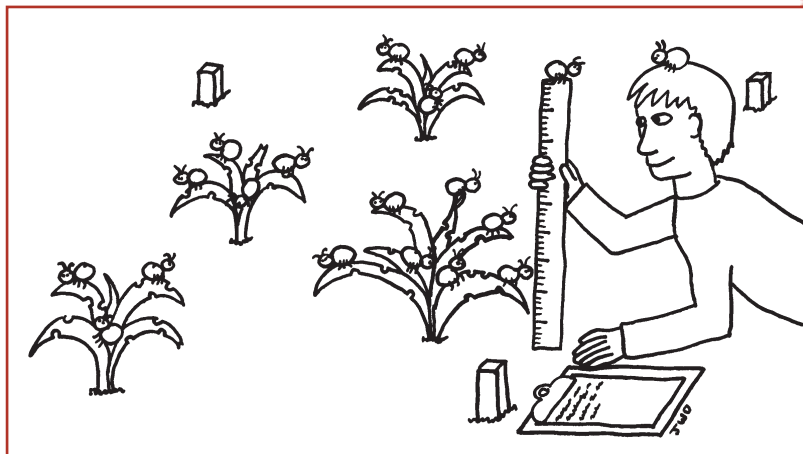


HOW TO RELEASE BIOCONTROL AGENTS IN A WAY THAT FACILITATES ASSESSMENT

Assessing the impact of biocontrol agents has often been done poorly in the past because releases have not been set up with impact assessment in mind and attempting to do this retrospectively can be difficult and expensive. However, there are some things that can be done at release time that will make it much easier to undertake effective impact assessment of biocontrol agents in the future. These are outlined below. Remember to determine suitable release sites well in advance!



1. Choose two plots at each release site. The distance between them can be variable, however, we recommend a minimum of 500m and further if the agent is expected to be highly mobile. It is essential for scientifically rigorous monitoring that the plots are randomly assigned their status as 'release' or 'control', and the easiest way to do this is by tossing a coin. If you are unhappy about releasing at the site the coin 'chooses', then it suggests that the sites are not similar enough and may not be a good choice for a paired-plot monitoring study. If it is not feasible to set up plots in this way then don't worry about it and go ahead and release at one site as per usual.
2. Mark the centre of the release and control plots with something durable and not easily dislodged (e.g. fibreglass rod, steel peg) and take a GPS reading. A written description of the site or a map is also useful.

3. Take digital photographs as appropriate. There are 2 types of photos that may be valuable in future:
 - Record photos** which can be taken at an oblique angle with no strict orientation or boundary which provide a visual record mainly for presentations etc. A printed version of this 'before' shot can be useful for correctly orienting subsequent 'after' shots.
 - Assessment photos** which have strict orientation (usually vertical) and boundaries (i.e. a quadrat or corner pegs) and provide an opportunity to do some analysis for some species if done in the same way at several sites. Landcare Research staff would need to take these photos and analyse them using special software. Contact Landcare Research if you are interested in exploring this further.
4. Don't forget to fill out a Biological Control of Weeds Release Sheet for the release and one for the control and send them back to us.

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