

Data Collection Form for the Wilding Conifer Information System

Data to be Collected by Contractors

April 2018



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1 Introduction

This form enables a contractor, who carries out control and survey work for operations, to ensure all required information is collected. The Wilding Conifer Information System captures data to communicate the completion of control work, surveys of infestations, and an infestation's attributes. A contractor must capture the area work took place (section 2) as well as corresponding attributes (section 3).

2 Area Capture

2.1 Record the Spatial Extent

The spatial extent of an infestation or activity needs to be recorded. This is done from recording track logs, GPS points or by drawing the area on a map. When recording area with track logs or GPS points, they should be converted into polygons and contain the attributes for the related layer e.g. activity attributes for an area that has been controlled.

2.1.1 Activity

2.1.1.1 CONTROL

Control activities should be converted into polygons for WCIS. If processing data outside WCIS, the conversion should utilise a 'buffer' followed by a 'union' with 'no gaps allowed' unticked. Different control techniques should have different buffer distances, such as stated below.

Control Technique	Buffer Distance (m)
Boom Spray	20
Ground Based	20
Aerial Basal Barking (ABBA)	50-100

2.1.1.2 BOOM SPRAY CONVERSION

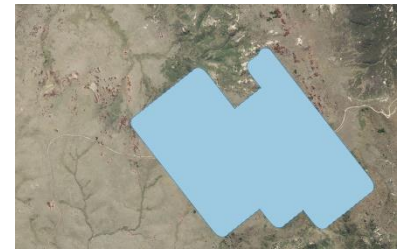
Refer to the pictures below for visual guidance on converting Boom Spray track logs into polygons. Note that the tail end of the flight path, that indicates travelling to/from the control site, has been cut off and isn't included in the polygon.



Flight Path



Flight Path processed into a polygon using a buffer and union tool so there are no gaps when an area is fully enclosed



Resulting Polygon stored in WCIS

2.1.1.3 ABBA CONVERSION

Refer to the pictures below for visual guidance on converting track logs from ABBA and Ground based control into polygons.



Flight Path



Flight Path processed into a polygon using a buffer and union tool so there are no gaps when an area is fully enclosed



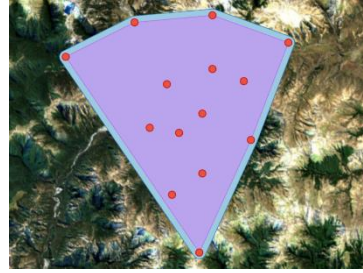
Resulting Polygon stored in WCIS

2.1.1.4 POINT CONVERSION

Refer to the pictures below for visual guidance on converting control points into polygons. Points should be grouped based on activity occurrence and technique i.e. an ABBA activity that took place in one area for sparse trees over a two day operation. It is recommended that you also update the infestation layer for the same area – use the points as accurate information on infestation density and date the infestation as captured the date prior to the control activity occurring.



Control Points



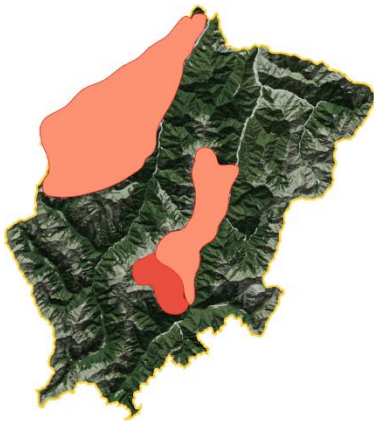
Control Points processed into a polygon using a 'minimum bounding geometry' (convex hull) and buffer tool



Resulting Polygon stored in WCIS

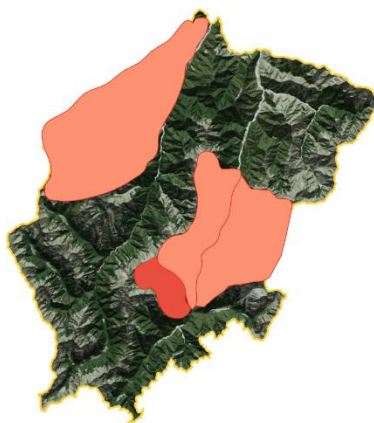
2.1.2 Infestation

When out in the field, wilding conifer infestations should be captured. A polygon encompassing the area infested and its characteristics should be added into WCIS. Each polygon should include a stand of wilding conifers of the same species and density. When density or species change, a separate polygon should be created. Overtime, these infestation characteristics (attributes) need to be updated.



Infestations

- Capture the area infested
- Record infestation features such as species and density
- Enter an infestation into WCIS prior to control commencing
- Keeping infestation data up to date will assist in planning operations, seeing the efficacy of control work and obtaining programme funding



Update Infestation(s)

- Before a control activity is carried out
- After a survey of the area occurs
- Update as frequently as possible to reflect change in infestation(s) over time

3 Data Collection Form

Date: ___/___/___

File Reference:

Management Unit:

Operational Area:

Recorded By:

3.1 Infestation

This layer calculates infestation density (Overall Percentage Cover). For WCIS to calculate this, the fields tagged with either orange or yellow need to be collected. Fields tagged with red are **compulsory**, fields with grey are optional or to be collected by Management Unit Managers.

FIELD NAME		DESCRIPTION	VALUE
Name	Grey	A self determined name for the infestation. You may wish to apply a naming convention to identify the location and species e.g. Cobb Valley North Douglas Fir	
Target revisit date	Grey	The date of revisiting the site, where data will again be collected to update the infestation in WCIS.	___/___/___
Species	Red	Species of wilding conifer in the infested area.	
Coning percentage	Orange	An estimate for the percentage of trees that are coning.	___%
Cultivated	Red	Whether or not the infestation is cultivated.	YES NO
Extra small	Orange	Less than 0.5m tall ➤ Typically less than 2cm diameter trunk at ground	A count of each size class of tree found in the infestation.
Small	Orange	Between 0.5m and 2m tall ➤ Typically 2-5cm diameter at ground	
Medium	Orange	Between 2m and 5m tall ➤ Typically less than 20cm diameter at 1.4m high	
Large	Orange	Greater than 5m tall ➤ Typically greater than 20cm diameter at 1.4m high	
Overall Percentage Cover (Override)	Yellow	Where it is impractical to count, or estimate, the number of trees in an infestation - manually estimate the Overall Percentage Cover.	
Comments	Grey	Any additional comments. Include date infestation was recorded	

3.2 Activity

FIELD NAME	DESCRIPTION	VALUE	
Type	<p>Whether the activity is:</p> <p>Survey if you are undertaking an operation to explore and discover infestations, without the purpose of applying control.</p> <p>Control if you are undertaking an operation to control an infestation.</p> <p>If you are carrying out a search and destroy operation, which will have elements of survey and control, then report the activity as control.</p>	SURVEY	CONTROL
Method	Either ground or aerial operation for control.	GROUND	AERIAL
Technique	The technique used to control the infestation.		
Volume (L)	The total volume of the chemical used. If not chemical was used, enter 0.	_____ L	
Lead Agency	The organisation that has commissioned the operation.		
Contractor	The contractor organisation conducting the activity. If the lead agency is carrying out the activity themselves then use the lead agencies name.		
Start Date	The date that the activity started	____/____/____	
End Date	The date that the activity was completed	____/____/____	
Total Team Hours	Total number of hours worked to complete the activity. When multiple people are involved at the same time then combine the hours for each person.		
Cost	The cost of the activity. This includes all transport, wages, materials, chemicals and any other expense incurred as part of the control or survey activity.		
Comments	Any additional comments		

3.3 Point of Interest

FIELD NAME	DESCRIPTION	VALUE	
Type	Either 'Other' or 'Hazard'. 'Hazard' for anything that may be a danger to operators in the area. 'Other' for any other purpose.	HAZARD	OTHER
Description	A description of the point of interest so that other users understand what is significant about this location.		

3.4 Chemicals

Fill out this table for each chemical used in the chemical mix for a control operation.

FIELD NAME	DESCRIPTION	VALUE				
Chemical	The name of the chemical in the mix.					
Quantity						
Measure	The liquid or solid measure of the chemical e.g. "Liquid: Millilitres per 10 litres" or "Solid: Kilograms per 10 litres".					