



Approve a Biosecurity Plan to immediately put prevention measures in place.

(Re)incursion is when an invasive animal arrives on an island that was previously free of that species. If an incursion/reincursion is not handled effectively, it can soon become a *(re)invasion*, whereby a breeding population of the invasive animal is established. Response to a reinvasion will require a(nother) full-blown eradication operation to be developed and implemented. It is far preferable, therefore, for conservation, financial and social reasons, to prevent reincursions from becoming reinvasions, and ultimately, to prevent reincursion in the first place. This is the purpose of biosecurity.

Biosecurity is relevant to all stages of an island restoration programme, even before eradication has taken place - you do not wish to transport *any* species between sites.

Biosecurity is also important for sites where no invasive species have been recorded. It should not be assumed that failure of an invasive species to arrive and establish in the past in any way indicates that an island is safe from future invasion. The rate of rodent invasion on islands has hardly slowed in the past century. It may be luck, as much as anything else, which has kept some islands 'invasive-free' so far.

Biosecurity planning involves the identification of risk species and 'pathways' (routes to the island) and multiple barriers that can be placed along those pathways to obstruct the movement of invasive species.

There are then three areas of biosecurity implementation - prevention, surveillance, and incursion response:

- **Prevention measures** are devised, installed and continuously applied to in order to reduce the chance of invasive species moving from one area to another;
- **Surveillance procedures** are put in place to search for any sign that an invasive species has slipped through the preventative measures, and to raise the alarm quickly if quarantine has been breached;
- **Incursion response plans** are required so that people are ready and able to respond quickly and efficiently to any incursion (breach of quarantine) by an invasive non-native species.

Prevention measures aim to prevent (re)incursion events, surveillance and incursion response aim to identify and respond quickly enough to incursion events to prevent (re)invasion.

In order to prevent incursions becoming invasions, the biosecurity implementation team must be ready to respond immediately - preferably, a team will be on the island implementing the incursion response plan within 48 hours of detecting an incursion. Such response requires a high level of planning and preparedness, just like for initial eradication programmes: who will go, which boat/helicopter will be used, where does it leave from, where will all the necessary gear (including rodenticide) be stored? etc.

Detailed planning and preparation are integral to biosecurity. Someone with no knowledge of the island should be able to pick up a biosecurity plan and implement it, if necessary.

Detailed biosecurity planning benefits from an in-depth knowledge of the island and the ways in which it is used. The quality of a plan is likely to develop during the course of a restoration programme. As such, it is recommended that an initial, brief biosecurity plan and biosecurity

checklist (for use before embarking on trips to/from the island) are in place from the outset of the project and that a more comprehensive plan is developed towards the end of the eradication operation. This comprehensive plan should be in place before the eradication team leave the islands.

A Biosecurity Plan should be considered a living document and should be reviewed regularly. If there are any significant changes in island use/incursion risk or external factors such as regulations surrounding permitted rodenticide use then it should be reviewed immediately. Similarly, if there is an incursion event, plans should be reviewed as soon as the incursion

In order to complete a Biosecurity Plan, you must:

- Identify and describe characteristics of the island that will affect biosecurity measures;
- Identify and prioritize risk species and pathways;
- Identify multiple barriers you can place in the pathways to mitigate the risks posed (Quarantine/ prevention measures);
- Design an appropriate Surveillance Strategy;
- Develop an Incursion Response Plan; and
- Have the plans reviewed by an independent expert, and amend them as necessary.

There are few hard and fast rules with biosecurity as so much depends on the island's unique characteristics, however, as general guidance:

- Place **multiple barriers along pathways**;
- Deploy **multiple types of detection devices**;
- Check the devices as **often as possible**;
- **Be prepared to act immediately**;
- Maintain **constant vigilance**.

Once the Biosecurity Plan is approved, you should immediately out prevention measures in place.