

Report 11.535
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Committee Environmental Wellbeing Committee
Author Megan Banks, Biosecurity Officer (Pest Plants)

Biological control - opportunities for community involvement

1. Purpose

To inform the Committee of opportunities for community engagement and participation in biological control practices.

2. The decision-making process and significance

No decision is being sought in this report.

3. Background

Biological control (biocontrol) has significant potential as a self-sustaining, integrative and environmentally friendly method of pest plant control. The GW Biosecurity Department contributes \$50,000 annually to the National Biocontrol Collective (Collective). The Collective consists of 15 key regional councils and central government departments, which are the end users of biological control for mitigating impacts of wide spread pest plant species. The total annual budget of the collective of around \$650,000 is administered by Landcare Research (LCR) for research and development into potential and existing biocontrol agents. LCR works closely with international experts and research organisations and follow the direction set by the Collective. In addition to the annual contribution GW invests \$10-15,000 annually to purchase specific biocontrol agents for release in the region. These agents are purchased directly from LCR and released at suitable sites in the region. Biocontrol agents are also sourced from the neighbouring regions for free.

4. Opportunity for community engagement and participation

The long term success of the programme would be significantly improved with community and primary industry support. The community and individuals can contribute to the programmes through:

4.1 Purchasing agents for release

LCR mass rears biological control agents for sale to interested parties across New Zealand. GW could facilitate the purchase of these species by individuals and community groups who are interested in their release and propagation.

These could, for example, include:

- Dung beetles for pastoral farmers and land managers to improve pasture and water quality
- Tradescantia agents for areas of high biodiversity values such as QEII National Trust covenants.

4.2 Harvest and transfer of established biocontrol agents within the Wellington region

There are a number of established biocontrol agents within the Wellington region which have viable populations for harvest and release at other sites. This is a time consuming and repetitive process that requires specific skills. GW staff could train community groups such as Forest and Bird to harvest, transport and distribute the species, assisting and expanding the current release programme.

These could include:

- Green thistle beetles from the northern Wairarapa
- Ragwort agents such as flea beetle and cinnabar moth from established sites across the region
- Broom psyllid from the Wairarapa.

4.3 Releasing agents obtained from established sites outside of the region

A number of successful biocontrol agents are established elsewhere in New Zealand that could be harvested and distributed by interested parties within the Wellington region. GW could assist with education on where and how these species can be accessed.

Potential species from other parts of New Zealand include:

- Ragwort plume moth from Horizons Regional Council
- Woolly nightshade lacebug from Bay of Plenty Regional Council.

4.4 Rearing agents for release

Some biocontrol agents can be easily reared in preparation for release. Interested individuals or community groups could be encouraged and assisted to establish breeding programmes to create a local supply.

Potential desirable species include:

- Tradescantia leaf beetle
- Green thistle beetle
- Scotch thistle gall fly
- Gorse pod moth
- Broom psyllid

4.5 Field days and seminars

The community responds well to leaders in their field of interest promoting new ideas. Select members of the farming community or local environmental groups could be approached to promote the release of appropriate agents on their properties. This could raise awareness of the potential of biocontrol and assist the community with the collection and transfer of agents.

4.6 Community financial contributions

Corporate organisations are often looking for environmental projects to sponsor or promote. These have traditionally been planting projects like the Honda Tree Fund, but could easily be expanded into the area of biocontrol.

High profile sites like the lowland forest remnant at the Tauherenikau racecourse may attract corporate sponsorship. The release of tradescantia beetle would assist with the management of tradescantia in this important ecological site.

4.7 Involving schools and education programmes

Schools could be involved with the breeding of agents as part of an environmental and agricultural educational programme. The mass rearing of selected biocontrol agents could be a suitable project for local schools, which would provide a valuable source of biocontrol species for later release. This could potentially link with the existing successful EnviroSchools programme.

Potential examples include:

- Dung beetles. This has wide-reaching potential to involve students, the farming community and GW. Students could access farmland to collect dung, propagate the beetles in the classroom and release them back into the original collection site.

5. Next steps

Biosecurity staff will liaise with landowners, interest groups, stakeholder organisations and territorial authorities to gauge future interest in biocontrol activities under the options covered in section 4 above. Precedents for more active involvement have already occurred with some territorial authorities indicating financial support for purchasing biocontrol agents.

A scoping exercise will occur after the liaison phase has been completed to identify what resources will be required from GW to implement greater public participation in biocontrol agent management.

6. Recommendations

That the Committee:

1. ***Receives the report.***
2. ***Notes the content of the report.***
3. ***Endorses the community engagement and participation initiatives set out in section 4 of the report to complement biological control practices.***

Report prepared by:

Report approved by:

Report approved by:

Megan Banks
Biosecurity Officer, Pest
Plants

Davor Bejakovich
Manager, Biosecurity

Wayne O'Donnell
General Manager, Catchment
Management