The Running Postman

Newsletter of the Private Land Conservation Program

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Building partnerships with landowners for the sustainable management and conservation of natural values across the landscape.

Department of
Primary Industries, Parks, Water and Environment

Tasmanian Government

Manager's **message** – December 2015

One of the most rewarding parts about managing and caring for a bush block is seeing change occur. On our little place near Exeter, the plantings of the past few years are already forming landscape linkages to nearby bushland and providing renewed habitat for burrowing crayfish, small woodland birds and bandicoots. Wandering about and looking for scats, feathers, the occasional burst of a stubble quail or the shadow of a gliding goshawk has been really encouraging, as many readers would agree.

This edition of the Running Postman provides some insight into tools and thoughts on ways to observe recovery and habitation in your patches of bush. Scats are a mysterious field of study, but they are as intuitive as footprints for identifying wildlife – once you get your eye in of course. And as always, the simple bird bath in the garden can be a wonderful way to create a focal spot to observe avian visitors to your place.

The Department also uses and encourages the systematic recording of habitat condition, by way of the Vegetation Condition Assessments. We can track the change over time in conservation reserves and use this information to help land managers make decisions about future activities. The data collected also provides good evidence of the value of private conservation reserves at the local, state and national levels.

I take my hat off yet again to the dedicated members of Conservation Landholders Tasmania for their inspirational work in sharing ideas and fostering discussions amongst reserve owners. The meeting at Campbell Town earlier in the year generated some excellent thinking. I encourage anybody with an interest to join the group and participate in upcoming meetings or field days.

Lastly I can hardly ignore the amazing achievement of Jane Hutchinson, Tasmanian of the Year and CEO of the Tasmanian Land Conservancy, what well deserved recognition not just for an amazing and generous individual, but also a recognition of the importance of nature conservation on private land as an integral part of effort to protect important natural areas.

I wish all a festive and peaceful summer and the best of times in 2016.

Peter Voller,
Manager, Natural Values
Conservation Branch

In this **Issue**

The Running Postman *is printed on Monza Satin recycled paper, derived from sustainable forests, elemental chlorine free pulp and certified environmental systems.*

On the cover: Silvereyes enjoying a communal bath. Photo: Stuart Smith. Design and layout: Land Tasmania Design Unit, DPIPWE.

Stu King rides off to new fields

Since the last edition of the Running Postman, our intrepid northern stewardship officer, Stu King has left the Department, choosing instead to look for new opportunities and to enjoy the freedom of the open road for a while. As some of you may know, Stu has three great passions, motorcycles, his children and motorcycles.

For the past four years in his spare time Stu has been deeply engrossed in the reengineering of a 1980's BMW enduro bike to become a state-of –the –art desert racer. The resulting heavily modified R 100 GS has had just about every nut and bolt replaced while the new engine, gearbox, suspension, seat and fuel tank have been built very much with Stu at the designers table, creating a bike he can take anywhere in the world – any time he wants to.

As he has tracked through this journey of motorcycling invention and creation, Stu also reengaged with his interest in creative writing, oddly about motorcycles. He now has a web log (a blog) and he writes for a national motorcycle magazine.

After leaving the Department earlier this year, he had a short stint in a motorcycle store, but the shackles of long hours in retail were not for this adventurer. He is now cooling his heels and progressing thoughts of travel, and exploration of his personal capacity for new worlds.

In the 8 years he worked for the Private Land Conservation Program, Stu brought great enthusiasm and vision - seeking the highest ideals in service delivery and conservation outcomes. Stu also made great efforts to gain funding for on-ground works for covenant landowners, especially in recent years through the Landcare Tasmania and PLCP partnership "Landcare Biodiversity Grants". He always kept his eye out for opportunities which would assist landowners, even doing hands on work such as fencing at times.

His interest in wildlife and the uncanny ability to use the camera in his smartphone to capture amazing images from the bush surrounding him made those of us more office bound very envious. One such occasion was the time Stu witnessed seeing an 'echidna train' when gallantly climbing back up a hill to retrieve a camera left behind by his work mate. Of course it was great to see such beauty was contained in the conservation reserves cared for by private landholders who worked with Stu.

Stu is planning to stay around in Tasmania for the time being so it may be that you will see this keen soul on a motorcycle out enjoying the landscapes and the beauty of nature that surrounds us. We will miss his creativity, eye for the bigger picture, camaraderie and his offbeat humour.

Much of the stewardship work Stu was responsible for is now being delivered for the PLCP by staff from the Tasmanian Land Conservancy. Anna Povey and Andrew Cameron, who are based in the north of the state and Oliver Strutt who is based in the south. Contact details for Anna, Andrew and Oliver are

Anna – mobile **0498 800 611**, email **apovey@tasland.org.au**

Andrew – mobile **0417 361 998**, email **acameron@tasland.org.au**

Oliver – mobile **0407 352 479**, email **ostrutt@tasland.org.au**

Peter Voller

Photos (L to R): Echidna train Photo: Stuart King. Stu giving a helping hand with fencing on a conservation covenant. Photo: DPIPWE

Scat-watching
- a way to know your wildlife

With so many of our wildlife nocturnal and secretive, their scats (droppings/dung/faeces/poo) can be one of the best ways to know they are around. I investigate scats whenever I come across them, which does cause amusement (or bemusement) amongst my companions, until curiosity has them also looking more closely. As scataholics, we can learn more about the species which are present, and also about their diet, movements and habits.

For example, recently I discovered a spotted-tailed quoll latrine halfway up a lookout track in Trevallyn. Perhaps the abundant rocks in the area are providing a den site. Sadly, a devil latrine that I had noted on the other side of the reserve for many years no longer seems to be used.

You may be most familiar with marsupial herbivore scats, with wallaby scats densely scattered over pasture, and wombat "cubes" piled on prominent logs, rocks and paths. An ecological rule is that there are always more herbivores than carnivores in a system, and also herbivores defecate more, as they have to eat a lot of fibrous plant material to obtain the energy they need. Amongst all the marsupial poo we are blessed with in Tasmania, the "gold" is carnivore poo, or other rarer items such as regurgitated pellets of birds of prey.

There are many people more expert than me in this field, so I provide here merely a guide to get you started. A very useful references to help you on your way is "Tracks, Scats and Other Traces – a Field Guide to Australian Mammals" by Barbara Triggs. Also keep your eye out for the native scat guide 'PooFlip' which should be available early 2016.

What kind of animal?

Grab a stick, poke the scat and work out what the animal has been eating. Many animals do eat a variety of foods, but you should be able to get some idea.

Note that, just as with a dog or yourself, the look, size and consistency of scats can vary depending on an animal's diet and health.

Never handle a scat directly. You can get infections, worms or parasites from scats. It's not a good idea to deliberately smell a scat for the same reason.

Nevertheless, should you get a whiff, it can often tell you if the animal is a herbivore or a carnivore/omnivore – the latter stink more offensively. Some people can tell individual species by the smell of the scat. My dog particularly likes to sniff and then eat quoll scats, so that's a clue!

The shape and size of the scat are other obvious clues. Barbara Triggs' book has a key to scats based on these factors. As you'd imagine, the size can vary with the size of the animal – a large spotted-tailed quoll scat may be similar to a devil scat.

Shape can be a real give-away; think of the cubic shape of wombat scats. This shape is thought to help the scats stay in the prominent and precarious positions favoured by a wombat marking its territory. A wombat can excrete 80-100 pellets per night, by the way.

Mammalian herbivores

Tasmanian pademelon, Bennett's wallaby and Forester kangaroo scats tend to be variable yet similar with plant fibres and green-brown colour. There is a general trend that the smaller animals have more cylindrical scats, while the larger animals have more square, shorter (but larger overall) scats, but really it's hard to tell.

Rabbits tend to have a toilet-place so many small, round scats in one place may be a sign of their presence. Look for holes/scrapes as a clue to distinguish from sheep/deer scats.

Sheep, deer and goats deposit a mass of small pellets, sometimes clumped. These species can be hard to tell apart.

Mammalian omnivores

Scat contents – plant fibres, seeds, insect fragments, etc - can vary enormously, depending on what has been the latest meal. Omnivorous mammals include possums, bandicoots, native and introduced rodents and others.
(Do notify the **Invasive Species Hotline 1300 369 688** if you suspect a fox scat).

Brushtail possum scats are typically 2-3cm long cylinders and found below trees. **Ringtail possum** scats are generally smaller, and references say they tend to be more regular and pill-like in shape, with a granulated surface.

Mammalian carnivores

Tasmanian devil scats can be very distinctive and amazing to investigate – they often contain large pieces of bone, lots of fur and even whole digits with claws. They are often white with calcium, due to the large amount of bone they consume, and devils often have a latrine area.

Spotted-tailed quoll scats can be similar to devil scats, though usually dark brown to black, not white. They don't tend to be as large, or contain such large pieces of bone. Both species' scats may be pointed at one end, and both can be twisted, with spotted-tailed quoll scats commonly twisted so much they resemble minature intestines. Both can have a green tinge due to high protein content (Elise Dewar, pers.comm.). Quoll scats tend to have an oily, tarry texture, depending on diet.

Eastern quoll scats are often full of insect remains. They tend to be smaller than those of the larger carnivores, are less likely to contain fur and do not contain large pieces of bone. Eastern quoll scats vary more dramatically; they may be tarry from eating meat, full of seeds, or crumbly with insect remains (E Dewar, pers.comm.).

Dog scats, too, may resemble any of these species, though their diet shouldn't include wild animals as a rule.

Cats may scratch soil over their scats, but feral, especially male, cats don't necessarily do this (E Dewar, pers.comm.). Cat scats appear compact, and often in segments.

Water-rats are quite common near rivers, lakes and the ocean. Their scats may contain fish scales, shell fragments, insect casings, feathers, hair and bones. Scats may be found near water-rats' "dining tables" – usually a flat rock where they eat their meals.

Other carnivores include bats, antechinuses and dunnart, all of which eat insects and have small scats.

Echidnas have scats full of ants and soil – they tend to be very crumbly so not easy to find. Good luck finding playtpus scats – apparently they usually poo in the water, but occasionally near a burrow entrance.

Birds and reptiles

Birds' scats are generally well recognisable because of the white splash associated with the dark faeces, though it can be harder to determine which species of bird it belongs to.

Did you know that the white is actually the bird's "pee"? Birds don't have to carry around a heavy bladder full of urine, as they excrete waste nitrogen in the form of uric acid (as do reptiles). Uric acid can be excreted as crystals in a paste that doesn't need water.

Reptiles also excrete white uric acid, but as the scats tend to be small, we don't often see them. I have not seen snake scats, but the book shows them looking like small quoll scats.

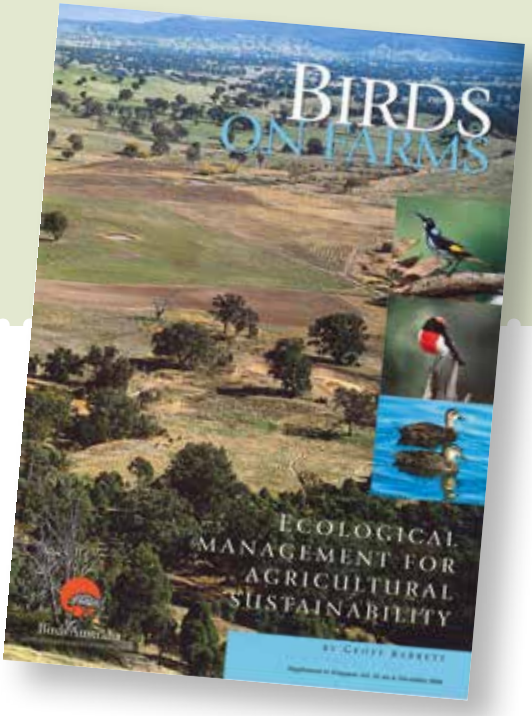
Bird pellets

Birds also regurgitate indigestible parts of a meal in the form of pellets, which can look like scats. Currawong and raven pellets full of fruit and seeds are a common sight. Birds of prey pellets may be full of feathers, fur, quite intact bones and insect parts. The pellets don't have a scat's white splash of uric acid, and they don't have the fine residue "pooey stuff" that scats have throughout. Pellets tend to be oval-shaped, tightly wrapped and with a smooth, glazed appearance due to their copious saliva coating. Remains in the pellet tend to be fairly intact, as birds don't have teeth.

Anna Povey

Photos (L to R):
Use a stick to break up a scat and work out its contents. Photo: James Hattam.
Cylindrical scats under a tree are a sure sign of possums (here Brush-tailed possums). Photo: Anna Povey.
Devil scats may contain large pieces of bone and be white with calcium. Photo: Anna Povey.
Bird pellets, probably here by magpies or tawny frogmouths, full of undigested beetle shells. Photo: Anna Povey.
Spotted-tailed quoll scats may contain small bones. Photo: Anna Povey

Keeping our **Woodland Birds**



If you are a hoarder like me, you may have kept all your 'Land for Wildlife' Newsletters dating back to the first Victorian edition in 1999! I have a box full of them and it's hard to believe their conservation messages spanning over fifteen years, are still as relevant today as they were then. One article that caught my eye was 'Birds on Farms' which summarised the findings of a five year study by Birds Australia to better understand how to keep woodland birds in the agricultural landscape (Land for Wildlife Newsletter Vol 4, No 8, 2001). This research identified 10 broad ecological principles which underpin bird diversity on the farm. Read it on the BirdLife Australia website (http://birdlife.org.au/) and see if these principles help explain the bird diversity on your property, irrespective of whether you are in an agricultural landscape or on a bush block.

1. Local native vegetation should cover at least 30% of the total farm area.

For every 10% increase in tree cover, bird diversity increases by 7% and exotic species decreased by 21%. Where more than 80% of the farm trees were local native species the diversity of woodland-dependent birds was 43% greater.

2. Re-create local conditions.

Woodland-dependent birds were 8% more diverse on farms where at least two different tree species were present and 21% more diverse where trees had regenerated naturally compared to sites where trees had been planted. Small foliage gleaning birds were 26% less diverse on farms where exotic trees had been planted instead of native trees.

3. Exclude high-impact land-uses from at least 30% of the farm area.

Bird diversity, especially ground-foraging birds, was lower on farms to which fertiliser was applied over the last five years and where ploughing had occurred over at least 25% of the area.

4. Maintain native pastures and avoid heavy grazing.

Bird diversity is re-stablished about 15 years after the removal of stock from a heavily grazed site. This increase in diversity continues, reaching a maximum diversity after about 25 years. Ground-foraging birds were 16% more diverse in sites with native pasture. Understorey birds were most diverse on farms that were never grazed and were 9% less diverse in sites that were mostly grazed.

5. Native vegetation cover should be in patches of at least 10ha and linked by strips at least 50m wide.

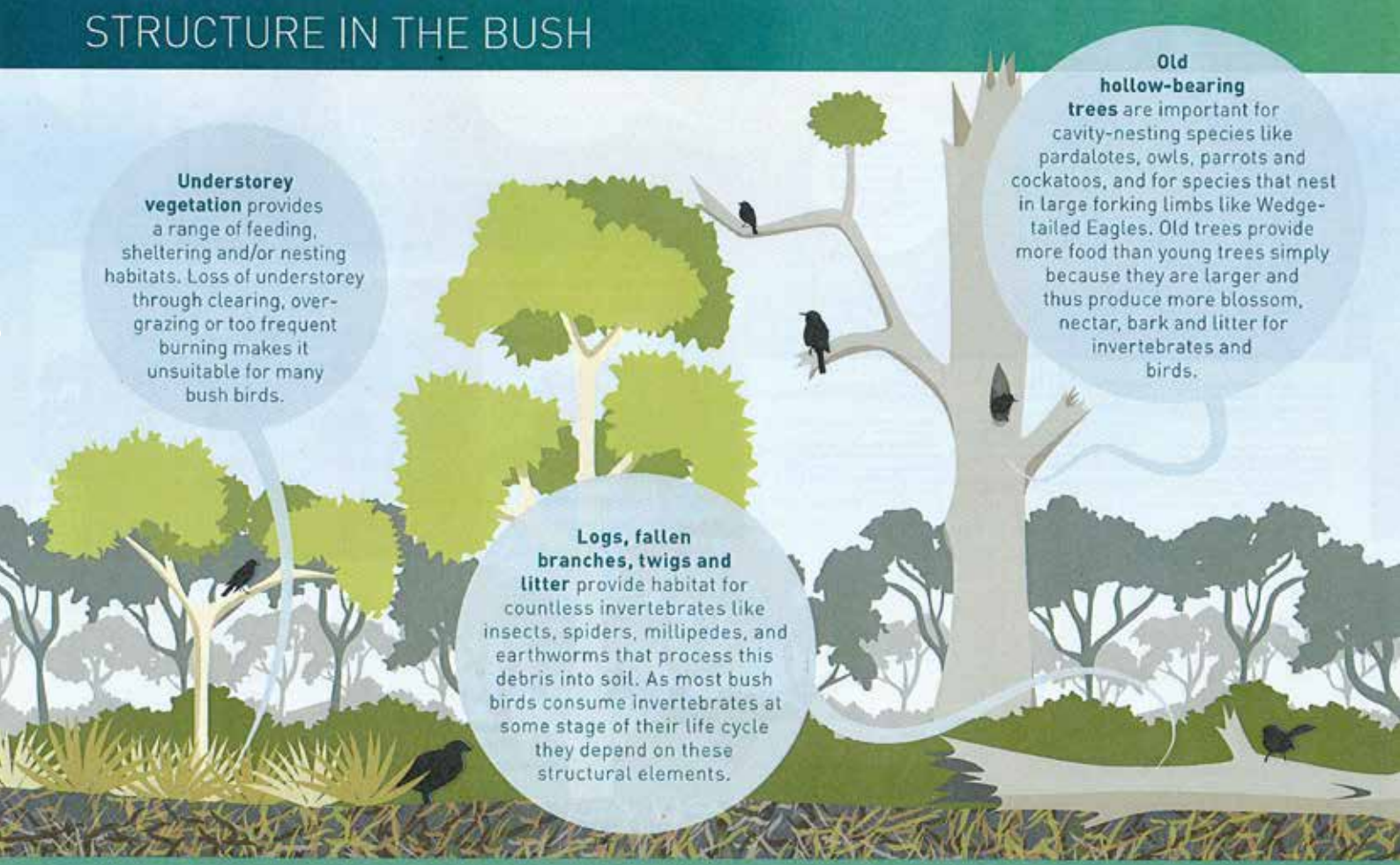
Bird diversity declined in patches of woodland smaller than 10ha. Woodland-dependent birds were 12% more diverse in broad strips of native vegetation compared to narrow strips less than 50m wide.

6. Manage at least 10% of the farm area for wildlife.

This 10% should include the best habitat on the farm and as a general rule the more complex the habitat the more bird species will be present.

7. Maintain a range of tree ages.

Bird diversity increased by 30% for every 10 large trees present. The diversity of woodland dependent hollow-nesting birds increased by 20% for every 10 large trees present. A critical age for planted trees appears to be between 5 and 10 years, after which bird diversity is significantly greater.



8 Leave fallen trees to break down naturally. Don't tidy up the farm!

For every 10 fallen trees present, the diversity of ground foraging birds increased by 30% and bark foraging birds by 70%. Total bird diversity was greater on farms with leaf litter, particularly when the leaf litter was present in dense clumps.

9. Maintain shrub cover over at least one-third of the area within a patch of farm trees.

On farms where understorey shrubs were present, there was a 31% increase in diversity of woodland-dependant birds. Small woodland-dependant foliage-gleaners that help control dieback, increased by 24%. Noisy miners (aggressive honeyeaters) were 78% less likely to occur in sites where understorey was present.

10. Maintain native vegetation around water.

A river or creek line resulted in a 21% increase in the diversity of woodland-dependent birds. Bird diversity increases by 3% with each additional farm dam.

Has the story changed?

Simple messages like 'messy is good, retain fallen timber, provide access to water' – are more important than ever given our birds are under increasing pressure from new threats like climate change. Check out the newer NRM South brochure: 'Bush Birds: making your place their place too'!

http://www.nrmsouth.org.au/wp-content/uploads/2014/10/bush_birds.pdf which has even more information on plantings, restoration and practical tips for making your property attractive to birds. It's that easy!

Dr Sally Bryant,
Manager, Science & Planning,
Tasmanian Land Conservancy

Photos (L to R):
Birds on Farms front cover.
NRM South structure in the bush. Source: NRM South 'Bush birds: Making your place their place too' fact sheet.

Private Land Reserve Condition through **Vegetation Condition Assessments**

In April 2015, the Private Land Conservation Program (PLCP) reached a 10 year period of monitoring in private conservation reserves using Vegetation Condition Assessments (VCAs). A milestone that was difficult to ignore and we'd like to share some of our findings.

What are VCAs?

In Tasmania, VCAs were formalised in 2006, through the Natural Resource Management (NRM) regions using both State and Federal funding. Since then it has been widely used and increasingly supported as a standard method for assessing vegetation condition throughout the State.

Adapted from the 'Habitat Hectares' process in Victoria, VCAs measure aspects of a vegetation community that relate to habitat and structure - (site condition) together with where it fits in the landscape (landscape context). These measurements are then scored against a benchmark which represents an ecologically mature, long-undisturbed forest.

How many did we do?

640 VCA baselines were done covering 263 reserves and over 4,300 hectares. Additionally 65 five year VCA resurveys in 20 reserves over 270 hectares.

What did we find?

Overall, the VCAs showed a positive picture in terms of the condition of private conservation reserves. Most reserves (75 %) were either in ***good*** or ***very good*** condition and scored highly in both site and landscape scores.

Components of the VCA include assessment of a number of features, such as presence of large trees, recruitment, understorey and amount of surrounding vegetation. Below is a summary of the findings for key components of the VCAs:

Large Trees – indicate forest age and provide important habitat: 37 % of VCAs recorded high numbers of large trees with good canopy health. Most communities were healthy regenerating forests which had the potential to age over time.

Overall Canopy Health – indicates tree health: determined from canopy health and cover: 79 % of VCAs scored very high in this category.

Weeds – indicate disturbance, threat and health: most areas assessed had none or very little cover of high threat weeds.

Understorey life forms – indicates the number of layers found in the community (structure) which in turn represents different habitats: measured by the cover and number of species in each layer or lifeform, e.g. herbs, grasses, shrubs. Layers missing can sometimes indicate the disturbance history of the community, e.g. heavy grazing or browsing. 62 % score high for their understorey structure.

Recruitment – Indicates long term ongoing persistence – measured by tree and shrub recruitment (immature trees, juveniles and seedlings): 66 % of sites had adequate recruitment to maintain the forest over time.

Litter and Logs – indicate ground coverage and important habitat: Most communities had adequate litter and log cover.

Landscape Context –indicates how isolated the reserve is: results showed that there was a positive relationship between the VCA score and the amount of native vegetation in the surrounding landscape.

In summary: I feel the VCA method is not just about what score we get in the end. It is a way of looking at our reserves – standing back – and seeing how they are faring in these times of fluctuating climate and potential land use changes. It is heartwarming to see the good results above. VCA resurvey results will be in my next installment.

Janet Smith

References

VCA Manual and Benchmarks: **http://dpipwe.tas.gov.au/conservation/flora-of-tasmania/monitoring-and-mapping-tasmanias-vegetation-(tasveg)/vegetation-monitoring-in-tasmania**.

Parker, D., Newell, G. and Cheal, D. (2003) Assessing the quality of native vegetation: the 'habitat hactares' approach. Ecological Management and Restoration, Vol 4 Supplement February 2003 pp 29038.

Photos (L to R):
Measuring tree trunk diameter at breast height (DBH).
Doing a VCA - assessment of litter cover and fallen log number.
Photos: Cindy Page

Conservation Landholders Tasmania's **conservation forum** on *The Value of Conservation Land in the Landscape*

How can we best convey the value of conservation land in the landscape to people who don't see it as having value? That is the challenging question that Conservation Landholders Tasmania members and colleagues tackled at a conservation forum in Campbell Town earlier this year.

Through discussions, presentations from experts and a panel session, those present gained many new insights.

Landowners had a wide range of reasons for valuing their conservation areas. For most, connection to the land is paramount: trees and native vegetation connect us to the past whilst our protection and regeneration efforts connect us to the future; conservation land is important for maintaining and strengthening biodiversity and for protecting habitat for wildlife (threatened and not); it also re-energises people. Others identified the importance of conservation land for widening the understanding and appreciation of natural bushland. Generally, owners of conservation land are supported by their wider families but attitudes of neighbours vary widely, from open hostility to physical support and encouragement.

Professor Jann Williams, Managing Director of NRM Insights, described an additional range of benefits that people derive from ecosystems: they store carbon, filter water, regulate climate, control erosion, give timber for shelter and warmth, renew the spirit and provide a place to recreate and enjoy. Jann talked about the challenge of putting a price on nature and emphasised the importance of integrating a positive emotional/spiritual relationship to the environment with a scientific approach.

Professor Andrew Bennett, from La Trobe University and the Arthur Rylah Institute, compared a study of the landscape with the study of the human body. In both we look at the structure, the function and the change in the system over time. His group's research shows the importance of corridors for the movement of wildlife and flora, particularly along watercourses, and of keeping at least 10% tree cover for the survival of birds and maintenance of species diversity. He stressed the importance of understanding that wildlife needs different habitats for different times of the day, seasons and stages of life. The decisions and actions that all managers take now will influence conservation outcomes for land and water far into the future.

Jane Hutchinson, CEO of the Tasmanian Land Conservancy (TLC), used photos of TLC's spectacular covenanted lands to show that conveying the beauty of nature can be an important way of sharing conservation values with others. Jane also highlighted the need to spread the word by appealing to the communal pocket. Protecting land through creating covenants on existing properties costs $190 per hectare. This is a considerable saving compared with buying and covenanting conservation land at $1500 per hectare, and with buying and regenerating natural values at more than $2500 per hectare.

A strong message arising from the forum was the vital importance of connecting with people on common ground when communicating environmental messages. This involves discovering the interests and priorities of audiences such as financial values, aesthetics, family values, a sense of place/history/global responsibility or through the advantages of conservation land for tourism, education, scientific knowledge or health benefits. It was felt that spreading environmental messages through engaging stories and good news stories was more desirable than tales of destruction and despair. We were encouraged to communicate the value of conservation land however we could, given the critical importance of preserving natural areas for future generations.

Thanks to NRM South and Landcare Tasmania for supporting this conservation forum and to participants for making the day such a lively, rewarding one.

Robin Garnett and Dylan Yorkson

Photo: Jane Hutchinson, Andrew Bennett and Jann Williams answering questions at the CLT conservation forum. Photo: Robin Garnett

Bird baths in the garden

An overwhelming message from many 'Gardens for Wildlife' members is that since growing native plant species in their garden a greater number and variety of native birds have been attracted to their garden. For many people a great deal of enjoyment is gained from seeing and watching birds in their gardens, particularly native birds.

Sally's article on Woodland Birds (pages 6 & 7, this edition) has relevance to the types of birds you may see in your garden depending on where you live. Findings to date from the 'Bathing Birds' surveys undertaken by the National Parks Association of NSW in collaboration with Birdlife Australia, Birds in Backyards and the University of Sydney, have shown that at a landscape scale the presence of remnant native bush, parks or reserves near where you live can influence the likelihood of and types of native birds which may visit your garden.

Isolated gardens planted out to provide excellent habitat for birds, particularly small bird species, will not have the opportunity to attract birds if the distance to the nearest native remnant bush is too great. However, collectively wildlife-friendly gardens may provide for safe movement of small birds by providing stepping stones creating linkages across the urban landscape.

Unfortunately, a growing trend with many new subdivisions is for smaller block sizes, with larger houses which occupy much of the area leaving very little garden space. Additionally, green spaces which may retain remnant vegetation or recreational park areas are often not considered in subdivision planning. This appears to reflect a growing disconnect with nature within the domestic urban environment and a lack of interest or desire to retain or create space or habitats for wildlife.

The 'bird-friendly' aspect of your garden will also influence the types of birds that may visit. In addition to the size and location of your garden, in more open urban landscapes, it is often larger or more aggressive bird species which are encountered in the garden such as honeyeaters, rosellas, noisy miners and ravens regardless of whether the garden has been well designed and planted with features to attract and provide for smaller bird species. As with natural bush with intact trees and understorey, structural complexity with native plant species within gardens provides for a greater diversity of native bird species. For the home garden this would include cluster plantings of native plants, use of prickly shrubs to provide protection and use of a variety of natives to provide food such as nectar, insect attracting, berries or seeds.

One of the best ways of attracting and providing for native birds in your garden is to provide water for drinking and bathing. A variety of containers may be used from bowls on the ground, pedestal bird baths or ponds. A key feature is to have fresh, clean water and a container which birds can safely get in to or out of without the risk of drowning. A stick or rock(s) in the container may help with this. It is also good to have habitat nearby, such as shrubs where birds can fly to for safety if they are disturbed or feel threatened.

Having water in containers elevated (or suspended) and on the ground provides water for a variety of birds and also other wildlife, like bandicoots, wallabies, echidnas, lizards or insects. The 'Birds In Backyards' web site has some excellent tips on how to create a safe haven for birds in your garden, look up **www.birdsinbackyards.net/Your-Garden-How-make-it-safe-haven-birds/Gardening-Birds**.

Iona Mitchell

Photos (L to R):
Black-headed honeyeaters having a good wash.
A refreshed wet wattle bird. Photos: Ruth Mollison.

Ginger tree syndrome

Have you seen a reddish orange coloured tinge or streaking on the trunks or branches of some gums, such as white gums (*Eucalyptus viminalis*), and wondered what the reason is for that?

This has been referred to as 'ginger tree syndrome' due to the reddish ginger colour of the substance which bleeds from the tree staining the bark and trunk. The exudate known as kino, or gum, flows to the outside bark and down the trunk of the tree from small pockets formed in the outer vascular cambium layer of wood in the trunk.

Kino is produced in response to injury such as damage due to wood boring insects, fallen limbs or shedding branches, mechanical damage (e.g. axe cuts or blows to the trunk) and fire which can cause the bark to split from the heat and dehydration of the trunk. Elevated ambient air temperatures can cause water stress and hence shrinkage of the bark and trunk leading to the production of kino. Water stress due to drought can also have a similar effect. Thus ginger tree syndrome provides a visual means of identifying stress or injury in an affected tree.

In Tasmanian, ginger tree syndrome was observed on blue gum (*Eucalyptus globulus*) in plantations in the north of the state. Closer examination and sectioning of affected trees showed that kino pockets coincided with the growth rings for 2012/2013, a time when there had been a period of prolonged elevated air temperatures (pers comm Tim Wardlaw, Forestry Tasmania). During the 2012-13 growing season there was unusually hot dry weather which would have caused considerable moisture stress to the plantation trees and hence the production of kino veins in the wood laid down during that growing season (pers comm Tim Wardlaw).

This impact was noted to be sporadic with some trees showing no signs while others clearly showed impact. The reason for this was most likely due to a combination of factors including variation in resistance to kino production within the same species, site condition, aspect, soil type, water availability and topography. Differences in the formation of kino pockets has also been found to vary between species of eucalypts with species such as blue gums, white gums and stringybark (*E obliqua*) being quite susceptible.

For Eucalypt trees destined as saw logs for joinery or structural construction, the presence of kino veins can significantly degrade the aesthetic quality or structural integrity of the sawn timber. In cases where kino production is deemed significant, trees may be culled or used for other purposes, such as for fire wood. Thus ginger tree syndrome provides a visual clue that can be used in the management of timber production.

White gums are known to be highly susceptibility to stress due to climatic factors such as reduced rainfall or elevated temperature, with variable recovery or eventual death depending on the severity and persistence of the environmental impact. At times, such stressed trees may succumb to attack from pest or pathogens leading to death of the tree from secondary causal factors.

In the Munro region of NSW, *E viminalis* trees known locally as ribbon gum has shown significant and extensive dieback which research has shown to be due to climatic factors of reduced rainfall and elevated temperatures. In Tasmania, the observation of ginger tree syndrome in white gums (or other Eucalypt species) could provide a means of monitoring the health and survival of white gums in areas increasingly becoming susceptible to impact from changing climatic factors.

Iona Mitchell

Photos (L to R): White gums showing dieback and stained trunks, Nunamara. Ginger tree syndrome evident on white gum, Trevallyn. Photos: Anna Povey.

Upcoming Field Days for Conservation Landholders Tasmania: calendar of future events for 2016

Conservation landholders are welcome to participate in the following events:

Saturday 27 February: ***Managing Wet Sclerophyll Forest***

CLT will hold a field day on the theme of *Managing Wet Sclerophyll Forest*, with discussions and expert presentations from fellow conservation landholders, well-known botanist and forest ecologist, Fred Duncan, and environmental manager, Matt Rose, from Natural State consultancy. The day starts at Lower Barrington Hall, South of Devonport, and is followed by a visit to Philip Milner's covenanted property that runs down to the Don River.

Thursday 12 May: ***Ecological Burning: research and practice***

A conservation forum for CLT members and partner organisations will be held at Campbell Town on *Ecological Burning: research and practice*. Three very experienced professionals in fire ecology will be speaking: Dr Stephen Bresnehan, Community Engagement Officer with the Fuel Reduction Unit of the Tasmania Fire Service; Dr Adrian Pyrke, recently retired Fire Operations Manager for the Parks and Wildlife Service and Dr David Cheal, former Principal Scientist at the Arthur Rylah Institute for Environmental Research, Melbourne. There will also be times for questions and small group discussions.

To join the CLT email contact list, email
Robin Garnett **robin@rubicon.org.au** or
John Thompson **thompsonjohng@gmail.com**.
Invitations are sent out to those on the list a month before each event.

Private Land Conservation Program participants as at December 2015

Number of covenants	789	97,026 hectares
Land for Wildlife members	910	57,088 hectares
Gardens for Wildlife members	543	2,790 hectares

Please note that some landowners are registered with more than one program and there is some overlap in the figures presented.

Post or email

Just a reminder that if you would prefer to receive your copy of *The Running Postman* by email please **contact the PLCP** on **6165 4409** or **iona.mitchell@dpipwe.tas.gov.au**

Selling property?

If you have a conservation covenant over your property and are thinking of selling, you should keep in mind that anyone involved in the sale process (e.g. agents, lawyers) need to be informed of the covenant and its implications.

Prospective buyers and new owners must also be informed of the covenant on the property title so that they can factor this into their decisions.

A covenant may appeal to particular purchasers and should be promoted as a valuable aspect of the property. Stewardship Officers are happy to talk to prospective buyers regarding the natural values and how to manage them in accordance with your agreement.

We often find that buyers of Land for Wildlife (LFW) properties are keen to enter the program so that they can get involved in more active conservation management.

We therefore also ask LFW owners who are selling to notify us so that we can make contact with the new owners and see if they would like to keep the property in the program.

Contacts

Stewardship
Anna Povey (North) **0498 800 611**
Andrew Cameron (North) **0417 361 998**
Oliver Strutt (South) **0407 352 479**

Land For Wildlife
Iona Mitchell **6165 4409**

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Natural and Cultural Heritage
Private Land Conservation Program
134 Macquarie Street Hobart
GPO Box 44 Hobart TAS 7001
www.dpipwe.tas.gov.au/plcp

Tasmanian Government