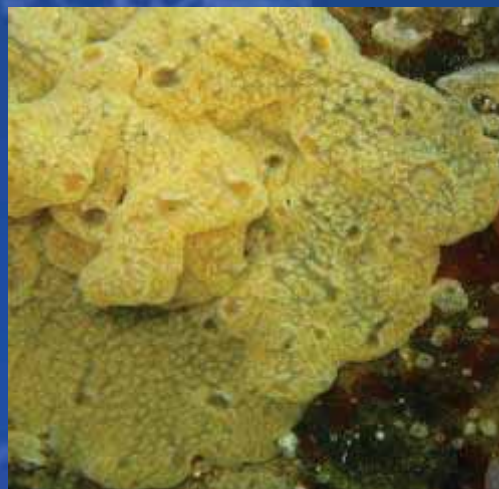
- Well spread throughout region
- Fast coloniser
- National focus on stopping further spread





Whangamata sea squirt *Didemnum vexillum*

- Whangamata 2001
- Tauranga
- Marlborough Sounds, Port Nelson, Port Taranaki





Clubbed tunicate *Styella clava*

- Hauraki Gulf, Lyttleton Harbour, Tutukaka Marina
- Pauatahanui and Nelson Haven





Australian droplet seasquirt *Eudistoma elongatum*

- Found on aquaculture farms, wharf piles and sea floor
- Usually submerged but often visible at low tide
- East coast of Northland to East Cape
- 7 February report near Pepin Island proved negative







Pyura

Pyura praeputialis

- Native to Australia
- Found Northland





Asian paddle crab

- Waitemata Harbour
- Very aggressive predator
- Attempted trapping





Asian date mussel

- Auckland / Whangarei
- Small nesting mussel
- Forms byssal cocoon, groups into dense mats





Not yet in New Zealand

- Chinese mitten crab
- European shore crab
- Northern Pacific seastar
- Asian clam
- Aquarium seaweed *Caulerpa taxifolia*
- Abalone virus (*ganglioneuritis*)



Vectors

- Ballast water
- Hull fouling
- Gear transfers
- Stock/catch transfers
- Natural range expansion

