

Best Practice Guideline

Event Management

Prepared By: Planning and Intelligence
Kauri Dieback Programme

Prepared For: Kauri Dieback Programme

Version: 1.0

Status: Final

Created: June 2020

Document Information


Version History

Date	Version	Author	Description of changes
June 2020	1.0	T. Ashcroft	

Consultation and peer review

Role	Name	Date submitted
Kauri Dieback Programme, Planning and Intelligence	T. Beauchamp, K. Parker, C. Green, M. Fea, Y. Chin, G. Clapperton	June 2020
Kauri Dieback Programme, Senior Communications and Engagement Advisor	Y. Grace	

Approval

Name	Role	Signature/ Date	Endorsement
R. Murrie Programme Manager	Approve / Note the contents of this document		Yes June 2020

Associated documents

Document name	Link
Hygiene procedures for Kauri Dieback	https://www.kauridieback.co.nz/how-to-guides/

Glossary

Terminology	Meaning
Kauri dieback	Name of the disease that causes dieback on kauri caused by the pathogen <i>Phytophthora agathidicida</i>
KDP	Kauri Dieback Programme
Outermost dripline	The furthest (maximum) extend of the branch spread from the trunk.
PA	Means the primary causal agent of kauri dieback disease, known as <i>Phytophthora agathidicida</i> .
Sterigene	2% solution of disinfectant Sterigene®
Wash-down	Removal of soil and organic material using pressurised water and brushes
Hygiene	Hygiene, in the kauri dieback context, is defined as the process of removal of all soil and organic material from footwear and articles, and the subsequent treatment of footwear and articles with a disinfectant.
Hygiene Station	A facility installed on a track that is provided for visitors to undertake a process to minimise the risk of transport of PA into or out of a Kauri Forest Area. Hygiene Stations generally consist of cleaning apparatus and a means of applying disinfectant to the soles of footwear and to other articles that are taken onto a Kauri Forest Track.
Kauri Forest Track	A walking track, cycling track or unsealed vehicle track that passes through a Kauri Hygiene Area over part of its length.
Kauri Root Zone	Means an area within a distance equal to three times the maximum radius of the canopy dripline of a New Zealand kauri tree or group of trees.

Disclaimer

The information in this guideline is intended to be general information. It is not intended to take the place of, or to represent, the written law of New Zealand or other official guidelines or requirements. While every effort has been made to ensure the information in this document is accurate, the Kauri Dieback Programme (and any of their representatives involved in the drafting of these guidelines) does not accept any responsibility or liability for error of fact, omission, interpretation or opinion that may be present nor for the consequences of any decisions based on this information.

1.0 Purpose

To provide hygiene guidelines around managing organised outdoor events that involve groups of people undertaking sporting or leisure activities in or near an area with kauri.

Examples of events include but not limited to the following:

- Distance running and walking
- Cross country
- Orienteering / Rogaining
- Trail biking

2.0 Background

Kauri dieback is a soil-borne disease that spreads primarily through the movement of contaminated soil. Just a pinhead of soil is all that is needed to spread the pathogen that causes kauri dieback, *Phytophthora agathidicida* (PA), to other areas.

Human related activities are the main vector in how this organism is spread long distance.

Stopping the movement of potentially contaminated soil and root material is the main aim to reduce spread of the disease, therefore it is important to reduce soil contamination on participant's footwear and any associated equipment that are used during the event. It is also important that hygiene practices are followed before and after an event.

This guide outlines best practice hygiene measures for event organisers to undertake during the planning and execution of an event as well as land managers during its assessment.

3.0 Assumptions and Constraints

- 3.1 There is a lag time between when a kauri tree becomes infected to when that tree shows visible symptoms. As a result, trees that appear healthy may actually be infected as well as the soil present within their root zone could be contaminated (Figure 1). Therefore undertaking hygiene activities in areas where kauri are present is important.
- 3.2 Long-lived spores (oospores) of kauri dieback may occur in soil well away from kauri. These spores can be transported long-distance and deposited via movement of contaminated soil. The spores may survive and remain viable for a number of years in these areas.
- 3.3 The relative importance of vector pathways that spread contaminated soil is proportional to the volume of soil moved and the frequency and distance of such movement. As a result, the majority of long distance dispersal of PA is likely via human activity.
- 3.4 To date, kauri is the only tree known to be susceptible to kauri dieback in the natural environment.

4.0 Scope

- 4.1 These guidelines have been developed to provide written advice on the key hygiene principles that should underpin **all** event management activities.
- 4.2 The guidelines are not policy but should be incorporated into event planning by event organisers, and should act as a guide for land managers when providing advice to event organisers.
- 4.3 The guide provides what is considered best practice based on current information and uses risk management principles to reduce the likelihood of spread of PA during an event.

5.0 Hygiene principles

The following hygiene principles should underpin any event management plan **before, during and after an event.**

#	Principles	Why
1	Arrive Clean, Leave Clean	<ul style="list-style-type: none"> • Only a pinhead size of contaminated soil can spread the disease, so hygiene practices which involve cleaning and the removal of soil on items is paramount. • Stopping soil movement will protect kauri.
2	Keep away from kauri	<ul style="list-style-type: none"> • A kauri's roots are extremely delicate, grow close to the surface, and are highly susceptible to disease. • Conducting activities near kauri increases the risk of picking up potentially contaminated soil, as it is more likely that contaminated soil is close to an infected kauri tree than far away. • The likelihood of transferring contaminated soil on people shoes or equipment to kauri roots increases when near kauri.
3	Scrub, Spray and Stay	<ul style="list-style-type: none"> • Scrub and Spray <ul style="list-style-type: none"> ○ To remove soil, it is important to scrub your footwear and equipment first using water and a scrubbing brush and after this is done, spray using sterigene. ○ Spraying first before scrubbing will decrease the effectiveness of the spray. • Stay on Track <ul style="list-style-type: none"> ○ Reduces exposure to contaminated soil. ○ Minimises damage to kauri roots caused by increased compaction over time as a result of foot traffic. ○ Root damage can impact on kauri health making them more susceptible to the disease.
4	Avoid wet and muddy conditions	<ul style="list-style-type: none"> • Wet conditions can increase transfer of contaminated soil onto footwear which makes cleaning more difficult.

6.0 Before the event

6.1 Planning

6.1.1 Contact the land management agency and landowners

- Contact the local authority for the area where you are planning your event e.g. council land or Public Conservation Land (administered by the Department of Conservation).
- The authority will advise on any local policy or regulatory constraints, or whether the event requires approval or a permit.
- The authority will also assist in determining whether the area you are planning your event to take place, has kauri and kauri dieback disease.
- Depending on the nature, size and location of the event, a Kauri Dieback Management Plan may be required by the local authority as part of the approval process. This plan, amongst other things, will help you decide if it is feasible to hold the event in a kauri forest or near kauri and what equipment, supplies and signage are required and where to place them.
- Assistance from the local authority could be provided by advising on where to source supplies and equipment and providing material to help raise awareness on the importance of hygiene practices. Additional resourcing may be provided if available.
- Contact any private landowners to obtain approval separately.

6.1.2 Suitability of the event location

- Choose to stage the event in areas away from kauri instead of in kauri forests or near kauri.
- If this is not possible, choose a site that minimises close contact with kauri, by event participants.
- Restrict staging areas and car parking to hard, dry surfaces, formed roads and designated parking areas, where possible.

6.1.3 Suitability of the track route and track conditions

Key Messages - 'Keep away from Kauri' and 'Stay on track'

- Check whether the track is closed to the public.
- If a track goes through a kauri forest or near kauri, plan your route (where possible) on tracks which are located away from kauri trees and their root zone (Figure 1).

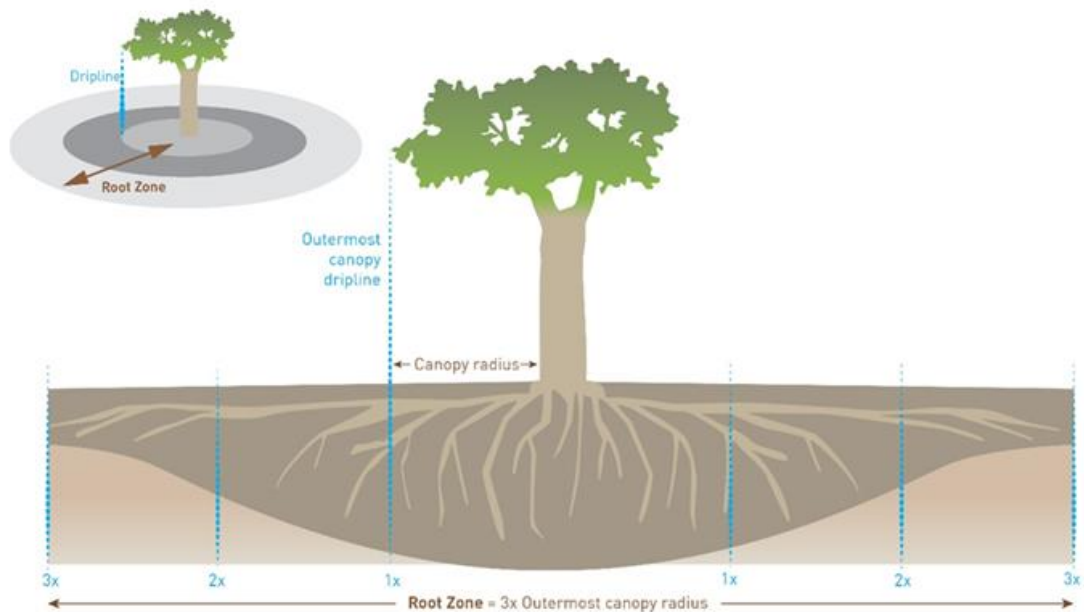


Figure 1: Kauri Root Zone is 3 times the radius of the outermost dripline.

- Select track surfaces that are either boardwalk, paved or have an aggregate and/or bark/aggregate base compared to bare ground.
- Make sure that the track route is well marked, if not, use directional signs (freestanding not fixed to a tree) so people do not accidentally go off track.
- Limit the number of catchments that event participants will transverse through.
- Choose tracks downslope from kauri, where possible.

Useful Resource

What	Where
Find out where tracks are closed	https://www.kauridieback.co.nz/track-closures/

6.1.4 Weather conditions

Key Message - 'Avoid wet conditions'

- Consider the weather forecast when you are deciding the event date/s.
- Schedule the event during the dry season as the disease spreads more easily in wet and muddy conditions. Also sites that are prone to flooding or ponding should be avoided where possible.
- Dry conditions will also make cleaning easier by preventing footwear and equipment becoming muddy.
- Plan contingencies, if wet weather prevents or delays staging the event.

6.1.5 Hygiene Stations

Key Messages – ‘Arrive Clean, Leave Clean’ and ‘Shrub, Spray and Stay’

- The installation of appropriate and effective hygiene stations at the entry and exit points of kauri forest tracks is a critical mitigation tool to prevent spread of contaminated soil.
- Determine whether the track route has existing hygiene stations. Existing hygiene stations must be used and used correctly by all event participants.
- Consider how you will manage the volume of traffic of participants through a hygiene station. Reducing waiting times of participants accessing a station is desirable without compromising the time required to thoroughly clean footwear.
- If hygiene stations are not present, discuss with the local authority your route and whether temporary hygiene stations should be used.
- If a temporary station is required, it must be functional, effective and used correctly. Suitable locations; the number of stations required (pending on location and number of participants); and the type of temporary hygiene station to be used for the event, can be discussed with the local authority where applicable.
- See Appendix 2 for examples of temporary hygiene stations and guidelines around setting one up.

6.2 Preparation

6.2.1 Event participants and visitors

Key Message – ‘Arrive Clean, Leave Clean’

- Inform your audience as early as possible that they should be prepared for kauri dieback hygiene measures before, during and after the event.
- Consider the behaviour profile of participants prior to the event, and tailor messaging to minimise any potential areas of non-compliance.
- It is important that participants are aware of the ‘Arrive Clean’ message that their footwear, equipment and vehicles must be clean of soil (i.e. soil-free) before arriving at the event. Prompt and remind participants a few days before the event.
- This information could be made available on the home page of your event website as well as including it on the registration form and in any other information media used to communicate with event participants.
- Contact the local authority for further advice on raising awareness, if needed.

Useful Awareness Resources

What	Where
General Hygiene Information	https://www.kauridieback.co.nz/media/1857/2018-kauridieback-hygiene-procedures.pdf https://www.kauridieback.co.nz/media/1750/kd012-2018-kauridieback-a3-posters-english.pdf
Specific Hygiene – Walkers and Runners	https://www.kauridieback.co.nz/media/1450/kauridieback-bpg-walkers-runners-fs-portrait-25_7_17.pdf
Specific Hygiene – Trail Biking	https://www.kauridieback.co.nz/media/1449/kauridieback-bpg-mountainbikers-fs-portrait-25_7_17.pdf
Specific Hygiene – Dogs	https://www.kauridieback.co.nz/media/1451/kauridieback-dog-walkers-fs-portrait-25_7_17.pdf

6.2.2 Resource Acquisition

- Once hygiene measures have been identified during the planning stages, the necessary equipment (e.g. signage, brushes, soak disinfectant mats, containers) will need to be sourced well in advance of the event.
- The quantity of consumables (e.g. sterigene and water) must be sufficient to cater for the number of participants.

Useful Resources

What	Where
Sterigene Supplies	https://store.chubb.co.nz/11-48/product/first-aid-kits-and-disinfectant https://www.kauridieback.co.nz/media/1391/sterigene-msds-ea.pdf
Signage examples	https://www.kauridieback.co.nz/media/1749/kd003-2018-kd-interpretive-sign.pdf https://www.kauridieback.co.nz/media/1750/kd012-2018-kauridieback-a3-posters-english.pdf

7.0 During the event

7.1 Set-up

- All equipment is set up properly, in the right location and available prior to opening.
- Staging event and car parking are in suitable areas.
- Hygiene stations are checked regularly to make sure they are fit for use and topped up with Sterigene solution if needed.

7.2 Undertake a hygiene briefing to all participants and supporters

7.2.1 *Key Message – ‘Arrive Clean, Leave Clean’*

- All participants and associated equipment must arrive at the event clean and soil-free.
- Check participant’s footwear prior to the start of the event.
- Participants are strongly encouraged to clean their footwear using the hygiene stations before departing the event. Alternatively shoes and equipment can be placed in bags prior to departing and cleaned at home.

7.2.2 *Key Message – ‘Scrub and Spray’*

- Show the correct use of a hygiene station.

Steps:

1. Remove all soil from footwear using the scrubbing brush and water provided.
2. Check all soil is removed.
3. Spray footwear to disinfect AFTER soil has been removed.

7.2.3 *Key Message – Stay on track*

- Outline the importance of keeping to track and not too go off track.
- Directional signage may be installed on the route, if parts of the track are not well marked.


8.0 After the event


- 8.1 Remember to dismantle and remove any barriers, fencing and temporary cleaning stations. If any equipment was set up within a kauri root zone, or could have been contaminated by staff or participants, then it will need to be cleaned.
- 8.2 Any unused Sterigene can be used later. Diluted Sterigene solution (i.e. already mixed with water) remains effective for approximately 6 months, and the concentrate has a shelf life of 2 years (check expiry date).
- 8.3 If you need to dispose of liquid waste, please make sure that it goes to the wastewater system (sewer system) connected to a wastewater treatment plant. Liquid waste cannot go into septic tanks, or into the stormwater system.
- 8.4 If you have used a temporary cleaning station, the soil that was removed from footwear may contain kauri dieback spores. The residue in the bin must be put into a bag and disposed of as waste at a suitable landfill. Your local authority, where the event is being managed, can provide advice on a suitable landfill.

Appendix 1: Checklist

Before the Event		✓
Planning	Contact your local, regional, unitary or district council or Department of Conservation office for assistance during the planning stages of your event and whether your event requires approval. <i>e.g. site risk assessment and suitability; appropriate mitigation options; resource assistance; any permit requirements.</i>	<input type="radio"/>
Preparing	Have you ordered or purchased enough equipment and the right type of equipment for the event? <i>e.g. hygiene station equipment, signage and supplies.</i>	<input type="radio"/>
Inform	Have you informed participants adequately on the hygiene requirements for the event and the reasoning? <i>e.g. update website and registration form, mail out information, other proactive communications.</i>	<input type="radio"/>
During the Event		✓
Set up	Set up any signage, temporary hygiene stations, and appropriate staging and car parking areas.	<input type="radio"/>
Check	Check participants arrive with soil free equipment, shoes and gear.	<input type="radio"/>
Hygiene briefing	Briefings to be conducted to all participants on hygiene behavior and requirements before being allowed to start. <i>e.g. Clearly communicate all hygiene requirements to all participants during the event. All participants will also be asked to use the hygiene station properly with clear instructions on how to use it.</i>	<input type="radio"/>
After the event		✓
Dismantle	Dismantle and remove any barriers, fencing and temporary hygiene stations and signage.	<input type="radio"/>
Removal	Remove any waste water, soil removed at hygiene stations and dispose in a safe manner via wastewater system or suitable landfill.	<input type="radio"/>
Report	If permanent stations are present, report any damaged stations or stations that need maintenance to the local authority.	<input type="radio"/>

Appendix 2: Temporary Hygiene Stations

Type	Description	Guidelines
<p>Basic Set-up</p>	 <p><i>Source. Auckland Council</i></p>	<p>Location</p> <ul style="list-style-type: none"> • The location of the station shall not be within a Kauri Hygiene Area and should be obvious at track entrances with appropriate signage. • A raised dry mud free surface (for people to place their feet when they have removed footwear, or are cleaning footwear as well as cleaning tools and equipment). <p>Equipment</p> <ul style="list-style-type: none"> • Seating (bench or plastic chairs) that can be used when cleaning footwear or other materials. • To avoid cross contamination, stations shall be designed with separate brushes or cleaning grids for each direction of use. • Two sets of scrapers, putty knives, nails, etc. that can be used to extract dirt/mud (one set for each direction of passage). • Two suitably sized waterproof containment trays (or bunds) that can be used to collect scraped mud before washing and that can hold water for final cleaning of footwear and other equipment in (all activity must be able to be carried out over and within the container so that material is not flicked about). Two containers are necessary. • Two sets of brushes. (One set for each direction of travel) • Clean water. • Spray bottles with 2% Sterigene disinfectant solution. • The quantity of consumables (sterigene and water) shall be sufficient to cater for the number of participants. • Plastic bags that can be used to line the collection boxes or used to transport collected materials for disposal off site if necessary. • Hygiene Stations shall have clear instructions so that all participants are informed on how to use the station correctly.

Type	Description	Guidelines
Disinfectant Soak Mats	 <p>Source. http://disinfectionmat.com</p>	<p>Note</p> <ul style="list-style-type: none"> Approval to use soak mats MUST be sort by the land management agency in the area where the event is being held. The land management agency will decide its appropriateness as there is currently not enough information to determine whether the Kauri Dieback Programme endorses or not its use.