



# TOP TEN BIOSECURITY RISKS



#### Rats & mice

These omnivores eat birds, seeds, snails, lizards, fruit, weta, eggs, chicks, larvae and flowers and compete with native wildlife for food sources.

# **Argentine ants**

Aggressive ants that can kill native insects, and birds. Known to swarm and bite. Take over large areas and are costly to eradicate.

# **Plague skinks**

Breed prolifically and displace native skinks. Easily transported in potted plants, compost and even known to hide in backpacks.

### Weeds and their seeds

Weeds can hide in dirt, camping gear, shoes and wheels and quickly dominate and smother existing plants.

#### Dirt and soil

Can contain plant diseases including Kauri Dieback. Most islands don't have Kauri Dieback disease.

# **Dogs and other pets**

Disturb and harm wildlife. Even leashed dogs can stress birds and affect their nesting, so dogs are banned from pest free islands.

# **Mediterranean fanworm**

With an ability to pack in 1,000 individuals per square meter, Mediterranean fanworm makes it difficult for other species in the vicinity to survive. Hitchhikes on boats.

# Caulerpa

A pest seaweed that has been found in Aotea Great Barrier Island waters. Spreads rapidly, forming vast, dense beds or meadows. Harmful to fish nurseries.

# **Asian Paddlecrab**

Aggressive competitors with a vicious bite. Strong swimmers that travel attached to fouling on a boat's hull, as larvae in ballast water where they can survive for up to a month.

# Other marine pests

Marine pests can include types of seaweed, sea squirts and even shrimp but they have one thing in common: they thrive in local waters and they could change forever the places we fish, dive and rock-hop. 144 non-native species have been recorded in the Hauraki Gulf alone. Thankfully only a few are harmful.



# YOUR RESPONSIBILITIES AS A BOAT OWNER

# If you have a moored boat

Keeping a pest free boat means a clean hull to stop marine pests from hitching a ride, and a cabin free of pests like mice and ants which can spread from one place to another when you are on the move.

In Auckland, the level of fouling (LOF) on your hull and in niches of any craft must not exceed 'light fouling' - this means no more than a slime layer and scattered barnacles on the hull. This applies to any boat in the Auckland area - moving or not. It includes any niches such as inlets, outlets, rudders or propellers. The species of fouling doesn't matter to this measurement: total coverage must be no more than 5%. However, if pest species are present then you must not move the craft to a new location as this will involve communicating (moving) the pest too.

Pests like ants, rats and mice can make their way into your cabin too, either hitching a ride in your gear from home, or climbing aboard at the marina or jetty while you are away. Thoroughly check your cabin regularly, and set traps if necessary.

Hull checks can happen any time, anywhere. You can expect the rules to be enforced, particularly for boats that are moving to areas such as the outer Gulf islands, west coast and other areas that are currently relatively free from marine pests.

Breaking the rules could mean bad news for the environment – and you could be fined up to \$100,000 (or \$200,000 for corporations) for breaching them.

For moored boats, proactive hull grooming and a well maintained antifoul coating is the best protection against marine pests.

# Info for trailer boats, jet skis, canoes and kayaks

- After use, wash your ocean going vessel and equipment with freshwater and allow to air dry thoroughly before use in a new location.
- Before you head out again, check your boat is clean. If not, clean it, and ensure all compartments are dry.
- Look for signs of pests gnawed wiring, droppings, small skinks and their eggs, ants, dirt, weeds and seeds
- Regularly treat any internal seawater systems – flush with freshwater or an approved treatment.
- Dispose of sewage and bilge water at an approved pump out facility.

# Handling fishing gear and other equipment

- Soaking gear in fresh water is an effective way to kill marine pests
- Remove any water, debris or by-catch material as you clean, rather than throwing over the side when you get to a new location.
- Check all gear e.g., food, open bags, camping equipment and boxes
- Clean dirty footwear and equipment before visiting the Hauraki Gulf islands
- Close your bags and use sealed containers
- Store rubbish in bins with lids



# Cleaning your hull only helps protect our marine environment if the pest species you scrub off don't end up back in the sea! There are different rules for cleaning, depending on what sort of growth is on your hull.

# Clean on land or in a marina if possible - but check with your marina first.

While tidal grids are convenient for checking your keel, rudder or replacing anodes they aren't suitable for hull cleaning and antifouling. This is because antifouling doesn't have time to cure between tidal cycles, and also because scraping releases contaminants, including heavy metals and pests, into the water. It's recommended an approved haulout facility is used instead.

Only clean in-water if you have no more than a slime layer - with no barnacles. Use a soft cloth to prevent damage to the paint.

Before you clean, check whether pest species are present, and check the rules for cleaning in your location on the Auckland Council website or with your marina, using this four-step process:

# **STEP 01:**

Check whether pest species are obviously present.

If you have pests present on your boat then you must make sure they're not released into the marine environment while cleaning. The easiest way to be sure of this is to clean out of the water.

If you think your craft is free of pests, you may be able to clean in water depending on where you are, and what kind of cleaning you need to do.

# **STEP 02:**

# **Check your location**



Outside the high value areas noted below

OK if standards are met



Hauraki Gulf conservation islands Prohibited

# **No-cleaning zones**

Hull cleaning is prohibited within 500m of the coastline of the following Hauraki Gulf conservation islands:

- Beehive Island
- Browns Island
- Little Barrier Island
- Mokohinau Islands
- Motuine Island
- Motuora Island
- Motutapu Island
- Rangitoto Island
- Saddle (Te Haupa) Island
- The Noises Islands
- Tiritiri Matangi Island



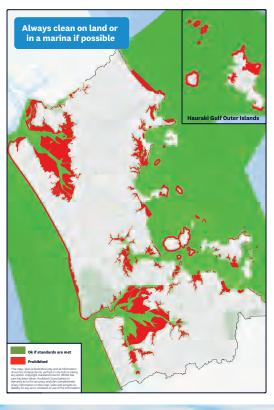
# Outside the high values area noted below

Resource consent required if standards are not met



Marine Significant Ecological areas

Prohibited - see map





# **STEP 03:**

#### **Permitted Activities**

Check Table A: (Permitted Activities) to identify what sort of cleaning you need to do. Each type of cleaning or fouling lists different rules to follow.

#### each rule. **TABLE A: TABLE B: Standards Applicable to Permitted Activities Permitted Activities REQUIRED STANDARD ACTIVITY STANDARDS** NO. Cleaning of a vessel with micro-fouling Gentle non-abrasive cleaning techniques must be used. Small scale manual cleaning (up to 5% of the hull surface The cleaning method must not compromise the existing anti-fouling area, including niche areas) coating system. Cleaning technologies should capture debris greater than 50 11 Cleaning of a vessel with macro-fouling from within Auckland micrometres in diameter. All captured debris must be collected and 11 disposed of appropriately. 11 11 11 Cleaning of a vessel with macro-fouling of domestic origin (that If unusual or suspected harmful aquatic organisms (or species H is less than extensive to very heavy macro-fouling) following a designated as pests in the relevant pest management plan prepared 11 11 under the Biosecurity Act) are found, the vessel owner or operator risk assessment that determined a relative biosecurity risk of l I negligible or low must take the following steps: all cleaning must cease; Cleaning of a vessel with macro-fouling of domestic origin that is: (b) the Council must be immediately notified; - More than low biosecurity risk, cleaning may not recommence until notified by Council to do so. - Or has not had a risk assessment, - Or has extensive to very heavymacro-fouling The discharge or escape of hull bio-fouling organisms or debris onto the foreshore, seabed or into the water must be collected as far as practicable and removed from the coastal marine area. Cleaning of a vessel with macro-fouling of international origin The anti-fouling coating on the hull and niche areas to be cleaned must not have exceeded its planned service life as specified by Treatment methods that render bio-fouling organisms the manufacturer. non-viable

**STEP 04:** 

**Required Standard** 

Check against Table B: (Required Standard) to see what you need to do under

Doing your bit to stop invasive marine pest species

Example correlation of permitted activities against required standards.



#### **Notes**

The standards apply to the above activities according to the level of risk associated with the nature, origin and extent of the biofouling.

- Cleaning of low-level fouling, fouling of regional origin (within Auckland) and fouling of domestic (NZ) origin that has been assessed and confirmed as low-risk are considered low-risk activities and are encouraged through less stringent standards. Capture of debris is not required.
- Small-scale removal of any fouling is enabled but capture is required due to the relative ease of capturing small amounts of fouling (Standard 3).
- Fouling of international origin, or domestic (NZ) origin that has not been assessed and confirmed as low-risk species are considered highest risk and are therefore subject to the most stringent standards, including capture of all bio-fouling debris (Standard 3).
- 4 Methods that render the organisms non-viable are subject to a less stringent standard for capture (Standard 5) as the organisms cannot spread after removal; however, chemical treatments may be subject to other controls within the Unitary Plan (e.g. discharges).

# Passive discharge of biofouling material

This rule requires you to limit fouling on your hull including niches such as inlets, outlets, rudders and propellers even if you don't plan to go anywhere, as invasive marine pests can spread from the affected hull to other nearby vessels or structures. As with hull-cleaning, the extent, origin and nature of the biofouling material determines the risk that invasive marine pest species can spread. 'Passive discharges' are known to

'Passive discharges' are known to occur once hull-fouling reaches 'macrofouling' stage. Where macro-fouling is present, resource consent is required in the following circumstances:

- Light to very heavy macro-fouling of international origin (level of fouling scale 2 to 5); or
- Very heavy macro-fouling of domestic origin (level of fouling scale 4 to 5);
   or
- Unusual or suspected harmful aquatic organisms (or species designated as pests in the relevant pest management plan prepared under the Biosecurity Act).

In other words, it is unlawful to allow a hull to become so heavily fouled that passive discharges occur, without obtaining a resource consent. Failure to comply may result in fines and other penalties.

Note: Commercial and military vessels are subject to different rules due to their requirements under other legislation.
Refer AUP sections F2.21.8.8.

#### **Defined Terms**

#### **LEVEL OF FOULING**

Expressed in the international Level of Fouling (LOF) scale - A scale used to assess the level of fouling on vessels, ranging from 1 to 5 based on the percentage of fouling cover.

To comply with the new rules you need to limit fouling to no more than "light fouling" – LOF 2 on this scale.

LOF 0 - 1 is described as micro-fouling;

LOF 2 - 5 is described as macro-fouling.

- **1. Micro-fouling** Slime layer fouling only. Nil macro-fouling cover.
- **2. Light fouling Hull** covered in biofilm and 1-2 very small patches of macro-fouling. 1 5% macro-fouling cover.
- **3. Considerable fouling** Presence of biofilm, and macro-fouling still patchy but clearly visible. 6 15% macro-fouling cover.
- **4. Extensive fouling** Presence of biofilm, and abundant fouling assemblages consisting of more than one species.

16 - 40% macrofouling cover.

**5. Very heavy fouling** Diverse assemblages covering most of visible hull surfaces. 41 - 100% macro-fouling cover.

## DOMESTIC ORIGIN

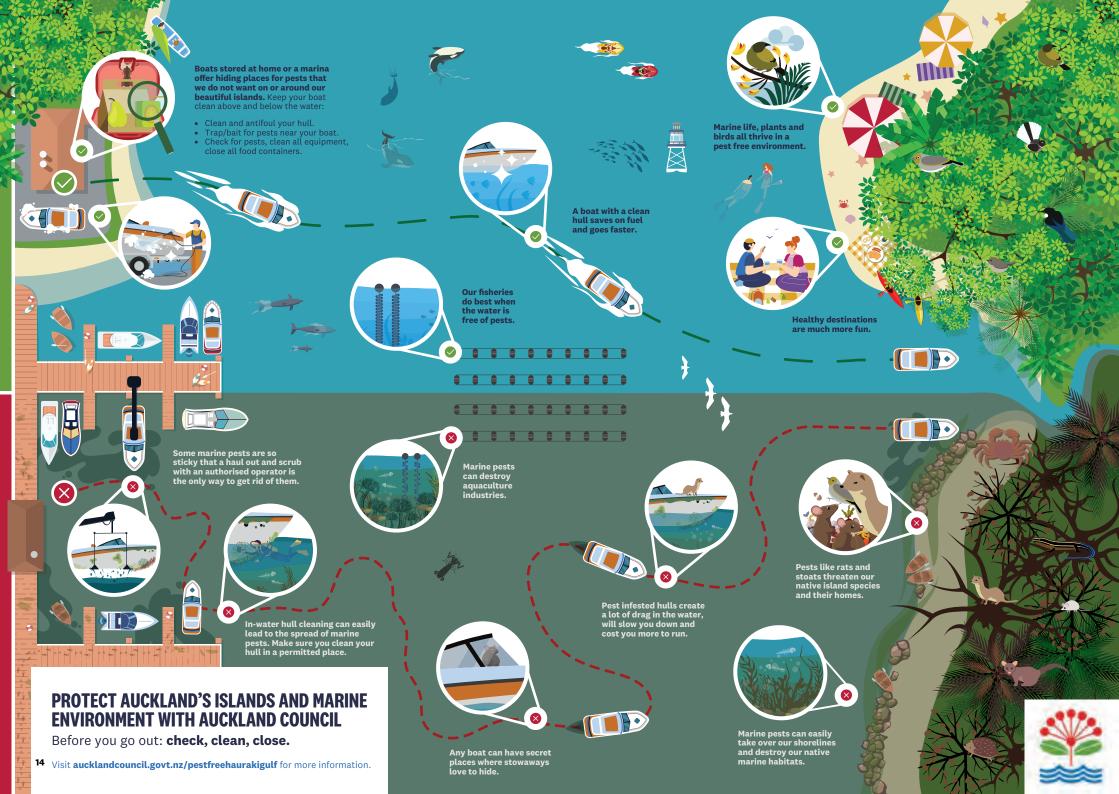
Domestic origin means bio-fouling material from within New Zealand but outside the Auckland region.





an example of LOF2 or light fouling







# Do you know your marine pests?

The dive spots, idyllic bays and pristine coastlines we know and love as boaties could change for the worse if marine pests get to them. Here is what to look out for... and why.



# MEDITERRANEAN FANWORM \*Sabella spallanzanii

With an ability to pack in 1,000 individuals per square meter, Mediterranean fanworm makes it difficult for other species in the vicinity to survive. Imagine it doing that in some of our pristine dive spots. It filters large volumes of water, feeding on nutrients and plankton, including the larvae of our much loved recreational fish species.

Large numbers attached to your hull could be costing you a whole heap more in fuel too.



# JAPANESE MANTIS SHRIMP Oratosquilla oratoria

An aggressive competitor with a dangerous but impressive 'karate chop' ability to stun prey. It lives in burrows in the sand and mud, causing damage and making it hard to trap. In large numbers it leaves no space or food for other native crab and shrimp species.



# **WAKAME** Undaria pinnatifida

A fast grower that forms dense colonies on any hard surface - including your boat, shells, reefs, wharf piles and mooring lines. Wakame crowds out native species and steals their light and space. This could mean our favourite dive spots are never to be the same again.



Pyura doppelgangera

Do your kids love exploring rock pools? Then be cautious about this aggressive competitor that has the potential, in the right conditions, to alter our precious intertidal communities in a significant way - it could even suffocate our beloved green-lipped mussel beds. Currently only found on the West Coast of the Far North. We don't want it spreading further.

# AUSTRALIAN DROPLET TUNICATE Eudistoma elongatum

With a slimy snot-like appearance this species can form big colonies on rocks, aquaculture equipment and marine structures. In its a free-swimming larval stage it can spread far and wide. It dies-back over winter but in summer it leaves no space for native species and changes the beautiful sights of our local beaches.



## **ASIAN PADDLE CRAB**

Charybdis japonica

If you see an Asian paddle crab on your travels, you are unlikely to see many other species close by. It is aggressive and quickly out competes our native paddle crabs for space and food. With a vicious bite when disturbed, the adults are strong swimmers and can spread attached to fouling on a boats hull, or as larvae in sea chests or ballast water where they can live for up to a month.



# **CLUBBED TUNICATE** Stvela clava

The clubbed tunicate prefers to grow on marine structures and boat hulls, affecting your boat's performance and hitchhiking to other places. It is disliked by the aquaculture industry because it grows in large densities on oyster and mussel lines, suffocating their shellfish, competing for space and food and adding to processing costs.



In New Zealand
most regions have marine
biosecurity rules and
requirements for all visiting
boats. Protect the coastlines
we love... clean your boat and
check it for marine pests.

Also check out www.marinepests.nz for ideas, advice and rules about marine biosecurity for boaties.

marinepests.nz

\*\*Sabella is a notifiable organism. If you spot Sabella, or anything else unusual, take a sample or photo and report it to the Marine Biosecurity Hotline 0800 809 966.



There are an increasing number of pest free islands in the Tīkapa Moana o Hauraki/The Hauraki Gulf Marine Park. Thanks to animal pest control and eradication programmes they are home to rare and endangered species such as the kiwi, takahe and tuatara, and are one of New Zealand's treasure troves.

But some of these islands receive constant visitors and with this come weeds, pest animals and disease that threaten their ecology, their biodiversity, and their intrinsic values.

# **Visiting Pest-Free Islands**

Visiting these islands is a special experience - they offer an immersion in nature and isolation that is very difficult to replicate anywhere else in the world.

When you visit pest free islands, please check all your gear - even your lunchboxes carefully. Camping and overnight gear offer an ideal home for stowaways as these items are often stored for long periods between use. So before you depart, unpack and thoroughly shake out tents, bedding, packs and other gear.

Many other islands in the Hauraki Gulf such as Waiheke and Aotea/ Great Barrier Island where people are living also have active pest control programmes that contribute significantly to conservation in the Gulf - so it's important to be mindful whenever you visit an island.

# What about my pets?

Unfortunately for animal lovers, furry friends are not welcome on pest free islands.

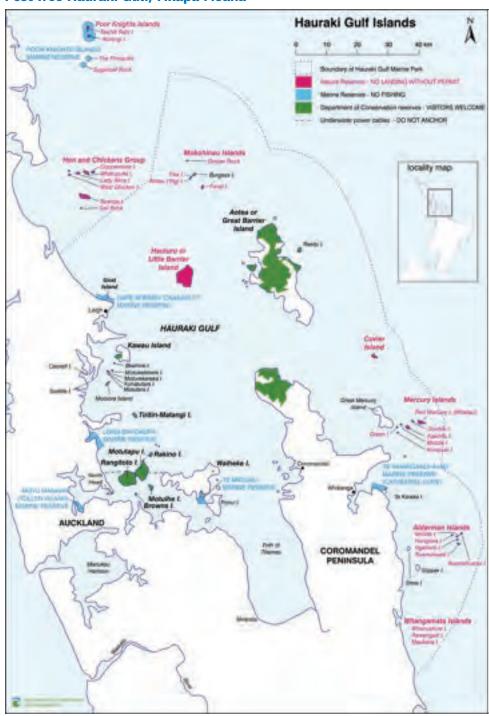
Dogs and cats visiting areas where disease is present can move soil around in their coat or paws, inadvertently spreading disease from one place to another. Pest plant weeds and seeds can also be transported on paws and coats.

You'll need to leave them at home or on your boat, at least 200m away from shore. And if they are enjoying boating with you, make sure you have a plan that allows them to exercise and toilet at safe, permitted locations.

# What should I do if I see a pest?

Let us know! Contact DOC on 0800 DOC HOT or Auckland Council on 09 301 01 01. You can also email biosecurity@aucklandcouncil.govt.nz. We recommend taking a photo, and if appropriate (such as for a marine pest), putting a sample in a plastic bag in the freezer. Marine pests should also be reported to MPI.

# Pest free Hauraki Gulf/Tīkapa Moana



# Which islands are pest free?

Beehive Island/Taungamaro

Browns Island (Motokorea)

Broken Islands (Pig Islands)

Te Hauturu-o-Toi/

Little Barrier Island

Kaikoura Island (Selwyn Island)

Karamuramu Islands

Mokohinau Islands

Motuhaku Island

Motuihe Island/Te Motu-a-Ihenga

Motuketekete Island

Motuora Island

Moturekareka Island

Pakatoa

Pakihi Island (Sandspit Island)

Rakino Island

Rakitu (Arid) Island

Rangitoto Island and

Motutapu Island

Rotoroa

Tarakihi (east of Waiheke)

Te Haupa Island (Saddle Island)

The Noises

Tiritiri Matangi Island





If you have checked and cleaned your boat and gear you are unlikely to fall foul of the rules but it's helpful to understand the legal framework. The applicable rules are:

The Regional Pest Management Plan (RPMP) 2020-2030 which includes a region-wide marine programme with rules that came into effect early 2021. These rules state that:

- Craft must have no more than light fouling, including on the hull and niche areas
- Any craft entering any marine water body from the land must be free of all ballast water, bilge water, holding tank water or sea water held in any other container
- There are nine named marine species which must not be moved to new locations. These species are Asian paddle crab, Australian droplet tunicate, Lightbulb ascidian, Clavelina oblonga, Japanese mantis shrimp, Mediterranean fanworm, Pyura sea squirts, Clubbed tunicate, and Undaria pinnatifida.

The Auckland Unitary Plan rules describe where and how you can safely clean your boat (detailed on pages 8 - 11 of this document).

The Hauraki Gulf Controlled Area Notice 2020 includes a list of 300 pests that cannot be moved within the Hauraki Gulf Controlled Area. A copy of the Hauraki Gulf Controlled Area Notice is on the Auckland Council website.

Get all you need at aucklandcouncil.govt.nz/ marinepests and aucklandcouncil.govt.nz/ pestfreehaurakigulf Most regions and many marinas have rules about biofouling and marine biosecurity and require evidence of a commercial hull clean - so keep your receipts. If you are travelling outside of Auckland, get the rules, along with a nationwide haulout directory and useful information for boat owners at marinepests.nz

**Tip:** Make sure you also familiarise yourself with rules and advice around boat sewage discharge in the Auckland Region too. There are places where you can and can't discharge your holding tanks.



# PROTECT OUR **HAURAKI GULF**



Check

your property for pests



Clean

your boat and gear before you go



Close all food

containers



Visit ourauckland.nz/haurakigulf to find out more from **Auckland Council** 







#### **Rubbish**

No rubbish can be dumped in the sea or on land. Take your rubbish home or dispose of it at an approved facility. Removing any excess packaging before you leave home can be a great space saver.

# Oil spills

Deal with spills of oil or fuel from your boat immediately and clean them using special sorbent material. You can buy sorbent pads from most chandlers or marine stores.

Dispose of any oil or oily waste at your local transfer station or through a waste contractor.

Report spills of oil, petrol or diesel to the Harbourmaster duty officer on 09 362 0397.

# **Choosing an antifoul**

Use low impact antifouling products, such as non-copper, low copper formulation or low copper release antifouling paint.

# **Choose cleaning products** with care

Whether washing dishes, washing your hair or cleaning equipment, if they discharge to the sea look for products that are environmentally friendly.



# **Discharging of sewage**

Untreated sewage can contaminate the shellfish we eat, or make water unsafe for swimming for a long time after it is discharged. If you are a boat owner, play your part in protecting our harbours by disposing of your boat sewage properly. If you need to discharge untreated sewage from a boat, make sure you are underway, well offshore, in open water and away from other boats.

You must be:

- in water more than 5m deep
- more than 500m from shore
- more than 500m from a marine farm
- more than 500m from a customary fishing reserve (mataitai)
- more than 200m from a marine reserve.

Our rules also specify that you cannot discharge in:

- Waitemata Harbour
- Mahurangi Harbour
- · Bostaquet Bay, Kawau Island
- · Port Fitzroy, Great Barrier Island
- · Nagle Cove, Great Barrier Island
- Tryphena Harbour, Great Barrier Island.

# Our tips:

- Use toilets on shore before you depart.
- Fit a holding tank.
- Use pump-out facilities where available, such as those at many of Auckland's marinas.
- Install a treatment system for your boat.

Get more information on boat sewage discharges on aucklandcouncil.govt.nz



















