# Northland marine pest identification guide

# **Reporting and sampling protocol**

If the presence of a marine pest is suspected;

- Take note of the location and tide.
- Take a photograph of the sample and note the location.
- If possible collect the sample and freeze it.
- Report the finding to Northland Regional Council immediately.

# P 0800 002 004 E marinebiosecurity@nrc.govt.nz

Under the Biosecurity Act 1993, every person has a general duty to inform of the presence of any notifiable organism.

Every person also has a duty to report what they think <u>could be</u> a notifiable organism.

Legal penalties apply should you release, cause to be released, or otherwise spread a pest or unwanted organism.

# www.nrc.govt.nz



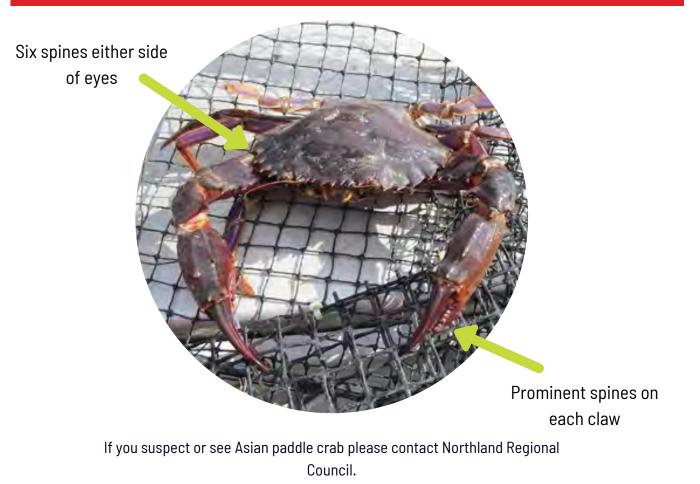
Pest - kīrearea

Distinguishing features:

- Relatively large swimming crab with paddle-like hind legs
- Carapace (shell) of adults can reach
  12 cm across
- Adults have six distinct spines / spikes on each side of the carapace below eyes
- Adults have five prominent spines on the upper side of each claw
- Crabs range in colour from palegreen or olive-green to a deep chestnut-brown with purplish markings on the shell

# **Asian paddle crab** Charybdis japonica

Take care if handling an Asian paddle crab, they can be aggressive and their claws can inflict intense pain.



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Photo credit: S. Wilkens (NIWA)

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- Is cream or white in colour but can have orange flecks
- Forms large colonies
- Each colony is made up of individuals in structures
- Colonies are generally 5–30cm long
- Attached to hard surface with a short stalk but can also be found washed up on beach
- Firm and gelatinous to the touch
- Colonies shrink over winter

# Australian droplet tunicate

Eudistoma elongatum



If you suspect or see Australian droplet tunicate please contact Northland Regional Council.

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Photo credit: Samantha Happy (Auckland Council)



- Forms colonies of transparent tubes about 5 cm long
- Tubes have white, yellow or pink bands around siphons
- Gelatinous to the touch

# Clavelina sea squirt

Clavelina sp.



If you suspect or see Clavelina please contact Northland Regional Council.

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Photo credit: Kaeden Leonard (Northland Regional Council)

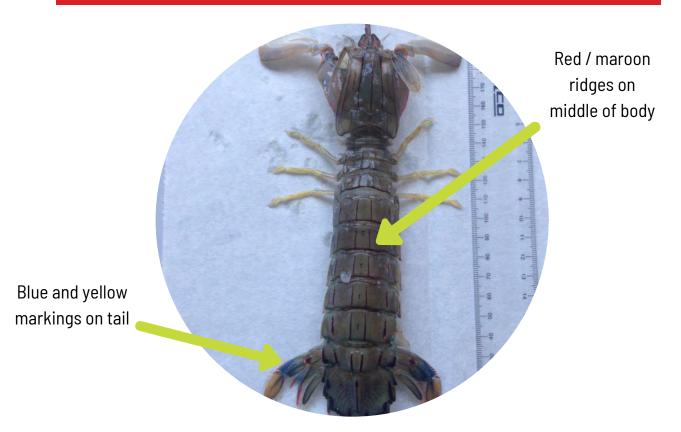


- Can grow up to 19cm long
- Has red-maroon lines running down the middle of its body
- Outer surface of tail is blue and yellow (grey and yellow suggest it is the native species)

# Japanese mantis shrimp

Oratosquilla oratoria

Take care if handling a mantis shrimp, as they can strike with their claws causing intense pain



If you suspect or see Japanese mantis shrimp please contact Northland Regional Council.

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Photo credit: John Booth (Marine Ecologist)



- The fan is often orange yellow with bands of purple, white, yellow and brown
- Fan spirals out from tube in a single crown
- Tubes are leathery and flexible
- Tubes are often <u>10-120 cm in length</u>
- Attaches to a range of solid surfaces
- Can attach to shellfish

# Mediterranean fanworm

Sabella spallanzanii



If you suspect or see Mediterranean fanworm please contact Northland Regional Council.

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Photo credit: Samantha Happy (Auckland Council)



- Has a sack-like body with a brown, or reddish-brown, leathery skin
- Adults grow up to 15cm or more in height and around 3–5cm in diameter
- Flat surface surrounded by a ridge and two siphons projecting out off-centre
- Two siphons have a cross pattern
- Can incorporate shells, rubble, sand into dense mats

# **Pyura sea squirt** Pyura praepetualis, P. doppelgangera



If you suspect or see Pyura sea squirt contact Northland Regional Council.

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Photo credit: Northland Regional Council



- Golden brown to dark brown in colour and slightly slimy to touch
- Plants more than 5cm long have a distinct mid-rib
- Mature plants can reach up to 3m long
- Eroded tops on adult plants
- Mature plants have a frilled reproductive structure at the base of the plant
- Juvenile plants appear as a single leaf

# Undaria seaweed or Asian / Japanese Kelp

# Undaria pinnatifida



If you suspect or see Undaria seaweed please contact Northland Regional Council.

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Photo credit: L. Bennett-Jones (University of Otago)



- Has a long club-shaped body on a short, tough, stalk
- Feels leathery and knobbly, ranges in colour from brownish-white to reddish-brown
- Two siphons on top with warts / uneven surface all around
- Often has other species growing on it

# Styela sea squirt

Styela clava



If you suspect or see Styela sea squirt please contact Northland Regional Council.

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Photo credit: Northland Regional Council

# More information

The species featured in this guide are unwanted marine pests. To prevent their spread, under Northland rules your hull should have no more than a light fouling.\* You must clean your vessel or you could be responsible for infecting areas of Northland's marine environment. Knowingly transporting these pests is an offence under The Biosecurity Act 1993 and may result in a fine or prosecution. For more information please get in touch with one of our Marine Biosecurity Officers.

# Email: marinebiosecurity@nrc.govt.nz Ph: 0800 002 004

\* 'Light fouling' means no more than small patches (up to 100mm in diameter) of visible fouling, totaling less than 5% of the hull and niche areas.

For more information on Northland's rules and designated places please visit: https://www.nrc.govt.nz/marinepestrules

