

Creating a prevention plan

The main aim of the prevention plan is to prevent (re)incursion events by identifying **barriers you can place along pathways to obstruct the movement of invasive species**. If resources are insufficient to cover all invasive species or pathways, you should identify and prioritize those which pose the greatest risks to your particular island (e.g. species which are most likely to go undetected, boats that visit most often, that carry higher risk goods/people, that stay near the island overnight, or that come from highest risk places).

The principle of prevention is to place as many barriers and checks along pathways of introduction as possible. Barriers should be placed and checks made so as to:

- prevent species getting on to vessels, either directly (e.g. climbing up mooring ropes) or indirectly (e.g. as a stowaway in cargo);
- prevent species dispersing from land within swimming distance of the island;
- identify the presence of species on vessels in transit; and
- prevent species getting off vessels;

Try to make the prevention measures as simple as possible as the harder they are the less it is that people will undertake them.

Biosecurity is required in perpetuity and project funding will most likely be time-bound. As such, adequate plans should be made to fund the biosecurity requirements in the longer-term.

Potential barriers

The lists on the following page are not exhaustive but give some ideas for barriers you can put in place.



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Actions at points of origin

- Have in place baited stations and/or traps on quays of servicing harbours.
- Install good waste management and reduce harbourage at quays/along adjacent 'swimmable' mainland. You may wish to undertake lethal control measures in high risk habitats along adjacent coastlines to reduce the likelihood of dispersal events.
- As far as possible, place island-bound goods and supplies in rodent-proof containers. At the very least, all items (including visitor day packs) should be placed in a sealed container so that they can be inspected for signs of tampering/entry by rodents.
- Before loading onto vessels, check goods and supplies that are island-bound for signs of rodent interference, especially items which cannot be placed inside rodent-proof containers or which have been stored overnight or longer. Look for chew marks and signs of entry/holes.
- As far as possible, ensure goods are packed on the day of delivery. For items which will be stored long-term or overnight before being transported, store off the ground (e.g. on a pallet) and place traps/rodenticide underneath/around the goods. This is particularly important for high risk goods such as fodder.
- As a preference, store all island-bound cargo in a **quarantine store** after it has been checked. Check cargo again before loading onto the vessel.

For boats moored on buoys or anchor:

- position the mooring so that the boat remains in the water at low tide;
- fix mooring hoods to mooring lines (where possible use a fixed mooring not an anchor);
- ensure nothing is suspended over the side of the boat;
- moor boats in areas free from shore-based rubbish and other food sources or concentrated rodent habitat.
- Do not run mooring lines ashore unless you absolutely need to.
- Larger ships should use line guards on ship-to-shore lines to stop rodents using mooring lines to get on and off the ship.
- Do not land at night unless you absolutely need to.
- Consider if any risks can be avoided altogether by a change in practice - e.g. using island sources rather than importing items (invasive-rodent-free Ramsey Island now produces hay itself rather than importing it, for example).
- Raise awareness of the invasive-rodent-free nature of the island and inform visitors of biosecurity actions they need to undertake (such as sealing and checking all their bags). Consider:
 - placing signs at key departure and arrival points about the risks of reincursion and the measures you would like people to take to reduce risks;
 - providing information leaflets at these points;
 - placing information on vessels (visual or audio - e.g. over ferry tannoy announcements);
 - designing visitor/ferry tickets so that they provide biosecurity information (e.g. using the reverse side for this purpose);
 - placing awareness-raising notices in local papers or radio.

- Publicise a contact number so people can report if they think they see an invasive
- For people planning to visit a number of islands (e.g. researchers, tour guides, rubbish collection vessels), visit those that are invasive-free (or have less chance of invasive species escaping onto your vessel) before visiting those with invasive species. Visiting islands in order of least risk decreases the chances of you transporting invasives from invaded to invasive-free islands.

Actions *en route* to the island

- Rodenticide poison and/or kill traps should be in place on all vessels which pose a significant risk of transporting rodents to the island. Second generation anticoagulant rodenticides are best for biosecurity purposes on vessels, but check the legality of using them in this way.
- All rodenticides and kill traps should be placed in covered and lockable containers and significant effort should be undertaken to reduce risk of harm to all non-target species.
- Traps should be checked at least once a day. If they cannot be checked with this frequency, they should not be used.
- Rodenticides should be checked at least weekly for any sign of consumption or tampering, and bait refreshed regularly (at least once per month or sooner if weekly checks show it to be damaged by weather/less attractive to rodents for any other reason).
- Train boat operators and encourage visitors to maintain vigilance whilst in transit.
- If a rodent (or any other invasive species) is found on a boat which is island-bound, the **boat should not land**. The boat should return to its point of origin until it is clear all rodents present have been removed. **Never allow a live rodent to be thrown overboard.**

Actions on arrival at the island

- Do not run mooring lines ashore unless you absolutely need to.
- Do not land at night unless you absolutely need to.
- Before unloading anything at the island, all packed gear should be thoroughly inspected for sign of rodent exposure (chews marks, gnawed holes, etc.).
- Only unload what must be unloaded.
- Unpack containers, luggage and cargo in enclosed, rodent-proof, well lit, and tidy areas. Preferably this would be in a quarantine room. This will allow easier detection and capture of any invasive species that do escape. The more secure the area, the easier it will be to stop the invasive species escaping onto the island.
- If there are no appropriate buildings on the island and a quarantine room cannot be built, goods should be unloaded and checked close to shore in an area which can be surrounded by people who are poised to take action should a rodent/other invasive species escape. N.B. there are significant additional risks to this approach.
- Consider installing lethal control measures at the main incursion points identified earlier in your biosecurity plan (an EIA and measures to limit risks to non-target species will be required).

Actions on departure from the island

- Apply the 'Actions at points of origin' measures to ensure you do not export invasive species from the island.
- Do not remove anything from the island that could contain invasive species.
- Remove all your rubbish, including fruit and vegetables, from the island. Rubbish provides a great food source to many invasive species and can hinder both surveillance efforts and incursion responses. Discarded species may also prove invasive themselves (e.g. fruit from vines/climbers).

Basic biosecurity checklist to be completed by team leaders for all island visits

Task	Completed?
1. Have I given clear biosecurity instructions to <u>all</u> trip members?	Yes/No
2. Have I checked they have understood these instructions?	Yes/No
3. Have all stores and supplies (which are small enough) been packed in approved rodent-proof containers?	Yes/No
4. Itemise gear too bulky/awkward to fit into rodent-proof containers: • • Items checked immediately prior to departure -	Yes/No
5. Has <u>everything</u> been stored in a rodent-proof room in sealed containers or re-checked immediately prior to departure?	Yes/No
6. Have I checked with every member of trip: - packs kept in rodent-free areas or checked and re-packed since? - no food held in any unsealed bags? - boots and other footwear clean and free of soil/seeds? - packs, pockets, Velcro fasteners, socks, etc clean of weed or grass seed? - no-one in party has worked in area of known invasive plant/invertebrate infestation recently without changing/ washing gear (including shoes/bags)?	Yes/No Yes/No Yes/No Yes/No Yes/No
ANSWERS 1-6 MUST BE 'YES' BEFORE TRIP CAN PROCEED	
7. <u>Identify any added risks of the trip:</u> - are we leaving/ travelling at night? - are there planned stops <i>en route</i> where pests could enter or exit? - are we travelling on a boat with no poison rat baits or effective rodent control measures? - are any items being stored on deck or in non-rodent proof holds?	Yes/No Yes/No Yes/No Yes/No
8. Have I addressed these concerns by identifying and implementing bespoke solutions to minimise potential risk to the islands?	Yes/No
YOUR ANSWER TO TASK 8. MUST BE 'YES' BEFORE TRIP CAN PROCEED	
<u>In Transit to Islands:</u> If any sign of rodent or other invasive species is detected on the boat whilst <i>en route</i> to your destination, DO NOT land at the destination island or any other island until the problem has been identified and remedial actions implemented in consultation with experts.	
<u>On Arrival:</u> - Have I re-inspected all containers for rodent entry or damage which could allow entry? - Has everything been unpacked or opened up and carefully inspected in an	Yes/No Yes/No