

Mediterranean fanworm

Sabellidae - Sabella spallanzanii



What does it look like?

Mediterranean fanworm is a large, tube-dwelling worm. It is the largest fanworm in New Zealand with its body measuring up to 20mm wide and 800mm long. It has a prominent crown of feeding tentacles that extend out of the tube and can be 150mm wide. The crown is often banded orange, purple or white. The tubes are leathery, flexible and muddy-looking, they are generally found on hard sub-tidal structures, but can also be buried up to 10cm deep in soft substrates.

Mediterranean fanworm can live in most artificial and natural habitats in the marine environment but it will not tolerate freshwater. It prefers sheltered, nutrient-enriched waters and is generally found in shallow subtidal areas in depths from 1 to 30m. It attaches to a range of solid surfaces including artificial materials as well as rocks, concrete, wood, steel, and benthic organisms (ascidians, mussels, oysters). It is also a common fouling species on moored vessels including car ferries, fishing boats and pleasure craft. It can also be found on soft substrates, generally attached to a small buried fragment of shell or rock.

Why is it a problem?

Mediterranean fanworm can form dense beds that are likely to out-compete other species and interfere with biological processes. Specifically, it has the potential to compete with native filter-feeding organisms for food and space, and in high densities is likely to impact commercially important species such as mussels, oysters and scallops. Mediterranean fanworm will readily settle on mussel grow-out lines and may reduce mussel growth by altering water flow around the lines and competing with mussels for suspended food (CSIRO 2001).

The ability of the species to attach to a wide range of surfaces in varying environmental conditions, its fast rate of growth, and its prolific breeding habits, make it particularly competitive. It has no known predators in New Zealand, and has particularly high concentrations of heavy metals in the branchial crown which has been suggested to be an anti-predatory strategy (Fattorini et al. 2004, in NIMPIS 2002).

Male Mediterranean fanworm release sperm into the water to be captured by the females. Fertilisation takes place inside the worm's tube, where the egg is released. Mature female worms can produce more than 50,000 eggs during each spawning event. Spawning occurs over a prolonged autumn-winter period and a female may release multiple batches of eggs. The reproductive cycles are influenced by local environmental conditions, particularly water temperature and light exposure. Larvae may drift in the water column for up to 14 days. If worms are damaged they are able to regenerate parts while the worm continues to function.

Control methods

You must notify the Environment Southland or the Ministry for Primary Industries if you suspect the presence of this organism

You can help prevent the spread of marine pests by:

- Regularly cleaning your boat's hull – ideally keep fouling growth to no more than a light slime layer.
- Applying a thorough coating of antifouling paint and keep it in good condition.
- Ensure your hull is clean and free of fouling before you travel to a new area.
- Clean and dry any marine equipment (e.g. ropes, lines and pots) before using in a new area.
- Inspect areas on your boat that retain water for signs of marine life.
- Check for aquatic weeds tangled around anchors, trailers and other equipment.

Notify Council

If you have seen or suspect the presence of Mediterranean fanworm you must report the sighting to Environment Southland immediately.

Management programme

- Exclusion

Summary of rules

- If you detect or suspect the presence of Mediterranean fanworm within the Southland region, you must immediately report its presence and location to Environment Southland.

For full rules please see the [Southland Regional Pest Management Plan](#) (Rule 2).

- You can not possess, keep, hold, enclose or otherwise harbour Mediterranean fanworm within the Southland Region.

For full rules please see the [Southland Regional Pest Management Plan](#) (Rule 3).

[Request info](#)

<https://eservices.es.govt.nz/online-services/new/BiosecurityRFS/step/1?Subject=MarinePest&Species=111>

[Report this Pest/Weed](#)

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