

Title	Carry out High Risk Site Surveillance in the urban forest environment		
Level	5	Credits	10

Purpose	People credited with this unit standard are able to: describe the classification of arborescent plants; identify and define a High Risk Site Area; identify a transect location and define the transect limits; develop a Transect Vegetation Description; carry out visual inspection of vegetation and wooden materials present in a transect; collect and package samples of suspect vegetation or wooden materials; and demonstrate knowledge of documentation required for High Risk Site Surveillance (HRSS).
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Classification	Forestry > Forest Health Surveillance
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Available grade	Achieved
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Guidance Information

1 References

Botanica's Trees and Shrubs (2001). Auckland: Random House New Zealand.
The Flora of New Zealand, Volumes 1-4 published by the Botany Division, Department of Scientific and Industrial Research, and Volume 5 published by Manaaki Whenua Press, available at <http://floraseries.landcareresearch.co.nz>.

2 For the purpose of this unit standard, herbaceous vegetation is excluded from the visual inspection unless specifically included by a special instruction or direction from the Technical Liaison.

3 Definitions

Arborescent – trees and other woody vegetation.

BNZ Standard refers to the MPI Biosecurity New Zealand document *Standard for High Risk Site Surveillance (HRSS)* refers to the methods and procedures of HRSS, and includes the classification of detections as Primary, Secondary, or Significant.

Buffer – the expansion of a linear transect by 10 metres width and length in each direction, so that an 80 metre long transect becomes 100 metres long with a width of 20 metres.

Crosby Region – ecological region defined by Crosby et al for the purposes of recording specimen localities in New Zealand.

Diagnostic laboratory – the laboratory nominated by MPI Biosecurity New Zealand (BNZ) to which suspect samples are submitted for diagnosis.

Discretionary surveillance – time allowed for inspectors to investigate symptoms on trees or other hosts outside the nominated inspection areas which they believe could lead to a primary detection.

High Risk Site (HRS) – areas, which, in the opinion of Biosecurity New Zealand, may contain high risk goods. High Risk Sites include Transitional Facilities, international ports, industrial sites, sites of recent eradications, sites of suspected post border incursions, and other sites where there is high risk of entry of exotic organisms into New Zealand through international trade corridors.

Primary Detection – detection of an organism new to New Zealand or new to science.

Risk Site Area (RSA) – area within an arbitrarily defined boundary in the surrounds of an identified High Risk Site.

RSA Contact form refers to a Risk Site Area Contact form designed by a MPI Biosecurity approved inspection company.

Risk Site Inspection form refers to a form designed and used by a MPI Biosecurity approved inspection company during an HRSS inspection.

Secondary Detection – detection of an organism previously detected in New Zealand but on a plant or tree species, or in a Crosby Region not previously recorded.

Significant Detection – detection of an organism previously recorded as eradicated, or subject to an eradication attempt, in a new Crosby Region, or outside of the defined area of response activity, or a new sexual or life stage record for a species.

Technical Liaison – a nominated representative of the Chief Technical Officer (Post Clearance) MPI Biosecurity New Zealand.

Transect – a rectangular polygon of varying size; based on the lineal transect between two GPS points; not shorter than 40 metres, or longer than 120 metres (when buffered); with an ideal width of 20 metres. Each transect is allocated a unique identification code and contains vegetation and/or wooden materials to be inspected for the presence of exotic organisms.

Transect Vegetation Description (TVD) – summary record of the dominant, unusual, ecologically important, or iconic vegetation present in a transect.

Transitional facility – any place approved in accordance with the Biosecurity Act 1993 (Section 39), for the purpose of inspection, storage, treatment, quarantine, holding, or destruction of uncleared goods.

Urban forest environment – groups of trees and individual trees in towns and cities, as distinct from commercial plantations and indigenous forests. The urban forest environment includes Vegetation Rich Areas (VRA) such as parks and reserves.

Vegetation Rich Area (VRA) – an area associated with a High Risk Site, known to contain a range of vegetation, e.g.: parks, reserves.

Walkthrough surveillance – an extensive survey of arborescent vegetation as inspectors move between transects. Only suspect symptoms are inspected.

Wooden materials – all wood and timber products such as seasoned timber, physical structures, wooden power poles.

Worksite procedures – documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

Outcomes and performance criteria

Outcome 1

Describe the classification of arborescent plants.

Performance criteria

- 1.1 The classification of arborescent plants is explained in accordance with the reference texts.
- 1.2 The purpose of the International Code of Botanical Nomenclature is described in accordance with the reference texts.
- 1.3 The use of the international binomial system for the naming of plants is described in accordance with the reference texts.
- 1.4 Ten arborescent plants are identified to species level in accordance with the reference texts.
- Range identification may include but is not limited to – leaf type, leaf shape, leaf margins, leaf colour, flower type, seeds, capsules, fruit type, bark.

Outcome 2

Identify and define a High Risk Site Area.

Performance criteria

- 2.1 Individual RSAs and VRAs are identified on a map and on the ground in accordance with the BNZ Standard.
- Range international airport, international seaport, transitional facility, non-port cluster.
- 2.2 The map system for High Risk Site Surveillance activities is explained in accordance with worksite procedures.
- Range Overview Maps, Primary Detection Area maps.
- 2.3 Prioritising rules for High Risk Site Surveillance activities are described in accordance with worksite procedures.
- Range review rule, transect rule.
- 2.4 RSA boundaries and transects are identified in accordance with worksite procedures.

Outcome 3

Identify a transect location and define the transect limits.

Performance criteria

- 3.1 The Global Positioning System (GPS) is used to establish the location of the start point and end point, and any required intermediate point, of an HRSS linear transect in accordance with worksite procedures.
- Range starter transect, landmarks, transect direction, GPS coordinates.
- 3.2 The unique alphanumeric code applied to the individual transect is identified in accordance with worksite procedures.
- Range Crosby Region, site identifier, integer suffix.
- 3.3 A linear transect is defined using GPS start and end points in accordance with worksite procedures.
- 3.4 The buffered boundaries of the individual transect are determined in accordance with worksite procedures.
- 3.5 The processes of relocating an existing transect are described in accordance with worksite procedures.
- 3.6 The processes of extending or reducing the length of an existing transect are described in accordance with worksite procedures.
- 3.7 The rationale for, and process of, building a new transect are described and the details entered into an HRSS mobile in accordance with worksite procedures.
- 3.8 A site access score indicating the physical ease of access to the vegetation present in a transect for inspection is entered into an HRSS mobile in accordance with worksite procedures.

Outcome 4

Develop a Transect Vegetation Description.

Performance criteria

- 4.1 The requirements of a Transect Vegetation Description (TVD) are described in accordance with worksite procedures.
- Range identification to species level, count per species, acceptable margin of error.
- 4.2 Information from a transect is entered into HRSS mobile in accordance with worksite procedures.
- Range dominant, unusual, ecologically important, iconic.
- 4.3 A TVD access score reflecting the accessibility of the vegetation present in a transect is identified in accordance with worksite procedures.

Outcome 5

Carry out visual inspection of vegetation and wooden materials present in a transect.

Performance criteria

- 5.1 The focus of HRSS inspections is identified and described in accordance with worksite procedures.
- Range Primary detection, Secondary detection, Significant detection.
- 5.2 Vegetation present in a transect is inspected in accordance with the BNZ Standard and worksite procedures.
- Range arborescent, herbaceous (as appropriate).
- 5.3 Wooden materials present in a transect are inspected in accordance with the BNZ Standard and worksite procedures.
- Range wooden posts, wooden poles, physical structures, timber products.
- 5.4 Walkthrough surveillance is used between transects in accordance with the walkthrough instructions described in the worksite procedures.
- 5.5 Discretionary surveillance is carried out in accordance with the BNZ Standard.
- 5.6 Additional requirements of special instructions issued by the Technical Liaison are actioned in accordance with the BNZ Standard.

Outcome 6

Collect and package samples of suspect vegetation or wooden materials.

Performance criteria

- 6.1 Suspect pathology samples are collected and packaged in accordance with the directions of the diagnostic laboratory.
- 6.2 Suspect entomology samples are prepared for dispatch to the diagnostic laboratory with a sample submission form, including a GPS position, in accordance with HRSS procedures and worksite procedures.
- 6.3 The special provisions for samples suspected of being new to New Zealand are described in accordance with HRSS procedures and worksite procedures.

Outcome 7

Demonstrate knowledge of documentation required for High Risk Site Surveillance (HRSS).

Performance criteria

- 7.1 The requirement for personal photographic identification while engaged in HRSS is explained in accordance with worksite procedures.
- 7.2 The purpose of an HRSS residential site visit card is described in accordance with worksite procedures.
- 7.3 The purpose of the RSA contact form is described in accordance with worksite procedures.
- 7.4 A Risk Site Inspection form is completed and submitted for each Risk Site in accordance with worksite procedures.

Planned review date	31 December 2028
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 July 2006	31 December 2017
Review	2	24 August 2007	31 December 2017
Review	3	17 September 2010	31 December 2017
Review	4	10 December 2015	N/A
Rollover and Revision	5	28 May 2020	N/A
Rollover	6	26 April 2024	N/A

Consent and Moderation Requirements (CMR) reference	0173
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Muka Tangata - People, Food and Fibre Workforce Development Council qualifications@mukatangata.nz if you wish to suggest changes to the content of this unit standard.