

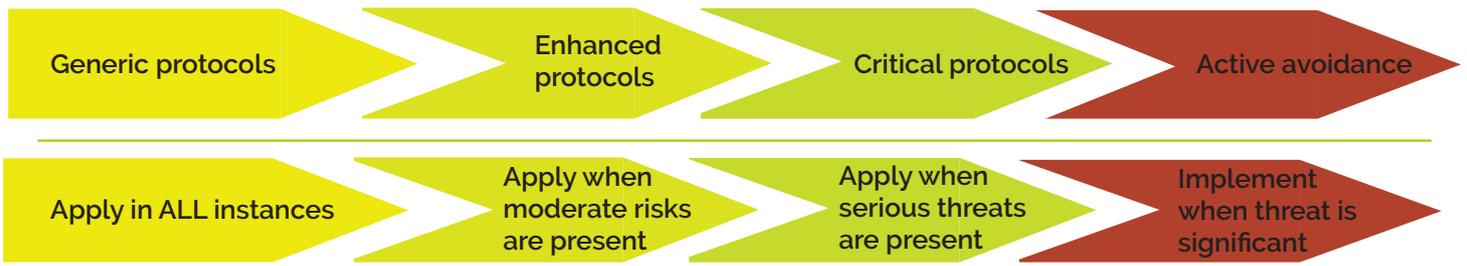
When conducting fieldwork of any kind, it's important to remember:

- Any activity in the bush has the potential to spread invasive species. This includes undertaking environmental restoration activities such as weeding and revegetation.
- The likelihood increases when using dirty tools and equipment or using plants and materials that are not confirmed free of pathogens and weeds.
- Clothing, hats, footwear, tools, equipment, machinery and vehicles can transport invasive species, pathogens like Dieback (Phytophthora), myrtle rust (Puccinia psidii), insects and weeds into, or between our natural areas.
- Even your skin and hair, as well as glasses, phones, watches, wallets and other pocket items can carry potential biosecurity risks such as myrtle rust spores, seeds or pathogens.
- Once these pathogens and weeds invade our ecosystems, eradication is often impossible.

Following these guidelines may help us avoid aiding in their spread.

To help mitigate the spread of biosecurity threats

Arrive clean, Leave clean



Generic protocols

The baseline level of Biosecurity awareness and response to be applied whenever operating in the field

Ideally, only one site per day should be visited but this is not always practical so -

- Always try to remove as much soil and organic matter as reasonably practical from footwear, vehicles and equipment before entering or leaving sites
- Always keep a simple hygiene kit in your vehicle, but if possible, always carry at least a hard brush and a small spray bottle of disinfectant -Trigene/Sterigene (or a solution of 70% ethanol or methylated spirits in 30% water) with you during site visits especially if 'higher' threats might be encountered that would warrant an on-site clean before back tracking out the same way you entered.
- Remain vigilant.
- Consider placing newspaper (or similar) in vehicle footwells to collect soil/seeds/contaminants from under boots etc between site visits to be replaced at each new site, sealing old newspaper into bags sprayed down with disinfectant.

Good practice

- Although it is preferable to wash all clothing between site visits, this is not always practical so, use newly disinfected/washed clothing each day.
- Ensure vehicle is regularly washed and vacuumed to avoid build-up of residual soil and organic matter that could drop off in new locations spreading weeds and pathogens.
- Check all bags daily for the potential presence of wildlife "stowaways".

Enhanced protocols

Higher degree of Biosecurity awareness and response is required in order to mitigate potential or confirmed moderate to high risk threats provided no restrictions on movement have been imposed by any authority.

Follow ALL Generic protocols, PLUS-

- Use a disinfectant solution, preferably Trigene/Sterigene (or a solution of 70% ethanol # methylated spirits in 30% water) to disinfect footwear, equipment or vehicles (or parts thereof eg Tyres) that may have come into contact with high risk soil, water or other substances.
- To clean footwear, first use a hard brush or stick to remove as much mud, soil and organic matter as possible before disinfecting with your disinfectant solution applied through a spray bottle or a footbath.
- Repeat this process on-site, before moving on to the next location.

Critical protocols

The Highest degree of Biosecurity awareness and response required where field work is still deemed essential to QEII, but associated activities are dictated strict Threat mitigation as prescribed/recommended by any controlling authority ie MPI, Council etc). If the work is not of an essential or significant nature to QEII, then Active Avoidance must apply.

ALL Generic and Enhanced protocols must be followed, PLUS -

- Comply with any requirements from any District, Regional or National Authority tasked with managing any biosecurity response including but not limited to setting up and using approved vehicle wash down bays etc.
- Set up a wash-down area where you can wash and dry your face and hands and clean your footwear before entering and exiting the site.
- Seal all personal rubbish and 'cleanings' in a bag and spray the outside of the bag with disinfectant solution before responsible disposal offsite.
- Collect all removed mud, soil and organic matter in a bag or bucket, and keep it out of clean/uninfected areas.
- Alternatively, make use of Boot covers and interchange for clean ones regularly between sites, or within a site if a risk of cross contamination between individual trees exists (ie Kauri dieback)
- If site access requires a level of Biosecurity control that incorporates vehicle wash downs, then the default position of QEII is to regard that site as one to be Actively Avoided (see below)- unless special dispensation is given.

Active avoidance

Must be applied in situations where restricting any movement into or out of the area is seen as the only feasible means of halting the spread of a significant biosecurity Threat, or when imposed by any Authority. If there is a lesser threat, but a high risk of spread, this option may well be considered if there would be no significant benefit gained from conducting the fieldwork (i.e. Precautionary Principle applied)

- Reps will adhere to and comply with any official notice or Authority (eg HO directive, MPI Directive, Council prohibition, Rahui etc.)
- Reps may issue a recommendation to avoid an area and advise HO accordingly of the reasons and implications of this recommendation

QEIs dynamic assessment protocol

We remain pragmatic in our approach to Biosecurity, and acknowledge that in order to do so, a level of flexibility and discretion is required from those operating in the field. Vigilance is key, and to that end, we are required to apply the same continuous 'in field' assessment and review process as in H&S Hazard identification and management. It uses a mnemonic based on the Māori word ārai, meaning a shield or protective barrier. This allows "on the spot" Biosecurity risk management, and appropriate scaling of response with the ability to up or downscale as needed.

Think ARAI

A

Assess

- While moving around, continuously assess the environment for Biosecurity concerns.
- Ask yourself: "Are there any known Biosecurity Threats in the area or possibly likely to be in the area, and do I know what to look out for?"
- Does anything look 'out of place'?
- Do I know what it is, or is it potentially something of concern?

R

Rethink

- If you find nothing or are indeed concerned about something, ask yourself "What are my options?"
- Should I Upscale to a higher protocol, or can I downscale in response?
- What resources do I have available to help me mitigate against compounding the Biosecurity Threat through my actions/inactions, and how should I use them?
- Are the mitigation measures acceptable? Is it still advisable to continue the work?

A

Advise

- Who, if any, would need to know about the observation (Landowner, MPI, QEII, Council etc.), and your mitigation methods used to prevent spreading the Threat and decision to pull out or continue?
- Gather details/ take photos but don't sample unless fully competent in methodology etc.

I

Implement

- Continue with the work under new protocol and incorporating new behaviours and controls.

Simple Biosecurity hygiene kit (personal use):

- Plastic tub with a lid (to carry items and to use as a footbath)
- Stiff brush
- Newspaper to cover the footwell of a vehicle (replace with clean newspaper regularly)
- Dustpan and brush; possibly also a long-handled broom (for general in field brushdown of vehicles between sites prior to disinfectant)
- Sealable Plastic bag for sweepings and dirty newspaper
- Water
- Spray bottle with a Trigene or Sterigene solution or 70% ethanol or methylated spirits in 30% water mix
- Alcohol wipes or gel for hands and personal items