Biological Control of Weeds Recovery Sheet

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



Site name: Date:

Organisation: Time of day:

Observer(s):

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



Green Thistle Beetle

Insect information

- 4) Number of: Adults: Eggs:
- 5) Time spent searching (min):
- 6) Furthest distance insect found from release point (m):

None Found / <20 / 20-50 / 50-100 / 100-300 / 300-500 / Further?

7) Greatest percentage of defoliation observed on a single shoot (%):

<10 / 10-25 / 25-50 / 50-75 / 75-90 / >90

8) Overall damage to foliage: None / Occasional / Patchy / Heavy / Severe

Weed Information

- 9) Most of the thistles are: Rosettes / Bolting / Flowering / Seeding
- 10) Size of weed infestation: Minor (<100m²) / Moderate (>100m²) / Major (as far as eye can see)
- 11) Percentage cover at densest accessible point (%):
- 12) Thistles density at the release point: Isolated patches / Widespread
- 13) Number of thistle stems/ m^2 : <5 / 5-10 / 10-20 / >20?
- 14) Photos taken: Yes / No 15) Photo compass bearing:
- 16) GPS for photopoint: 17) Photo file name:

Comments

- 18) Is your site a hill-country: Yes / No
- 19) Have any of the following happened to the site recently?

```
Mowing / Spraying / Grazing / Flood / Drought / Fire / Other?
```

20) Please record any further observations or comments about the site, including any checks for non-target damage.

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) You may be able to see this insect from spring until autumn. The adult beetles are oval and green in colour and blend in well with the leaves. The larvae are creamy-white and have prominent lateral spines and a forked tail. They have a protective covering of moulted skins and excrement on their backs. Groups of eggs are laid in brownish cases on the undersides of the leaves towards the base of plants. Adults and larvae make windows in the leaves and larvae can completely defoliate plants.
- 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 larvae.
- 7) Record the greatest defoliation (i.e. removal of green tissue) you can see on a single shoot. Both adults and larvae are feeding on the leaves, creating a 'skeletonising' effect.
- 8) Record the amount of feeding damage seen overall at the site: occasional (signs of damage present but not common), patchy (signs of damage are present but are variable throughout the site, some plants may have no damage, and others may have heavy damage but this would be rare), heavy (the majority of plants are showing signs of damage and at least some plants are beginning to show signs of severe defoliation/damage or stress), and severe (severe damage is obvious and widespread).

Weed Information

- 9) Record the most obvious life stage.
- 10) Estimate and record the approximate size of the infestation e.g. 100 m x 100 m or 1 ha etc.
- 11) Estimate the average percentage cover of the weed over the whole infestation.
- 12) Do the thistles at the site occur in discrete patches or do they cover the entire area?
- 13) Estimate the density of thistle stems in the 50 m surrounding the release point.
- 14) Please indicate if you have taken photos.
- 15-17) 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

- 18) Would you classify the site as hill-country? (e.g. can you drive a tractor on the land to spray).
- 19) Please indicate if any of these important events have happened to the site.
- 20) Tell us any other important information we should know about the site (e.g. whether you have been harvesting the beetles for release at new sites). Use the top of this page if you need extra space.