

Invasive marine pests continue to threaten Kangaroo Island's marine environment. Natural Resources Kangaroo Island (NRKI) have been working to prevent marine pests from gaining the advantage and would like to remind us all of the shared responsibility we have to protect marine environments.

Marine pests not only threaten Kangaroo Island's unique marine biodiversity, they threaten the fishing, aquaculture and tourism industries, which are a lifeline for island residents. We all have a strong attraction to the coast and marine waters of South Australia and for many, Kangaroo Island (KI) is a place like no other. This connection translates to a sense of responsibility and stewardship to protect what is important to them.

Surveys have shown that vessel owners who travel to KI are more aware now of the risks that marine pests pose to the marine environment and understand what they can do to prevent their spread into new areas. It's clear that boat owners want to do the right thing, with most visiting yacht and motor cruiser owners controlling the level of hull biofouling, which can prevent the translocation of invasive marine pests into island waters.

The biggest culprits

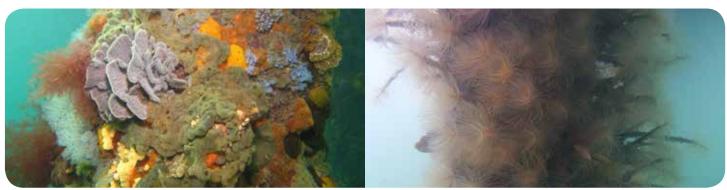
Out of the seven marine pest species that have been detected in the coastal waters of KI, two species in particular pose a significant biosecurity risk to the island's marine environment. The European fan worm (*Sabella spallanzanii*) and European sea squirt (*Ciona intestinalis*) might sound harmless enough, but anyone who has visited marinas around Adelaide and at Wirrina can see the impacts these species have on coastal ecosystems.

Once established, they spread rapidly and can out-compete native marine organisms by attaching to both natural and artificial surfaces such as vessel hulls. They have the potential to then be easily moved along with the vessel to new pest-free waters, altering native marine ecosystems and competing with native organisms for food and space.

Surveillance stops stowaways

NRKI have been focusing on newly arrived vessels from mainland marinas, aiming to stop marine pests before they have a chance to establish. Surveillance activities include monitoring key entry points at American River, Christmas Cove, Kingscote and the north coast coves and intercepting incoming vessels carrying marine pests.

Below left: Kingscote jetty covered with diverse native marine life. Below right: Wirrina jetty pylon smothered by imported European fan worms.





Natural Resources Kangaroo Island



What to look out for:

European fan worm



The distinctive spiralled feeding tentacles and protective tube of a European fan worm.



Large infestation of European fan worms on the keel plate of a yacht recently berthed at Christmas Cove, Kangaroo Island.

European sea squirt



European sea squirts have a soft, translucent body that forms an elongated vase shape with a siphon at the top.



Infestations of European sea squirts can form dense colonies as seen on the hull of this vessel.

For more information

Natural Resources Kangaroo Island A 37 Dauncey Street Kingscote SA 5223 P 08 8553 4444 E kinrc@sa.gov.au W www.naturalresources.sa.gov.au/kangarooisland

How surveillance has helped

A thousand European fan worms found at Christmas Cove

An infestation of more than 1,000 European fan worms were found on a yacht that had travelled from Wirrina and was berthed at Christmas Cove. Due to the high numbers of fan worms present and the risk in removing so many individuals, the vessel owner decided that the best course of action was to return to the mainland immediately to have the hull cleaned.



Juvenile European fan worms and sea squirts found on a yacht at Christmas Cove

An infestation of juvenile European fan worms and European sea squirts were detected on a yacht at Christmas Cove that had travelled from an Adelaide metropolitan marina. Working with the vessel owner, about 50 pests were removed by NRKI divers using a venturi pump.



European fan worms found at Kingscote Jetty

Low numbers of fan worms continue to be detected at the Kingscote Jetty, tidal pool and slipway, which suggests they may be part of a small self-sustaining population. A total of 308 European fan worms have been removed from Kingscote since their initial discovery in 2008.



European sea squirts at Bay of Shoals

An infestation of more than 1,000 European sea squirts were found on a yacht moored at Bay of Shoals, which had travelled from an Adelaide metropolitan marina. This infestation was treated using a tarping method that is wrapped around the entire vessel's hull while still in the water and starves marine pests of light and oxygen. The tarp needed to remain in place for several weeks to ensure eradication was successful.

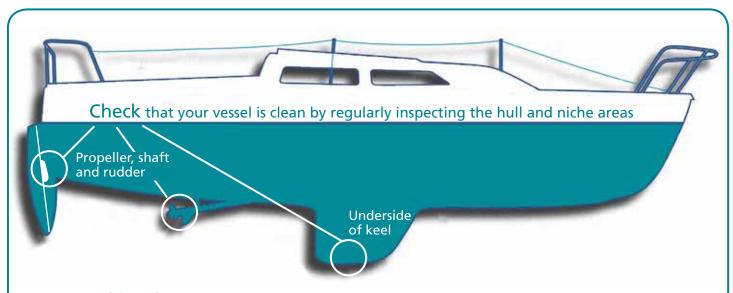


There haven't been any recent detections of marine pests at American River wharf infrastructure, moorings or vessels, with the last marine pest being detected back in 2014. This suggests that vessel owners are taking the right precautions to control biofouling before visiting this location.

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Please regularly inspect your vessel

As a friendly reminder, NRKI would like to urge all vessel owners who travel between mainland marinas and KI to regularly inspect their vessel's hull for marine pests, especially those vessels that spend extended periods of time berthed in Gulf St Vincent marinas. These simple actions not only help keep KI free of marine pests, they also vastly improve in-water performance and reduce fuel and maintenance costs.



Levels of biofouling on your vessel should be kept to a minimum. All seawater should be treated or pumped out before travel.

Environmentally-friendly methods should be used to keep the hull clean. Keep it out of the water, tarp it or clean when dry docked. Don't clean the hull in the water, without first checking with the relevant authorities.

Antifouling paint should be renewed regularly in accordance with the manufacturer's directions and should be suitable for your vessel's intended activity.

Never travel without first taking these steps, and keeping records of them and your voyage history in case of queries.

What to do if you spot a marine pest

Despite even the best biosecurity practices, invasive marine pests can sometimes arrive undetected. So if you believe your vessel is harbouring marine pests on arrival in KI waters or you have sighted something that looks suspiciously like one, **please do not remove them**, instead **contact NRKI on 8553 4444** or **FISHWATCH on 1800 065 522** immediately.

Thank you and safe travels.