

ROCKWELL COLLINS - *Green Communities Grant Application*

17 February 2011

CONTACT INFORMATION

Name of Organisation Applying for Funding: Regent Honeyeater Project Inc

Benalla
Victoria, 3672
Australia

Rockwell Collins Community Served: Victoria, Australia

GRANT INFORMATION

Anticipated Project Start Date: January 2011

Anticipated Project Completion Date: December 2011

Purpose of Grant: Protection, restoration and linking of remnant vegetation areas, to provide strategic habitats and movement corridors for several threatened birds and mammals.

BACKGROUND ISSUES

- The Regent Honeyeater Project is a well-established habitat restoration project based around the Lurg Hills near Benalla. The project focuses on the Regent Honeyeater, which is classified as *Critically Endangered* under the Commonwealth Endangered Species Protection Act 1992. Only 1000-1500 of these birds remain in South East Australia and there are just three key habitat areas left in Victoria. The Lurg district, being one of these, provides essential nectar supplies for the Honeyeaters when they arrive each winter to feed on the flowering Ironbark trees.
- Over clearing of the original forest has produced a farming landscape with highly fragmented and degraded remnant vegetation. Severe dieback and mistletoe infestations point to a general collapse of ecosystem processes. Our project aims to connect and restore all remnants of Box/Ironbark habitat, including tree patches in farmland, linear strips along road reserves, and creek lines.
- The network of roadside habitat has numerous gaps that further inhibit the movement of wildlife species. Threatened species such as Brush Tailed Phascogales, Squirrel Gliders, Grey Crown Babblers, and a host of other woodland birds, have therefore been split into several isolated sub-populations that are at serious risk from natural catastrophes such as drought and bushfire.
- More insidiously, the isolation of separate populations (and population decline in general) have worked together to narrow the gene pool considerably. We have just fewer than 20 Babbler families in the district, and it has been demonstrated by Monash University researchers, that the Squirrel Gliders of Lurg are all related to each other!!
- A quick look at the aerial photographs shows several crucial habitat gaps that prevent these animals spreading across the district and even more importantly, beyond our district. Significantly, most of the gaps are in fact cleared stretches along roadsides! Revegetating these gaps will link the isolated habitat areas, and allow wildlife to move across the landscape to find new food reserves and new breeding partners.

SITES FOR 2011

We have around 30 habitat sites in total this year, but would like to seek your support for a selection of projects that specifically aim to improve the quantity and quality of biolinks in our region. Eg:

- creating strategic wildlife corridors to link isolated habitat areas
- widening roadside habitat by planting on private land adjacent to the road
- enhancing roadside habitat by planting the open gaps
- planting the median strip on the Freeway to enable safe crossing for wildlife
- placing nest boxes in corridors to provide safe shelter during the risky dispersal phase
- increasing habitat density to improve breeding success of our shy & rarer species

Name	Site	Ecological values
	Corridor from Moore's La to Lewis' ridge planting	Closing gap between existing habitat areas
	Broad strips adj to bush on W and S boundaries	Adding bulk to existing habitat, closing crucial gap
	Strip adjacent to Bostock Rd trees	Widening the existing roadside habitat
	Open areas on SW slopes of main ridge line	Adding bulk to existing habitat, closing crucial gap
	Strip adjacent to Coach Rd trees	Widening the existing roadside habitat
	Scattered trees S of the old quarry hill	Adding more bulk to existing bush area
	Strips adj to trees on surrounding roads	Widening the existing roadside habitat
	Extend the planting on ck line off Old Hume Hwy	Broad habitat node on narrow streamside habitat
	Corridor from Moore's La to Lewis' ridge planting	Closing gap between existing habitat areas
	Extend the planting on erosion gully S of Mill's La	Closing crucial gap between existing habitat areas
	Strip adjacent to Kelly Gap Rd trees	Widening the existing roadside habitat
	Corridor - Stanley Dve bush to Wortmann's bush	Closing crucial gap between existing bush areas
	Strips adjacent to Moore's La & Wattle Ck Rd	Widening the existing roadside habitat
	Strip adjacent to Bruce's bush	Adding more bulk to existing bush area
	Strip adjacent to Hunter Rd trees	Widening the existing roadside habitat

Note that a few of these sites are still to be confirmed with the landholders.

Roadsides	Site	Ecological values
✓ Hume Fwy	Planted wildlife crossing at foot of Glenrowan Hill	Closing gaps between existing trees allows safe travel for small mammals and birds and ensures genetic diversity for the long term.
? Bacon Rd	Kennedy La to Old Lurg Rd	
? Embling Rd	Granite Rd to Greta-Lurg Rd	
? Greta-Lurg Rd	Embling Rd to Wattle Ck bridge	
? Ross La	South end from Greta Rd to 1 st rise	

Permission to plant on Shire roadsides still to be confirmed through Benalla's new Environment Strategy.

THE IMPORTANCE OF CORRIDORS FOR GENETIC DIVERSITY

The isolation of Lurg wildlife populations (and the various sub populations within Lurg itself) places many species at risk of inbreeding in the long term. Research on Lurg Squirrel Gliders indicates a declining population with reduced genetic diversity.

We are addressing this serious issue by improving the protective shelter on the likely migration routes into and out of the Lurg district. But many of these dispersal routes have serious gaps in the habitat, and are also dominated by young trees without natural hollows for the animals to rest in during the day. So these routes may well be systematic death traps or "net sinks" in the population dynamics.

1. ENVIRONMENTAL BENEFITS

- Restoring this habitat helps other threatened species as well. eg Grey Crowned Babbler, Squirrel Gliders, Brush Tailed Phascogales
 - Buffering old growth habitat from "edge effects" by planting adjacent to roadsides and unmade roads
 - Protecting our best remnant vegetation by fencing

- Restoring ecosystem processes by replanting the missing understorey
- Rescuing threatened plants by seed collection, propagation and planting into safe reserves
- Conserving depleted vegetation types; eg Box-Ironbark Forest, Grey Box Woodland, Valley Grassy Forest
- Creating strategic habitat links to assist threatened species move across the landscape
- Removing environmental weeds that can seriously invade indigenous vegetation
- Promoting natural regeneration of degraded habitats through ecological burning
- Protecting roadside verges is critical, as these are often the best examples of our original vegetation types. More importantly, nearly all of the big old-growth trees are on roadsides, and these have been critical refugia for hollow-dependent birds and mammals
- Dense planting in private land next to roadsides helps our shy & rarer birds to hide from aggressive birds
- The planting also buffers the old trees from external influences like climate extremes & nutrient influx from adjacent grazing land.

COMMUNITY BENEFITS

Our projects have multiple benefits for the broader community as well as the wildlife. eg:

- Community education to increase people's awareness of ecological issues, knowledge, and skills
- Attracting volunteers to help local farmers tackle serious environmental problems
- Providing motivation for local people to act on issues contributing to sustainable land use
- Giving local people hope for a more sustainable future
- Providing long term aesthetic improvements to a degraded landscape
- Providing shelter and shade for farm animals in adjacent paddocks
- Ensuring a healthy self-sustaining landscape by addressing the root causes of ecological imbalances
- Undertaking research to quantify the benefits and share them through conservation networks

SUCCESS STORIES

- Our nest box monitoring for Squirrel Gliders has given us further insights into the importance of roadsides. We have placed over 380 nest boxes around the district, and have seen Gliders moving into just about all them. During the summer however, boxes in the dry rocky hill country are usually empty while boxes along the creeks all have animals present. It seems there is a seasonal migration to moister habitat, but it's only possible because of strategic tree lines!
- Squirrel Gliders have also been found in "test case" boxes deliberately placed half way along several of our planted corridors. They have clearly used our planted trees to move along these corridors, in one case only 4 years after planting!
- Another success story concerns the elusive Brush Tailed Phascogale. This species has not been seen in the central Lurg district for decades, so we were delighted to learn of 2 sightings at the southern edge of our project area in about 2001. In recent years we are finding their distinctive nests in nest boxes several kms from the initial sightings, and our planted corridors have clearly played a key role in this migration.
- As a final example, it's been very encouraging to see the rare Grey Crowned Babblers nesting in scores of our planting sights, in some cases several hundred metres from the nearest old-growth trees. In fact our strategically located planting sites have enabled several family groups them to move several thousand metres to more fertile habitats lower down the catchment. With the better food resources available, the breeding rates have gone up. We now have 113 birds in the district, compared with 60 birds 8 years ago!!
- The Project's ongoing success is in a large part due to the huge level of community involvement. We have a small team of local volunteers who provide on-going support for our 2 paid employees by undertaking tasks such as seed collection, seed cleaning, propagation, nursery work, planting, nest box maintenance, and administrative work. Over 1500 students from 23 local schools provide further support as they help with seedling propagation, nest box building, and school planting days. Hundreds of volunteers from universities, bushwalking clubs, cycling clubs, church congregations, scout groups and the like are also involved each year on large scale planting weekends, nest box monitoring and bird surveys. Almost 23,000 people have been actively engaged in the work over the past 16 years, and our support base continues to grow!!

2. SUSTAINING THE OUTCOMES

The Regent Honeyeater Project has been in existence for the past 15 years and has a great deal of experience in delivering both on-ground achievements and change in local community attitudes to remnant vegetation. For example, many of our landholders take on a different project on their property every year, and there is a steady stream of new landholders wanting to join in as well. In fact we have so

many potential projects each year that we are now able to select the most strategic ones that will make the biggest difference to our threatened species.

It is true to say that our project is leading the way towards long-term sustainable land use, by working to restore the natural ecosystem balances that keep the land itself healthy. Landholders are actively involved in the project because they see the planting has as much benefit for them as it has for the wildlife.

Our group is developing long term plans to deal with weeds and feral animals in habitat areas as more and more sites are fenced off and revegetated. Annual baiting programs and shooting drives take care of foxes. We also arrange annual kangaroo culls to protect our planting sites and the bush remnants from overgrazing. Roadside burn-offs and follow-up spraying are undertaken to reduce troublesome grassy weeds like Phalaris.

The management committee for this project includes the most active landcarers in the Lurg Hills Ironbark district. The members understand the ecological issues very well, have worked impressively for conservation on their own properties and are well respected by the local community. The project is in the best hands possible to steer it in new directions for the future and to keep local people well informed about the opportunities being offered through this project.

Benalla Rural City Council is also very supportive of our efforts, so our planting sites on public roadsides are in good hands. In addition, the shire is preparing a holistic Environment Strategy which will certainly include actions to conserve threatened flora and fauna in the municipality. With such a well-informed and supportive council, we can be confident that our on-ground works are secure for the long term.

3. ROCKWELL COLLINS PARTICIPATION

I have been delighted to give special slide presentations to Rockwell-Collins employees in Melbourne on 2 occasions over the past few years. Staff members showed keen interest in the achievements we are making, and were invited to join the action on our planting weekends at Lurg.

In fact our project undertakes many different activities such as seed collection, plant propagation, nursery work, nest box monitoring etc throughout the year, and we would be pleased to welcome Rockwell-Collins staff to join us.

4. WORKS SCHEDULE

- sites are measured and pegged out in summer & autumn
- grants for the farmers arranged through our Catchment Management Authority
- sites are deep-ripped in autumn to facilitate easier planting
- spraying is in early winter to kill the autumn germination weeds
- 2nd spraying in spring (on some sites) to kill the spring germination weeds
- fencing is in autumn, with input from landholders (where they have the skills and equipment), and significant assistance from our project team, or prisoners from a regional corrections centre.
- planting begins in winter, with assistance from schools, universities, bushwalkers, and many other community volunteers, including some Rockwell Collins employees

5. BUDGET/OTHER FUNDING FOR 2011

Item	Applicant funds	Other contributors		Rockwell Collins Funds soughtf2011	Total budget
Employment/ project management/ co-ordination, monitoring and evaluation, communications with landholders, schools, universities, volunteer groups & funding bodies	22,880	CMA Expression of Interest Grants to Envir & Heritage Orgs Exetel Caring for Country SP Ausnet Wettenhall	40,000 2,300 6,000 2,000 2,500 20,000		95,680
In-kind/volunteer labour	248,350	Including local landholders, project committee, bushwalkers, university students, cyclists, scouts, bird watchers, 4WD clubs, shooting clubs, Telstra, Red Hill Computers, Daynetree Computers			248,350
Propagation, nest box placement and monitoring, mistletoe removal, ripping, slashing, spraying, ecological thinning, ecological burns, bus fares for school planting days, planting tool repairs, contract post ramming, fencing labour, fencing materials, kangaroo & rabbit control, tree guards, woody weed removal		Caring for Country CMA Community Educ Grants Exetel SP Ausnet Benalla Rural City (pending)	18,000 4,000 39,000 7,500 2,500	2,500	73,500
Total Budget 2010-2011 (GST exclusive)	\$271,230		\$143,800	\$2,500	\$417,530

6. PUBLICITY

Our project actively seeks opportunities for media coverage of our activities and achievements. The local and regional newspapers, the radio networks and TV stations regularly publish our stories, drawing wider community attention both to our work and the many voluntary groups involved.

We produce a yearly newsletter which is distributed to local landholders, media outlets, 23 local schools and hundreds of community volunteers from across Victoria and southern New South Wales. Financial supporters of the project are always acknowledged in the newsletter.

Slide shows about our project are shown widely across the state, to potential volunteer groups in schools, universities, bushwalking clubs, service clubs etc. These presentations give people an overview of the ecological issues we are dealing with at Lurg, the successes to date, and the great variety of on-ground projects involved in the restoration work. There are frequent questions about our funding base, and natural opportunities to acknowledge our sponsoring agencies.

7. PHOTOS OR METRICS

- The best signs of success are given by the threatened wildlife themselves:
The population of Grey-crowned Babblers has grown from around 50 birds to over 110 in just 8 years. They are nesting and breeding in scores of our restoration sites.
They have been able to move across country to better habitat, using our planting sites as corridors or stepping stones.
Squirrel Gliders and Brush-tailed Phascogales have also been able to move to better habitat via our corridors
Systematic annual surveys of over 150 sites in Lurg, have found many other rare woodland birds using our planting sites
- Photos of several key sites will be emailed shortly, and follow-up photos will be sent after the sites have been fenced & planted.

OVERALL PROJECT ACHIEVEMENTS

You may be interested to see some of the bigger picture of our work across the entire Lurg Hills district over the past 16 years. It shows the on-going commitment of local landholders, schools and community volunteers to the work, and a steady growth in on-ground outcomes.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL
no of sites fenced	23	24	39	22	23	16	17	20	30	16	17	23	15	16	326
km of fencing	17½	13	21	13.3	11.5	12.9	6.8	11.6	19.5	8.5	16.9	16.1	13.5	9.3	209.6
ha of habitat protected	93.5	93	108	80	70	68.2	56.1	72.1	95.0	34.7	56.13	103	106.9	110.5	1274.3
no of sites planted	13	46	21	33	39	24	35	40	45	23	28	29	21	24	438
seedlings planted	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	456,425
seedlings propagated	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	450,680
direct seeding sites			1	2	10	0	2	1	2	0	0	9	9	10	46
nest boxes placed	17	21	31	69	19	11	23	0	21	0	26	178	33	0	411
landholders involved	26	30	27	22	23	11	32	26	33	18	21	24	28	20	127
schools involved	10	11	12	17	16	16	18	22	23	23	25	20	23	20	37
students involved										1,885	2,000	1,350	2,058	2,100	15,658
community volunteers										440	460	550	674	560	7,084
total no of people	750	700	750	750	900	1,590	1,256	1,630	1,930	2,325	2,460	1,900	2,732	2,660	22,742