

Biological Control of Weeds Recovery Sheet

(Please refer to the back of this sheet for instructions)



Manaaki Whenua
Landcare Research

Site name:
Organisation:
Observer(s):

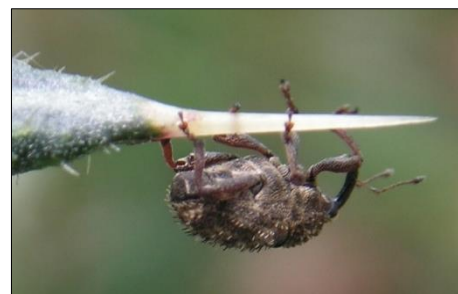
Date:
Time of day:

Current weather conditions

- 1) Sunny / Partly / Overcast / Rain
- 2) Strong wind / Light wind / Calm
- 3) Temperature (°C) < 10 / 10-15 / 15 -20/ 20 -25 / >25

Insect information

- 4) Number of: Adults:
- 5) Time spent searching (mins):
- 6) Furthest distance insect found from release point (m):
None Found / <20 / 20-50 / 50-100 / 100-300 / 300-500 / Further?
- 7) Counting damaged plants (see method overleaf):



**Nodding Thistle
Crown Weevil**

	No. counted	No. damaged
Thistles at release point		
20 m from release point		
50 m from release point		

Weed Information

- 8) Most of the thistles are: Rosettes / Bolting / Flowering / Seeding
- 9) Thistles density at the release point: Isolated patches / Widespread
- 10) Number of thistle stems/m²: <1 / 1-5 / 5-10 / >10?
- 11) Photos taken: Yes / No
- 12) Photo compass bearing:
- 13) GPS for photopoint:
- 14) Photo file name:

Comments

- 15) Have any of the following happened to the site recently?
Mowing / Spraying / Grazing / Flood / Drought / Fire / Other?
- 16) Please use the back of this sheet to record any further observations or comments about the site.

INSTRUCTIONS FOR FILLING OUT THIS SHEET

(Please note that it is important to complete these questions in order)

Where choices are given mark the correct answer by bolding or highlighting it or by deleting the other options.

- **Site Name** – please be consistent in the use of site names to prevent confusion.
- **Organisation** – the name of your organisation.
- **Observer(s)** – the names of people who helped with this recovery not onlookers.

Current Weather Conditions

1-3) Choose the words that best describe the weather conditions.

Insect information

- 4) Adults can be difficult to find but you may be able to see small greyish-brown weevils all year round.
- 5) Record how long you spent actively searching.
- 6) If you have time to look further afield we would like to know how far away from the release point you can find adults or larval damage.
- 7) Larval damage may be observed all year round but is easiest to see during winter and spring. Stand at the release point. Examine all the rosettes in a 2 m radius. Record how many thistles you counted and then how many of these show signs of larval damage (black frass at the centre of the crown and often soft dandelion-like leaves). Repeat approximately 20 and 50 m away in the direction where you can see the most thistles. If there aren't any thistles at the release point, 20 or 50m away, check any patches of thistles you can find within 50 m. Now look further afield and record how far away you can find damaged thistles.

Weed Information

- 8) Record the most obvious life stage.
- 9) Do the thistles at the site occur in discrete patches or do they cover the entire area?
- 10) Estimate the density of thistle stems in the 50 m surrounding the release point.
- 11) Please indicate if you have taken photos.
- 12-14) If you have taken photos please record the photo compass bearing, the GPS point, the file name for the photo and attach hard copies to this form if you can.

Comments

- 15) Please indicate if any of these important events have happened to the site.
- 16) Tell us any other important information we should know about the site (e.g. whether you have been harvesting the insect for release at new sites). Use the top of this page if you need extra space.