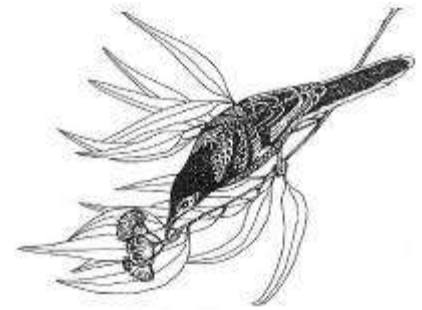


Regent Honeyeater Project

Newsletter Nov 2012



Planting successes for the year

- With planting season now behind us it's time to look back and celebrate the achievements of so many people, and also at what we've learnt from the year's work.
- The community planting weekends over winter and spring were really successful as usual, attracting a total of 448 willing volunteers from many different backgrounds! Our faithful support groups include bushwalkers, universities, churches, scouts, bird lovers, bicycle riders, the 4WD Mobile Landcare Group, and most recently the "Couch Surfers' Group". Their efforts were truly inspiring, despite some adverse weather conditions.

late July	80 scouts	1,744 seedlings
early Aug	45 volunteers	2,581
mid Aug	85	4,275
early Sept	93	4,609
late Sept	94	3,982
early Oct	37	3,037

- And the school planting days were really powerful as well, with 810 students & teachers involved over the course of 23 school excursions, and a total of 12,358 seedlings planted!
- Overall tallies for the year include:
 - 77.5 ha of habitat restored/protected
 - 15.2 km of fencing built
 - 27 sites planted
 - 36,347 seedlings planted
 - 20 sites direct seeded

Overall achievements

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Totals
no of sites fenced	25	23	24	39	22	23	16	17	20	30	16	17	23	15	16	20	25	371
km of fencing	18	17.5	13	21	13.3	11.5	12.9	6.8	11.6	19.5	8.5	16.9	16.1	13.5	9.3	14.0	15.2	238.8
ha of habitat protected	83	93.5	93	108	80	70	68.2	56.1	72.1	95.0	34.7	56.13	103	106.9	110.5	70.6	77.53	1378.2
no of sites planted	17	13	46	21	33	39	24	35	40	45	23	28	29	21	24	25	27	490
seedlings planted	15,000	22,000	28,000	19,000	28,000	35,000	26,775	31,575	33,520	45,400	28,230	38,019	34,585	35,621	35,700	32,500	36,347	525,270
seedlings propagated	8,500	21,000	21,000	24,000	20,000	25,000	31,550	28,350	40,000	45,000	47,300	45,000	39,760	45,020	45,000	38,683	34,413	523,776
no of direct seeding sites	0	0	0	1	2	10	0	2	1	2	0	0	9	9	10	4	20	70
nest boxes placed	0	17	21	31	69	19	11	23	0	21	0	26	178	33	0	7	2	420
landholders involved	24	26	30	27	22	23	11	32	26	33	18	21	24	28	20	24	24	141
schools involved	11	10	11	12	17	16	16	18	22	23	23	25	20	23	20	19	20	38
students involved	?	?	?	?	?	?	?	?	?	?	1,885	2,000	1,350	2,058	2,100	2,233	1,802	19,693
community volunteers	?	?	?	?	?	?	?	?	?	?	440	460	550	674	560	588	644	8,316
total no of people	410	750	700	750	750	900	1,590	1,256	1,630	1,930	2,343	2,481	1,924	2,760	2,680	2,845	2,470	28,169

Direct seeding

- Niche direct seeding by hand has become an important strategy for establishing understorey in sites where the moisture competition from remnant trees makes planting impossible. It's also much more successful as a replacement for browsing losses by kangaroos. The slow and steady appearance of shrubs established by this approach, survive much better than planted seedlings where the tree guards just seem to attract attention!!
- We also direct seeded 1 site of 3ha by machine, adding understorey to a significant area of mature Grey Box trees. It will quickly develop enough understorey cover to be really valuable nesting habitat for Grey-crowned Babblers living in the area.
- In addition we take sites with relatively intact ground cover warrant an effort to establish extra species diversity. This includes the smaller shrubs that would simply be lost in weedy sites, rare species that have almost disappeared from the district, and herbaceous species that are easily sown straight into the bare soil along the rip lines.
- We've been really heartened to see small clumps of seedlings from these "fluffy" seeds, often with several different species growing tightly together!

Community education and involvement

- We continue to give short talks and displays to all the groups we work with, always focusing on a positive message about the amazing results people can achieve by working together. We also emphasize the particular significance of the tasks and sites the group is working on, and how their efforts will make a difference for threatened species.
- It's clear that people are motivated by knowing more about how their work fits into the bigger picture, so we are particularly delighted to hear insightful responses and questions, even from young primary students!
- We hosted the 3rd annual project tour for Melbourne University Master Degree students to see the ecological issues we are dealing with, the success of our past works, followed by a planting session to get first-hand experience of how we organise the planting works.
- Channel 10 TV filmed our 4th planting weekend, dramatically showing "people power" at work. The segment showed 90 people "swarming" down a hill digging and planting as a well-oiled machine, and included interviews with 2 volunteers sharing their perceptions of working for our project.
- I also organised a tour for a Uniting Church group to see the massive scale of our restoration work.
- A small group of Year 9 students did work experience with us every Friday during term 4. It was equally beneficial as personal development for the students as for the wildlife!
- Another advanced student from Wangaratta High School filmed a very insightful interview about our project for a school communications project.

Communication with new volunteer groups

- One of our former Monash Univ students administers a *Facebook* page specifically for our project, advertising our activities and sharing success stories about recent works. The "Couch Surfers" group found us through that medium and quickly arranged a sizable group to join us on the 2nd planting weekend just recently.
- In fact all the university groups are increasingly using *Facebook* to communicate about our activity weekends, and they are often the largest proportion of attendees.
- Our website is maintained and updated by one of our keen bushwalking volunteers, often with great photos of large groups engaged in our working weekends.

Special weekend camps

- This was the 5th year of working with Scouts Victoria. Participant numbers have risen from 22 little cub scouts in the 1st year to 85 older teenage Venturer Scouts this year! It's a great model for other groups....
- And it's also our 2nd year working with a Wangaratta church which organises a camp during the September holidays for city kids to experience some country life. We organised a tree planting day, taught them about our threatened wildlife, showed them some gliders in a nest box, and visited some older planting sites to see how their efforts will look in a few years' time.

Nursery progress

- Our excellent nursery facilities have been expanded greatly by Andie and his team, particularly the new benches to get seedlings off the ground for better root development and ease of handling.
- Careful fertilising and watering to suit the optimum growth requirements for each species, continues to improve seedling quality and quantity of many species that have been difficult to propagate. Eg the dry hill country peas and acacias that just hate being in pots!
- But there are some other less obvious causes of poor seedling vigour, particularly for the many rare plants we are building up.....

Genetic integrity of our plantings

- In these cases the gene pool is too narrow, so we are seeing genetic depression. Our response is to collect seed from all the local remnants & deliberately going beyond to include the broader gene pools from bigger populations.
- We grow the different clones separately in our nursery and combine them at planting time to ensure all the different genetics are represented in each site. This is vital for maximising cross-pollination.
- Future seed harvesting from these sites will have the broadest genetics available in the entire region!!
- We intentionally cull out the smaller "runty" seedlings from our nursery stock, to remove genetic mutants that would have failed anyway in the tougher conditions of the natural environment. Monitoring of our older planting sites show these mutants continue their poor vigour, poor growth forms, and failure to thrive even 10-15 years after planting!
- We've also been astonished to see that many canopy trees in our older plantings are multi-trunked, twisted forms, and it's not from a single grazing incident when the seedling was very young! The repeated dichotomous branching all the way up each trunk makes it clear that all the good sawlog trees were taken a long time ago, so the gene pools of many tree species have been skewed towards these poorer forms. This has been made even worse by unwary nursery people collecting masses of seed from such trees, simply because the lower branches are so easy to reach.
- This summer we'll be intentionally seed collecting from the best genetic forms of these over-harvested canopy trees, to bias the genetics back towards growth forms that are now seriously depleted.

Planting site preparations

- Weed spraying this year has been highly successful, due to detailed calculations of dosage rates targeted to "kill" the toughest weeds rather than using the chemical label recommendations which only aim for "suppression". This has made digging much easier for our volunteers, especially the school groups.
- And with a new crop of weeds germinating in the spring, we did a 2nd spray of the final few sites. It made those planting sites really secure against weed competition, and sped up the planting work enormously.

Thinning of dense regrowth forests

- Our ecological thinning site has shown a steady regrowth of understorey vegetation following the removal of 70% of the overcrowded trees in 2008. Our recent flora surveys didn't find any new plant species germinating, but confirmed once again the dramatic difference between the thinned area and the un-thinned areas.
- The more open structure of the thinned forest has let more light in and reduced the competition for moisture, so the ground layer plants are growing well as expected.
- By contrast, the un-thinned sites have not progressed at all, retaining a soil surface that is almost totally covered by leaf litter and nearly devoid of any ground vegetation - including the usual hardy grasses!
- But the most exciting sign of renewal was the luxuriant growth of new fresh leaves on the Eucalypts. We could see the tree canopies are thickening up really obviously - but only in the thinned area!
- The success of this thinning trial prompted us earlier this year to thin out 2 smaller sites that were planted far too densely back in the early 1990's.
- Since then we've direct sown a variety of local acacias and peas into these sites and will monitor them for signs of new growth as the effects of long term moisture competition fall away.

Allowing for vegetation change with climate

- To help design our planting mixes for each site more efficiently, we've reduced the choices down to a number of **Broad Vegetation Types**, based on geology and topography:
 - * *Upper Hills*
 - * *Lower Hills*
 - * *Gravelly Slopes*
 - * *Loamy Slopes*
 - * *Granitic Outwash*
 - * *Alluvial Flats*
 - * *Plains Country*
- The remnant over-storey trees on each site give an immediate indication of the mid-storey and under-storey plants that are usually associated with those trees and soil types.
- Where sites are on an ecotone between 2 of these landforms, we allocate species from both vegetation types, which enables different plant species to dominate different parts of the site over time.
- We typically plant around 6 or 7 eucalypts, plus a range of acacias, peas, woody daisies, and other shrubs associated with the canopy species - a minimum of 30-35 species in total.
- This wide range of species also has an inherent flexibility to enable natural selection to skew the vegetation one way or the other as climate gets wetter or drier.....

Monitoring older sites

- We've already seen this natural selection taking place on a "Lower Hills" site that we planted in 1997. With remnant Ironbarks at the top of the site and Grey Box at the bottom, it's clear there is a marked shift in soil types somewhere down the slope, and 15 years on it's really easy to see different trees gaining supremacy on particular parts of the slope that are most suitable.
 - * The Ironbarks are booming ahead of the Stringybarks and Long Leaf Box on the mid slopes.
 - * Grey Box and White Box are racing ahead of Yellow Box on the heavy clays at the bottom.
- We're also seeing many sites from previous years with masses of daisies, and indeed many other shrubs regenerating naturally from seed falling off the original planted seedlings.
- This is exactly what we've been aiming to achieve!! It is critical that the understorey can thicken up by itself over time, so the shyer and rarer birds can find the necessary dense shelter.
- Without this natural seed germination, the habitat will become just like most of the local bush blocks – all trees and no shrubs.
- And the understorey species are really the "bread basket" for many wildlife species, providing nectar, seeds, and insects to eat, as well as safe nesting sites.

Annual bird surveys

- The woodland bird survey in early October once again broke a record, finding several new species in their surveys of 155 sites across our project area. The organisers Dean Ingwersen and Chris Tzaros from *Birdlife Australia*, point out that our habitat works are clearly making a huge difference for many woodland birds, and establishing a landscape restoration model that other groups wish to emulate!
- It is the best possible validation that our aims, strategies, processes, techniques & research efforts are on track.

Grey-crowned Babbler surveys

- Local volunteer Nigel Lacey has continued his painstaking surveys of these threatened birds for the past decade, to document a population rise from only 50 birds in 13 family groups to over 120 in 23 families.
- Even more significantly, he has been able to verify that many family groups have been able to use our planting sites as corridors or "stepping stones" to move across the district and set up home in entirely new territories! Frequently this has been a shift down the catchment to sites with better soils and more food availability!!
- These shifts and the more successful breeding are directly attributable to the extra habitat density that allows the Babblers to nest, shelter and hide from aggressive birds such as Noisy Miners. This welcome news further confirms the effectiveness of our habitat restoration strategies and methodology.

Woody weeding

- A number of local roadsides and private habitat areas have been seriously over-run by invasive woody weeds such as poplars, ash trees, briar roses, blackberries, and garden escapees that include a number of non-local Australian native plants. These pose a serious threat to our local habitats by stopping the growth of indigenous plants that the local wildlife depend on.
- So we've been working systematically to remove the troublesome plants each year before they drop another crop of seeds, and it was rewarding recently to see how successful the cutting and poisoning jobs from last year have been.
- This work is even more critical in habitat areas where some rare plant species are just hanging on. Removing the weeds gives these rare plants the best possibility to regenerate naturally and boost their populations.

Arranging new sites for 2013

- I have already talked with or visited about 5 landholders about projects for 2013 and there are more in the early planning stages!!
- We are focusing, as always, on enrichment plantings to add the missing understorey, connecting remnants, widening narrow remnants to buffer them from external disturbances and boost their habitat value, planting densely to break the dominance of aggressive Noisy Miners, and planting on fertile soils to produce better wildlife food reserves.

Special thanks to....

- Generous sponsors whose cash and in-kind support allows us to launch into each year with confidence: The Norman Wettenhall Foundation, Exetel Pty Ltd, Goulburn-Broken CMA, the Federal government *Caring for our Country* grants, the State government *Communities for Nature* grants, Rockwell Collins, Telstra.
- Andie Guerin for his outstanding and inspiring commitment to quality outcomes in all he does!
- Landholders of the Lurg Hills who have given so much of their land to the future of our wildlife.
- Schools & volunteers for their hands-on work that makes our big projects achievable!
- Local volunteers Peter, Gary, Tina and Emily who work so reliably with us 1, 2 or 3 days every week. Together they contributed 76 work days during planting season alone!
- Voluntary project committee who manage the administration and all our financial dealings.
- Goulburn-Ovens TAFE staff and students for their fantastic catering on our planting weekends!
- Melbourne Colonial Dancers for the great fun bush dances on our planting weekends.
- Local contractors who provide quality work and expert advice sometimes in difficult circumstances. Tom & Gayle Lee, Garry Bruce, Maurice Welsh, Fallon's Bus Service, Benalla Bus Lines, Robert Voss.

Seed collection – extra hands needed

- We've looked at our extensive seed collection to identify any specific needs for more bulk seed to expand our direct seeding work, or wider gene pools to shore up our declining species.
- Andie and Peter have been out monitoring likely sites for seed readiness, and have already bagged seeds from several new populations!
- The seeds have been ripening slowly, but will now start to drop rapidly in this hot weather!
- So we need extra hands with:
 - * seed collection
 - * seed cleaning
 - * seed sowing
- Please contact us if you'd like to get involved in this vital phase of our annual cycle of activities.

Ray Thomas.

26th November 2012



Volunteers work their way along a major habitat corridor, planting over 4,600 seedlings in 1½ days!



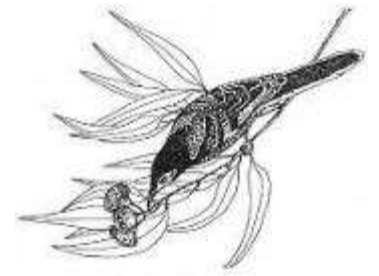
The strategic corridor connects two of our best roadside habitats to the trees along a major creek line.



In late August we planted an entire small valley, boosting the size & productivity of the adjacent bushland



And our planting also linked the bush area to other habitats further afield.



Planting season highly successful

- I'll start with a belated vote of thanks to the hundreds of hardy souls who came to help with our planting days last year. The attached photos show something of the incredible energy of those big events.
- And with all those rains over summer, the seedlings are growing just beautifully now!!
- Special thanks to all the landholders who have dedicated parts of their land as habitat for threatened species. The total area over 17 years, has grown to a staggering 1300 ha or 3250 acres.

Planting totals for 2011

- 1,120 school students were involved over 31 planting days, planting a total of 12,537 seedlings
- 447 volunteers were involved in our community planting events, with 16,168 seedlings planted all up
- 32,500 seedlings was the grand total for the year
- 70.6 ha of habitat restored on 25 sites
- 14 km of fencing constructed
- Finally, thanks to the emergency planting volunteers who helped us finish the last few planting sites. With an average team of only 3 or 4 people each day, we planted 2,266 seedlings from mid Oct to late Nov.
- These cheery crews proved again, just how much can be achieved by a small dedicated team!



Volunteers enjoy a day in the great outdoors, while they plant a 1600m buffer strip along the bush edge. The new plantings will introduce extra plant species to the bush, and cushion the bush from environmental extremes.

Overall achievements

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	TOTAL
no of sites fenced	25	23	24	39	22	23	16	17	20	30	16	17	23	15	16	20	346
km of fencing	18	17.5	13	21	13.3	11.5	12.9	6.8	11.6	19.5	8.5	16.9	16.1	13.5	9.3	14.0	223.6
ha of habitat protected	83	93.5	93	108	80	70	68.2	56.1	72.1	95.0	34.7	56.13	103	106.9	110.5	70.6	1300.7
no of sites planted	17	13	46	21	33	39	24	35	40	45	23	28	29	21	24	25	463
seedlings planted	15,000	22,000	28,000	19,000	28,000	35,000	26,775	31,575	33,520	45,400	28,230	38,019	34,585	35,621	35,700	32,500	488,925
seedlings propagated	8,500	21,000	21,000	24,000	20,000	25,000	31,550	28,350	40,000	45,000	47,300	45,000	39,760	45,020	45,000	38,683	489,363
no of direct seeding sites	0	0	0	1	2	10	0	2	1	2	0	0	9	9	10	4	50
nest boxes placed	0	17	21	31	69	19	11	23	0	21	0	26	178	33	0	7	418
landholders involved	24	26	30	27	22	23	11	32	26	33	18	21	24	28	20	24	136
schools involved	11	10	11	12	17	16	16	18	22	23	23	25	20	23	20	19	38
students involved	?	?	?	?	?	?	?	?	?	?	1,885	2,000	1,350	2,058	2,100	2,233	17,891
community volunteers	?	?	?	?	?	?	?	?	?	?	440	460	550	674	560	588	7,672
total no of people	410	750	700	750	750	900	1,590	1,256	1,630	1,930	2,343	2,481	1,924	2,760	2,680	2,845	25,699



Freeway wildlife crossing

- The aim is to help Squirrel Gliders and other threatened species to cross the busy Hume Freeway and reach new habitat, and more importantly, to find new breeding partners. Look out for the new crash guard rails about 1km west of the hill that rises up to Glenrowan, and you'll see our seedlings in the median strip and verges.
- Sincere thanks to Vic Roads for their generous support with this visionary project, that enables better gene pools, and therefore protects these species from in-breeding problems in the future.

Ecological thinning

- Many of the forest areas in the Lurg Hills consist of young regrowth trees that are overcrowded and severely stunted. We thinned one site 3 years ago, taking out 70% of the trees, and have been watching the changes carefully.
- It is obvious at a glance that the native grasses have sprung up due to the extra light and moisture, but we've proceeded with our annual systematic survey of 24 quadrats to see what other differences might come to light.
- We noticed that the disturbed soil in the thinned area had many young wattle and pea seedlings that have clearly germinated from seed that's been lying in the soil for decades! By comparison, the untreated forest has a thick cover of dead leaves and sticks which is clearly preventing germination of any new understorey shrubs. It's not a very rich habitat.
- The final part of the experiment involves looking for extra growth in the trees that are less crowded now. So we'll return to measure the trunk diameters of about 80 tagged trees in the thinned area, and compare those with another 80 tagged trees in the un-thinned area. A thorough statistical analysis will be undertaken after that, with recommendations for further thinning efforts and scaling up the work.

New projects for 2012

- I've been visiting lots of landholders to arrange habitat projects for 2012 and already have 17 projects set to start, with at least a dozen more still in the pipeline. We are fortunate to have more than enough projects, which allows us to choose sites that will make the most difference for our threatened species.
- We've started work on the new sites already, with fences completed on 2 sites and posts rammed on several others. Thanks to the Beechworth Prison crew who help so much with this important part of the year's work.

Roadside planting

- Our roadside planting to bridge crucial gaps in the habitat network, has progressed in several stages since the late 1990's. We've seen Squirrel Gliders moving through these planted areas and Babblers nesting in several of them, so it's been a real success. But things had to go on hold after Black Saturday.
- In the past 12 months, Benalla Rural City has developed a new Environment Strategy which identifies among other things, a need to protect and support threatened wildlife in the Shire.
- So I've re-opened discussions by requesting an opportunity to present to council about the importance of this work, the successes we've already had, and the value of this natural heritage for the Shire as a whole. I've also made a formal application for a permit to plant the open gaps on 3 or 4 specific roadsides this year.

Assessing our Red Gum thinning trial

- One of our creek planting sites from 2009 has been "choked out" by a massive germination of River Red Gum seedlings that sprouted en-masse in the bare soils along the rip lines. A few extra seedlings would have been nice, but thousands and thousands of them are crowding out our planted seedlings. It's virtually a monoculture with much reduced habitat value, so we started a trial back in June to thin the saplings by chain-sawing the saplings and poisoning the stumps.
- Our recent visit to the trial site showed very promising results, with only minor re-sprouting of the culled Red Gums, and very strong growth on our planted saplings. Some of these are now 5 or 6m tall with about 1m of new growth, so they'll clearly out-compete any little Red Gums that have survived the cut and poison work.
- It's time-consuming but definitely worth preventing the same dense forest blocks that germinated after the 1952 bush fires!

Direct seeding

- Each year we take on some direct seeding as a complement to our planting work. The aim is to establish some extra understorey shrubs into treed areas where traditional planting just doesn't work. In 2011 we did 3 big sites by machine, and several more sites by hand. The process is simply sprinkling seeds along the rip lines, choosing spots where the absence of weeds gives the seedlings a good chance of survival.
- We've been out checking to see how the sites are going and have been delighted to see rows and rows of young seedlings sprouting amongst the old trees. The hand sprinkling work has produced clumps of daisy bushes every few metres on the driest gravelly soils, often with several species growing together!

Seed collection and propagation

- With an already sizeable seed collection in store, this year we specifically targeted plants that are poorly represented in the Lurg Hills. The aim is to import extra genetic stock from large populations elsewhere in the region to make sure our Lurg Hills plants avoid the problems that arise from in-breeding.
- Yes, it happens with plants as well as animals, and the effects are already evident in several of our local species. eg deformed leaf structure, stunted "runty" trees that fail to grow much beyond seedling size, but more serious than that, we frequently find plant colonies that fail to set seed, and others where most of the seed turns out to be infertile! It's a serious issue for the long term survival of these species!!
- We are also collecting from species such as Lightwood Wattle, that are having a bumper crop after many years of poor seed production.
- Sowing the seeds of all 40 - 50 species has been staggered this year, with slower growing peas and wattles sown several weeks earlier to take advantage of the better growth conditions over summer.



Andie and our local volunteers have been busy building nursery benches and fitting our 3 hot houses with shade cloth and automatic watering systems. They've done a fantastic job using recycled steel and lots of ingenuity!

Solar panel & water pump

- An important project to fence and plant a creek line has finally come to completion with the installation of a solar powered water pump to supply water in the adjacent paddocks. The McMonigle family has been generous in fencing off their creek line and farm dam for habitat purposes, and we are grateful for the invaluable assistance given by a local solar company "Outlook Alternatives".
- This project completes a crucial habitat link from large forest blocks in the area to the nearby roadside trees.

Feral control

- We've been working side by side with landholders on rabbit control, to provide a bit of encouragement on this daunting task. We are careful to explain the process, to demonstrate the practicalities of doing the job safely, and always revisit each site several times to ensure the rabbits are declining.
- We've also been attacking woody weeds such as Pines, Blackberries, Robinia, Cork Elm and Tree Lucerne that threaten native bush areas and planting sites. The work has involved chain-sawing, poisoning stumps, man-handling onto bon-fire heaps, hand pulling and spraying.

Mapping of work sites 1995-2011

- Our friendly CMA staff have been championing our cause to the federal funding bodies, showing just how much our work fits national priorities in so many ways. The latest initiative is updating the map of all our work sites from 1995 to the present, and overlaying that with remnant vegetation cover.
- It shows how well our works are connecting the major forest blocks to one another, how precisely we are targeting the depleted vegetation types that need the most help, and how closely we match computer modelling of "biodiversity hot spots" that need protecting.
- We clearly aren't working randomly all over the country without co-ordination, but rather with strategic plans where we'll make the biggest difference. This very detailed map tells the story in full graphic colour!

Bird search weekend

- Our annual bird survey weekend in October found a record number of species, almost 150 in total, including a range of threatened species as always. Significant findings for this 7th survey included lots of nesting birds, lots of juveniles already on the wing, heaps of honeyeaters, and many migratory species. This, together with the 2 earlier of Regent Honeyeater sightings, says a lot about the value and condition of our Lurg Hills habitat. The birds are coming here for good reasons!!
- Thanks to the Birds Australia team and their volunteers for their long term insightful research, and to the landholders who kindly allow us to search the bush areas on their properties.

Nest Box Database

- Enthusiastic volunteer Chris Schirlinger has totally redesigned our nest box database to a new format that enables quick sorting and sifting through our massive collection of occupation data. Another volunteer Vicki Koller, has assisted enormously by entering all of the paper copy records dating back to the mid 1990's.
- And we've had our first trial of the system to answer a landholder's questions about the particular species that are being found on or near his properties in Glenrowan West. "If I decide to go ahead with some more conservation work, will it really make any difference?" It's a very good question, because you need to know which animals are present before you know what actions will be most helpful. You also need to know where they are living, (and where they aren't) to decide where the works should be to make the biggest impact.

Thanks to our sponsors

- The massive amount of hands on work by so many willing volunteers is complemented by significant financial support from many organisations, without whom, our project simply couldn't continue.
- We would like to thank each of them for their generous support, in some cases over many years.
 - Exetel Pty Ltd
 - Norman Wettenhall Foundation
 - Rockwell Collins
 - Caring for our Country Grants
 - Landcare Australia & SP Ausnet
 - Goulburn-Broken CMA
 - Dept of Sustainability & Envir
 - Redhill Computers
 - Daynetree Computers
 - Telstra Network Integrity Services
 - Grants to Environment & Heritage Organisations

Nest Box Weekends – 24/25 March & 21/22 April

- One of the highlights every year is checking our 400 nest boxes to see who's living there. With over $\frac{2}{3}$ of the boxes occupied, it's obvious that we're making a huge impact on threatened animals like Squirrel Gliders and Brush-tailed Phascogales.
- So grab some friends and join our team for a weekend or 2 of good fun - I think you'll really enjoy seeing these delightful little creatures up close. It's also interesting to learn about the animals' habitat needs and inspiring to see how our planting work is already helping them!
- See the attached flyers for details.



Squirrel Glider parents with 2 young ones snuggled underneath.

The nest boxes provide safe spots to rest up during daylight hours, and crucial warm dens all through the breeding season.

Ray Thomas,
Regent Honeyeater Project Co-ordinator
February 2012.

Nest Boxes for Rare Species

24/25 March 21/22 April 12/13 May 2012

Our nest box program has been in operation for over 13 years now and we'd love to invite you to join us as we do our annual monitoring work. We have 381 boxes already in place, with Squirrel Gliders and Sugar Gliders nesting in about $\frac{2}{3}$ of them!

We're also finding more and more stringybark nests of the rare Brush-tailed Phascogale, so we're hoping to see some of them face to face when we go checking this year!

Why do we need nest boxes?

The basic problem facing all of these animals is an extreme shortage of natural tree hollows, because the old trees were heavily cleared decades ago, and the regrowth forests are still far too young to have many hollows.

New boxes to place

As well as checking the older boxes, we'll also be placing some new boxes to help the animals move around the district in search of better food reserves. This is critical for breeding females, as they need the best food to provide enough milk for their babies.

The extra boxes will also provide crucial shelter for juvenile gliders when they leave their parents' territories at the start of the next breeding season.

Why check them every year?

Regular checking is important so that we can find the extent of local populations, the habitats they prefer, the breeding success of particular colonies, and barriers to their movement across the landscape.

We also need to get accurate reports of unwanted species (such as feral bees) taking over our boxes, so that we can remove them at a later date.



Squirrel Glider family having a rest in one of our 400 nest boxes.

What do the results tell us?

Results from several years have given conclusive evidence that gliders need the fertile soils along creeks to breed successfully. Our records also show that gliders move out of the dry hills down to the creeks every summer, and they absolutely need continuous corridors to do this safely.

So any major breaks in the tree cover along roadsides or creeks become serious barriers to glider populations. Isolated 'islands' of habitat have proven empty, because gliders are taken by predators and there are no possibilities for replacement! Solid information like this makes it possible to know what needs doing and also where to do it to make the most difference.

Possum boxes for mistletoe control

We will also monitor 30 extra boxes that were specifically designed for Common Ring-Tail and Brush-tail Possums. These boxes are all located in heavy mistletoe infestations to re-establish a population of these hungry possums as a natural biological control for mistletoe.

GPS fixes

Most of the box locations have been recorded by GPS, so visiting groups can find the boxes more easily. At the very least, it will help confirm your location if you are a bit uncertain.

Please use **GDA 1994** co-ordinates to ensure you are at the correct nest box. Look for UTM/UTS WGS 84 in your GPS menu.

Bush navigation

These weekends provide an excellent opportunity for bush walkers to practise their map reading and navigation skills while looking for the nest boxes. The sites are all mapped carefully on 1:25,000 contour maps and brief access and location descriptions.

Activities:

- Checking nest boxes to see the wildlife at home
- Recording data for our ongoing research investigations
- Sharing insights from our day's observations
- Spotlighting wildlife after dark (if suitable conditions)
- BBQ tea at Lake Benalla (BYO)

Useful Gear:

- Sun screen, hat, sturdy shoes, long trousers
- 6 metre extension ladder (if you have one)
- Roof rack & rope to carry ladder (if you have such)
- Tow ball to carry a ladder on a trailer (if you have such)
- GPS unit for easy location of boxes (if you have one)

Meals:

BYO lunch & drinks for Sat & Sun, we are out all day
BYO food for Saturday night BBQ at Lake Benalla

Accomm:

Free accommodation at Benalla Scout Hall if needed
Mattresses supplied
BYO sleeping bag & pillow
Minor kitchen facilities available
BYO tent if you prefer to camp outside

Bookings:

Please let me know: Number of people expected
 Any equipment you can bring

Meeting:

9.30 am Sat Dept Sustain & Envir, Sydney Rd, Benalla
6.00 pm Sat BBQ at Lake Benalla, beside Shire Offices, Fawckner Dve
9.00 am Sun Dept Sustain & Envir, Sydney Rd, Benalla

Do come and join us. It's the perfect opportunity to see these beautiful little animals up close, and the data collected will help us refine our habitat works.

It's also a good opportunity for you and your friends to meet some new people, while you're all having some fun together in the great outdoors.

The Regent Honeyeater Project – *A bit of background.*

This well established revegetation project focuses on the Regent Honeyeater, an endangered bird species that has declined seriously over recent decades. Only about 1000 - 1500 of these striking birds remain in the wild and there are just 3 key habitats left in Victoria! The Lurg district, as one of these, provides essential nectar supplies for Regent Honeyeaters when they arrive each winter to feed on the flowering Ironbarks.

But the ecosystem is in trouble. After 150 years of clearing and grazing, remnants of the former Mugga Ironbark forest are scattered across the landscape as narrow strips on roadsides and small patches on private land. With increasing fragmentation and grazing pressure, the natural ecological balances of healthy bushland have been lost. Remnants have little or no understorey, serious dieback problems are obvious throughout the district, mistletoe is out of control in many areas and the paddock trees are dying. We are losing the valuable old habitat at an alarming rate and it's a one way process!

As well as the Regents, the district supports a host of other threatened woodland birds such as Grey-crowned Babblers, Painted Honeyeaters, Speckled Warblers, Hooded Robins, as well as several threatened mammals like Squirrel Gliders and Brush-tailed Phascogales, and many rare plants.

There is a race against the clock to protect, restore and enlarge the existing habitat as fast as possible.



The project has gained enormous support from the local landholders, who are keen to protect any habitat that remains. Activities such as seed collection, plant propagation, fencing, planting, direct seeding, mistletoe removal, environmental weeding, nest box placement, and wildlife monitoring have been in full swing for the past 16 years. The staggering results include planting more than 420,000 indigenous plants on over 420 individual sites, with a grand total of around 1160 ha of habitat restored.

More than 100 landholders have been involved to date, assisted by 23 schools, 2 LEAP groups, 5 *Green Corps* teams, *Work for the Dole* groups, charitable trusts, corporate sponsors, university students, bushwalking clubs, cycling clubs, church congregations, scout groups and the like. Over 20,000 people have lent a hand in the work!

Many threatened birds or mammals are already living in scores of sites that are only 5 to 6 years old, and of course the trees are using up CO₂ and helping to fix salinity and erosion in the process! It's really a demonstration of the changes needed for ecologically sustainable development; a win-win situation for sure.

Babbling their way to a brighter future?

By Dean Ingwersen, Chris Tzaros, Nigel Lacey, and Ray Thomas

Imagine this. Your ancestors have lived in an area for generations and continually acquired and improved on the land they have owned. With the passing of each generation the land has been successively handed down, and after many generations you have arrived as the next in line to take over the family dynasty. But what you've inherited is much different to what your ancestors had – the dynasty and the land that supports it is busted due to factors out of your control. You've got terrible neighbours who constantly harass you, and as a result you can barely support your family. Welcome to the life of south-east Australia's Grey-crowned Babblers.

Over the course of the past 200 years the woodlands upon which this and many other species depend have been heavily modified by saw, tractor and plough to the point where the lands which once supported vast populations of woodland birds can now only support a small proportion. The beautiful tracts of vast, continuous woodland have been carved up and fragmented to the point that a woodlands bird's worst neighbour – the Noisy Miner – now reigns supreme. It's no wonder that the Babblers have struggled in recent times, with most remaining groups in south-east Australia now stuck on marginal land and struggling to keep the family lines running. But one revegetation project is changing all of that.

The Regent Honeyeater project in the Lurg Hills near Benalla in north-central Victoria has been in operation since 1992, and was initiated as a way to protect, restore and replant habitat specifically for that species. Since then, nearly 18,000 students and volunteers have assisted to plant in excess of 380,000 trees and shrubs at over 100 properties. More than 1,000 hectares of woodland has been restored or replanted, and the benefits are certainly beginning to show. Unfortunately no Regent Honeyeaters have been seen in the area since the project kicked off, but the local Grey-crowned Babblers aren't complaining – they've just had their most productive breeding season on record.

In 2001 Ray Thomas, the project coordinator, and dedicated local volunteer Nigel Lacey determined to conduct an assessment of the status of the Grey-crowned Babblers of the district. As many readers will know, this is a social bird of the highest order, with breeding pairs supported by offspring and other family members when rearing young. It has been determined through the great work of Doug Robinson and the Friends of the Grey-crowned Babbler, that the success of breeding is almost directly proportional to the size of the family groups – the larger the group, the greater the chance of more breeding success (although factors such as landscape fertility and rainfall also play a part). Since 2001 the population of Grey-crowned Babblers in the Lurg district has fluctuated fairly steadily between 52 and 69 individuals, with a median family size of around 4.5 birds (fig 1). As is common in such populations, the positions of some of these family groups in the landscape have shifted dynamically, moving from area to area in response to changing resources. For the most part, the birds have been stuck in habitat that is isolated, on less fertile parts of the landscape, and dominated by Noisy Miners. But that's all changed this year.

The results for 2009 have been nothing short of spectacular – the total number of individuals located was 85, with a median family size of 5.3 birds! But perhaps the best news relates to the habitat that is being used. Nine of the 16 family groups in the district have been recorded using replanted areas for foraging, nesting or as flight paths. As well as this there appears to have been a reduction in the population of Noisy Miners in the district, perhaps in response to the densities and strategies used in the plantings. And the truly amazing news is that some of the revegetation sites being utilised by Babblers are only six years old. The plantings have been conducted in a strategic manner which has targeted fertile parts of the landscape (for provision of greater resources), additions to key remnants, and linking of crucial habitat via corridors for movement. Along with the babblers, a host of other species are benefiting from this work, including Red-capped Robins, Brown Treecreepers and even furry things like Squirrel Gliders!

One of the Grey-crowned Babbler family groups was found this year in restored habitat about 1km from the nearest roadside, feeding and nesting in a site that was planted six years ago around a cluster of old Grey Box paddock trees. This family has shifted more than 3 km down slope from the dry hills to a revegetated site on the plains, where the food is more secure and the habitat has reached sufficient density for nesting. Even better news is that the family has grown from four to six over the past year. Previous surveys have detected other groups shifting from poorer sites to better ones, with abandoned roost ‘nests’ found in replanted areas. The birds are clearly using the plantings as stepping stones across the landscape – exactly what was planned.

A recent review has shown that in areas where targeted habitat restoration or protection occurs, such as at Lurg, Grey-crowned Babbler populations are generally remaining stable or increasing. This very encouraging news shows that targeted conservation actions can have a demonstrable effect in the short to medium term, and that those benefits can extend beyond the initial target species; remember – the Regent Honeyeater project in Lurg was initially intended to put habitat back into the ground for Regent Honeyeaters. No doubt these birds will benefit at some stage too, but for now the dynasty of the Grey-crowned Babblers looks a lot brighter than it did a decade ago.

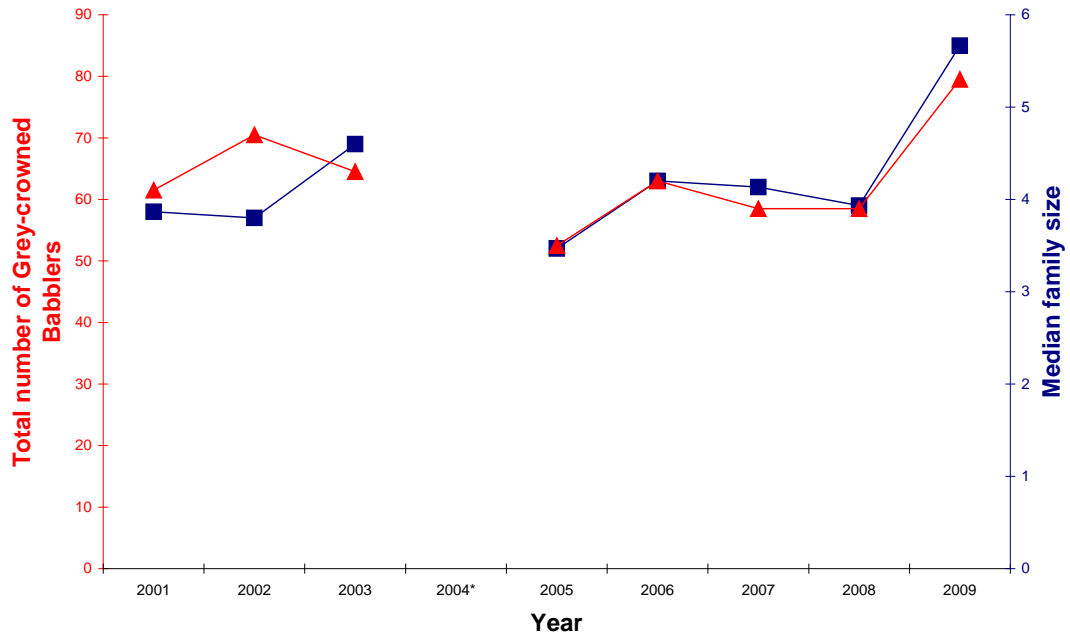
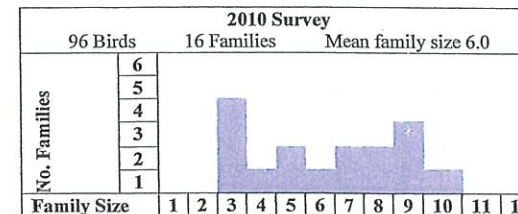
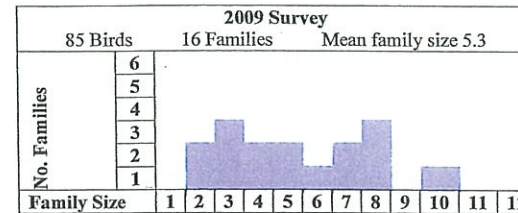
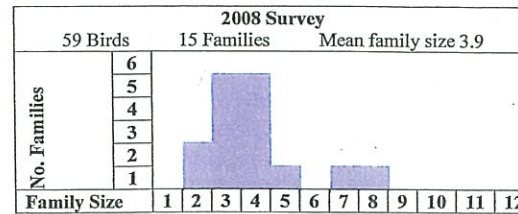
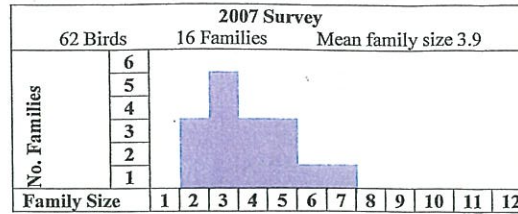
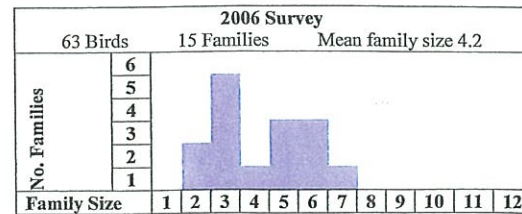
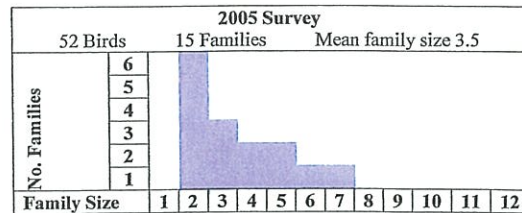
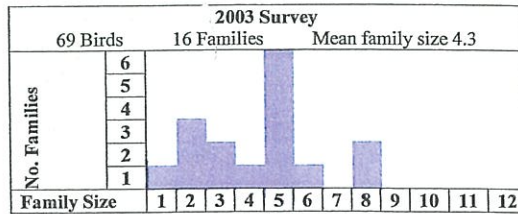
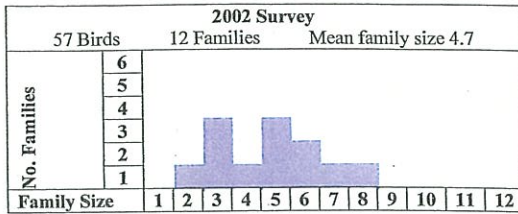
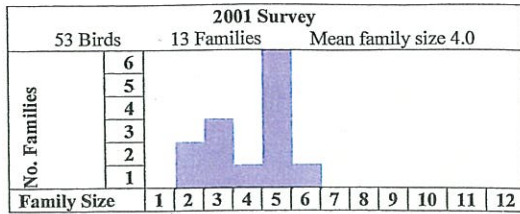


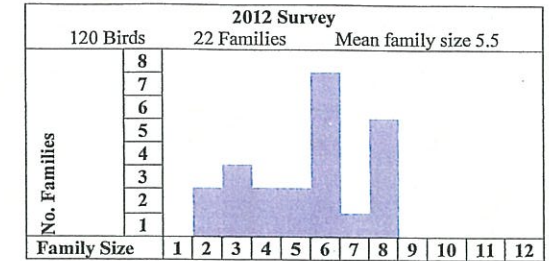
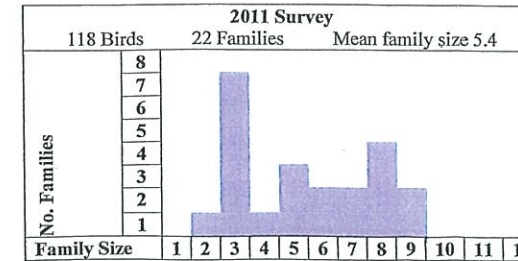
Figure 1. Total number of individual Grey-crowned Babblers, and median family size, across the survey period (* - survey not conducted in 2004)

Grey-crowned Babbler Surveys - Lurg Hills

Family Size Distribution 2001 - 2012



* Family E lost 3 birds to accidental drowning; it was originally 9 strong.



Improved habitat - a benefit to farming!



Narrow tree lines like this are really valuable for both farming and wildlife, but they're at risk. With no understorey shrubs, the natural checks & balances don't work, so things can get badly out of control.



Eg there are very few Birds, or Sugar Gliders, or Lizards, or Frogs, or Spiders, or Wasps, etc So the insects breed up and eat all the tree leaves! This dieback just shows us that things are out of balance.



And by themselves, the trees have little safe cover for small shy birds.....



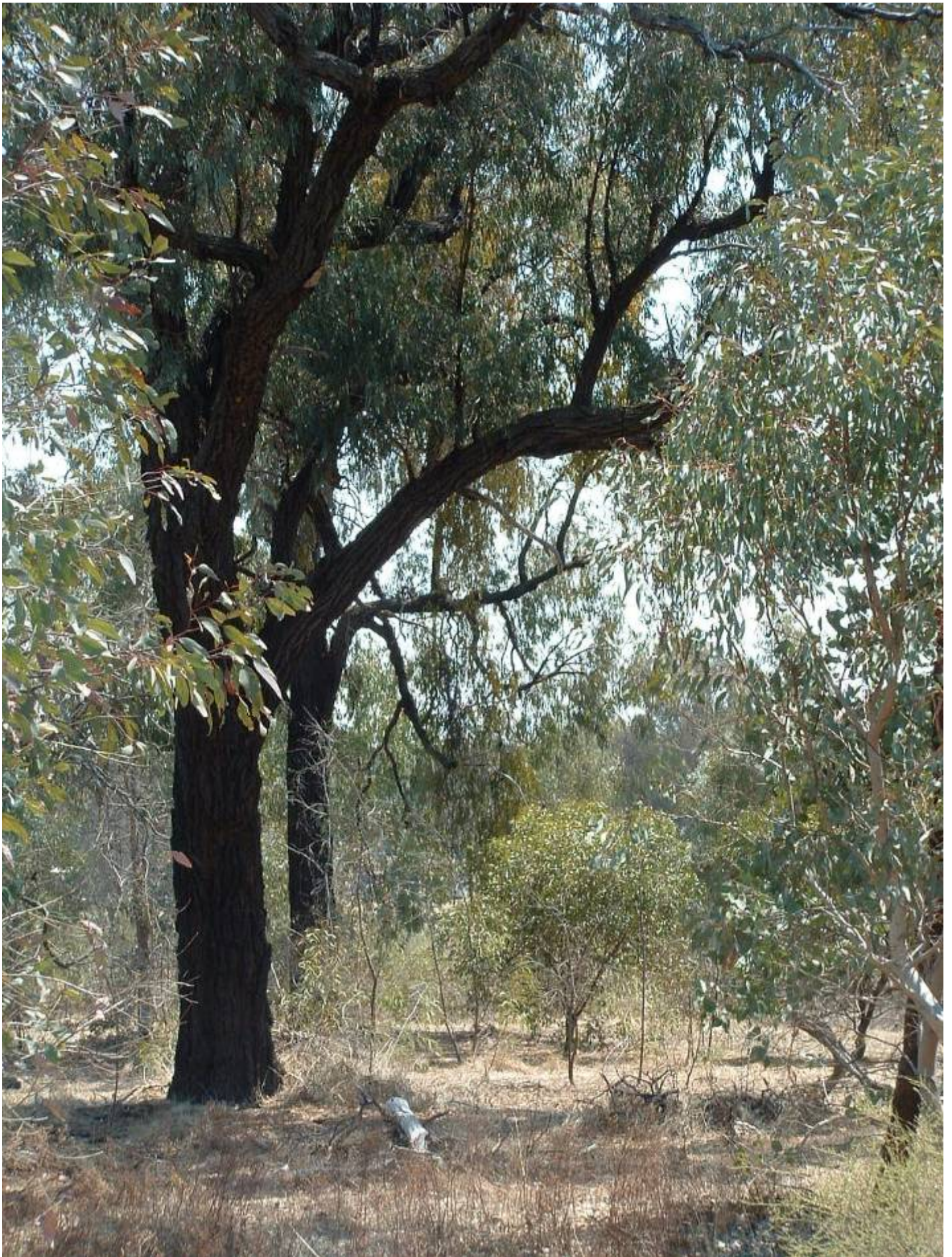
.....so aggressive birds such as Noisy Miners can easily dominate the habitat.

© Michael Dahlem

When all the other birds are chased away, the insects breed up further and the trees can get even sicker!!



Our planting makes the habitat denser and wider, with plenty of cover for the small birds to hide and feed in.



5 or 6 years later we get excellent habitat for many birds, including rare species like the Regent Honeyeater. Basically the vegetation needs to be thick enough that you can't see through it – like this planting site.



As well as the habitat benefits, our plantings help the farm with better windbreaks and insect pest control.



But if the planting is not dense enough, we miss out on both the habitat and the farming benefits!



Long-term grazing can also reduce the habitat benefits, because all the understorey shrubs get eaten. Without shrubs there are very few birds, the insects breed up, the trees suffer, and it's a poor wind break as well.



Places like this are really static “plantations” where the ecosystem doesn't function in a healthy way.

On the other hand, if grazing is greatly reduced, the shrubs can keep growing, and that keeps the bush healthy.



Even better, the shrub seeds fall to the ground and grow naturally, so the vegetation gets denser over time.



With more shrubs regenerating naturally, the habitat just gets better and the bush stays healthy for the future.



But without the shrubs, a whole lot of things can get out of control, eg mistletoe plants!



Mistletoes are a natural part of the bush, but if there are too many they kill trees by using up all the nutrients.

Mistletoes are normally kept in control by simple things like butterflies and possums!!



The butterflies lay eggs that turn into caterpillars.....



.... which sleep at the tree base all day.....



.....and eat mistletoe leaves all night!



And the caterpillars can eat mistletoe plants right down to bare sticks!!

Possums love mistletoe too!

It's more nutritious than the tree itself.

But they need tree hollows or dense shrubs to nest in!

Photo: GB Baker © Australian Museum



The flowering shrubs really are the vital key to keep all these natural balances working.