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TASMANIAN COMMUNITY FOREST AGREEMENT RESEARCH INTO ALTERNATIVES TO 1080

NEWSLETTER 12

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Grants Program Update

The CRC for Forestry's possum aversion trial have reported this month that although everything else is going well, slow seedling growth due to cold weather has delayed the trial by up to two months, and the completion date has subsequently been pushed back from October to December.

Rural Development Services have circulated their survey design into landholder attitudes to the use of 1080 to the Technical Advisory Panel for review and it is currently being tested with a small group of respondents.

We expect to send the final mailout to all farmers who have been issued a 1080 poison permit since July 1996 (about 1,350 people) in the next week.

This survey will support the 90 face-to-face surveys with users and non-users of 1080 to provide a solid understanding of the drivers behind the changing role of 1080 in native animal browsing management.

Dr Edwards has been sending in some examples of his night-time filming and a couple of images are shown below.

Large-area infra-red monitoring at night has allowed him to gain a real understanding of how the different animals are reacting to his traps.



Figure 1 Video Image of Ivo Edwards Multi Animal Trap. Distance 30-40 metres from camera. There are 6 rufous wallabies in trap.

Dr Edward's infra-red lights are easily able to illuminate an area up to 70 metres away (the technical specifications state up to 200 metres). We're hoping to utilise a similar lighting technology combined with the use of several video cameras to observe animal responses to field trials of repellents in research that will start in early 2008 (see repellents section below).



Figure 2 Example of illumination - Mersey Box Trap at 70 metres.

Professor Norton's team held a workshop on September 17 to discuss their research program and objectives for developing decision support tools to quantify and monitor the impact of native animals on pasture.

There appeared to be strong support for the proposed work from the participants.

The Humane Herbivore Control Project, which is examining the use of Feratox™, is organising meetings with groups throughout Tasmania for the first week of October. A number of experts will be available at these meetings to discuss the use of Feratox™, explain its use in New Zealand and to get feedback on its potential acceptability as an alternative to 1080 here in Tasmania.

Tasmanian Plantation Management Services are expecting to complete their review of the use of night scopes and provide a recommendation on the proposed night scope to be used in their trials for consideration by the Technical Advisory Panel by the end of October.

Quarterly status reports for all deeds are due at the end of September, with a Technical Advisory Panel meeting scheduled for 10 October to review progress.

Project Officer Update

The fourth and final week of trapping has been completed in the North-East (see previous newsletter for more details of this trial).

Over 11 nights of trapping a total of 376 adult rufous wallabies and 303 adult brushtail possums have been captured at the three sites.

The Project Officers have now finished trapping, and are in the process of monitoring pasture mass at both treatment and control sites on all properties, conducting after-treatment spotlighting, and re-measuring scat plots.

Graham Hall will be undertaking analysis of the trapping trial over the next month, but some preliminary observations he's made include:

- Trapping success for wallabies increased over time for low and medium trapping intensity sites, and only declined after four weeks of trapping at high trap numbers;
- Possum trap success rate declined over time for all trapping intensities;
- A high number of female wallabies (89%) and possums (88%) at all sites were carrying pouch young ; and
- There has been some failure of trap components, such as springs and slides, and a small number of traps have failed (see figure 3) because large animals (eg. Forester kangaroos and wombats) appear to have damaged components.



Figure 3 A Mersey Box trap destroyed by a trapped adult wombat attempting to dig its way out. Unlike the trap, the wombat was uninjured, though slightly put out.

Funds Allocation Review

The Implementation Committee requested a review of the Program's expenditure at their last meeting, and a forward plan for the allocation of the remaining funds.

This review was completed and approved in August. Approximately \$1.2m of unallocated funds were identified after expenditure on the existing deeds, Project Officer program, communication strategy and project management costs were accounted for.

On reviewing the areas of the *Strategic Plan* not currently being addressed, the Implementation Committee have agreed, in principle, to allocate this funding to the following areas:

- Demonstration and capture of knowledge on best practice native-animal proof fencing;
- Investigations into repellents and tree guards;
- Understanding of wallaby home-range movement in response to lethal controls;
- Examination of animal density and browsing damage relationships on King Island; and
- A trial of the use of performance-based shooting (subject to stakeholder support for Landcare Research’s recommendations on how this may be done).

Negotiations are already underway for some of these activities and targeted deed funding will be offered for other areas.

New Funding Offer: Research into Home Range Utilisation and Movement

The first targeted funding offer will be for researchers interested in undertaking research into wallaby home-range movement in response to lethal controls.

Specifically, the Implementation Committee are seeking research proposals that will:

1. improve our understanding of home range utilisation and home range shift of Bennetts and Rufous

Wallabies including pasture and bushland utilisation and differences within the species due to season, age and sex;

2. examine home range shifts in response to a vacuum created by a lethal control event similar to a 1080 poisoning, intensive shooting or trapping where a large portion of a local population is removed.

A document containing more detailed information on this funding offer, including the grants process, more details on the desired objectives and outcomes, the application form and selection criteria will soon be available from <http://www.daff.gov.au/1080>, or by contacting the Project Manager. Applications close Friday 26 October.

Repellents

Negotiations are well advanced for the first stage of captive trials of a number of repellents. Whilst no final agreements are yet in place we’re hopeful that these trials will commence as early as November.

Three separate, but related, trials are being negotiated. These are:

1. A trial of repellent combinations to see if cross-species effectiveness can be improved. This research will be conducted in New Zealand by Connovation using a captive population of Brushtail possums and Bennetts wallabies.
2. Drs Mick and Helen Statham will be trialing the effectiveness of odour-based repellents (extracts from dingo urine and tiger and Tasmanian devil faeces) against Bennetts and Rufous wallabies in their 0.8ha enclosure at Prospect, Launceston. Two approaches will be tested. Firstly, a ‘fear’ test to see if the animals will pass through a ‘gate’ protected with a repellent to get to a preferred food source (eg. carrots); and secondly a feeding test to see if the animals will take food from feeders spread

throughout their compound with different repellents applied or located nearby.

3. Negotiations are underway with Dr Julianne O'Reilly Wapstra of the CRC for Forestry to carry out similar fear and aversion tests for Brushtail possums with their captive population.

The last two trials are also subject to our being able to source suitable samples of the different repellents.

The results of these three trials will be reviewed by the Technical Advisory Panel and any promising repellents will be field tested with plantation seedlings in early to mid-2008.

The field trial is also planned to include an evaluation of Sen-Tree™ and onion-bag tree guards as positive controls.

King Island Program

In the June 2007 (edition 9) newsletter it was reported that the Implementation Committee initiated a three-month feasibility study into conducting a research program into the effectiveness of commercial harvesting as a mechanism to control browsing damage on King Island.

Following the findings of this review, a phased research program is now being implemented.

The first phase, planned for early 2008, will involve survey work to determine population density estimates of Bennett's Wallabies across King Island on 'open' areas, principally pasture lands, and the relationship between population density and pasture loss.

The second phase will involve the evaluation of commercial harvesting or professional culling activities in reducing local wallaby populations and pasture loss.

Funding for this first phase is currently being offered by grant deed, and interested parties can contact the Project

Manager for more information on this offer.

Involvement in Science Week

Earlier this year, Louisa Stewart, a grade 6 student at Waimea Primary School did a research project into 1080 Poison.

At the end of her Project she invited the Australian Government Minister for Fisheries, Forestry and Conservation, Senator the Hon Eric Abetz, to come and speak to her class about the use of 1080.

Dr Dave De Little, the Chair of the Technical Advisory Panel, followed up on this visit to the school as part of Science Week in August, to talk to students about the important role that scientists play in investigating the possible alternatives to 1080 poison.

Louisa's paper was very well researched, and it was particularly interesting to read the survey of students and teachers attitudes to the use of 1080.

The students in her class kept David on his toes with plenty of challenging and well thought-out questions.

Overall, the presentation was a great success, and hopefully a few more students were encouraged to consider science as a future career.



Figure 4 From left to right: Dave De Little, Louisa Stewart and John Dawson

Our thanks go out to Andrew Walsh of Forestry Tasmania and others who allowed us to use some of their audio-visuals and to talk about their research.