Seymour, March 2016

Biolinksalliance.org.au



Symposium Presentation No. 5

Restoring the "Glideways" of the K2W Link

Mary Bonet

Partnership Facilitator – Kanangra Boyd to Wyangala Link Great Eastern Ranges Initiative email mary@upperlachlanlandcare.org.au



Mary spoke about the achievements of a large program to build the Kanangra Boyd to Wyangala Link, a project that is part of the Great Eastern Ranges Initiative. Restoring the Glideways is a project focusing on glider conservation and awareness across the K2W Link. The project is a partnership with many community groups and agencies and includes baseline surveys of gliders and people, habitat management and a large effort to raise awareness of gliders in the local community.

The Great Eastern Ranges Initiative

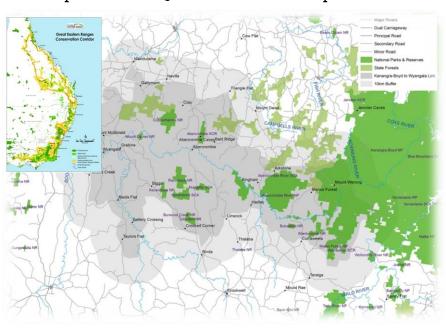
A 3,600km 'continental lifeline' linking people, reserves and habitats within and across landscapes from the Grampians to the Queensland Wet Tropics

Kanangra Boyd to Wyangala Link

The K2W Link forms part of the Great

Eastern Ranges
Initiative. It is a major landscape corridor, connecting the sandstone forests of the Greater Blue

Mountains with protected areas and treasured habitats on private land in the



Seymour, March 2016

Biolinksalliance.org.au



upper reaches of the Lachlan River catchment. This spectacular area is a 319,200ha natural corridor following the line of the Abercrombie River, formed by the casuarinas lining its banks, the eucalypt forests on the surrounding hills, and the grassy box woodlands that connect them.

The K2W Partnership

The partnership contains representatives from 2 regional Local Lands Services, NSW Office of Environment & Heritage, National Parks and Wildlife, NSW Forestry, 3 Universities, 4 Local Government areas and representatives from NGOs and community groups including local Aboriginal Land Councils, Conservation Volunteers, The Foundation for National Parks and



Wildlife, National Parks Association NSW, Land For Wildlife, International Volunteers for Peace, Cowra Woodland Birds and, of course, the local Landcare groups.

The Partnership works with landholders, local communities and organisations to protect the wildlife and natural resources of the Abercrombie catchment in an area we call the K2W Link.

To achieve its primary purpose to **restore key linkages** across the K2W Link, the partnership has aimed to:

- support voluntary management of remnant native habitats by local landholders, parks staff and others;
- encourage collaborative control of pests and weeds across property boundaries to improve the condition and corridor value of habitat linkages;
- restore lost habitat connections through assistance and support for voluntary revegetation;
- support reconnection with country through sharing of Aboriginal traditional knowledge and development of new joint ventures;
- provide opportunities for community involvement in field days, replanting events, and wildlife surveys.

Seymour, March 2016

Biolinksalliance.org.au



Funding support

- Australian Government Biodiversity Fund: \$2.7 m 2012-2017
- NSW Office of Environment and Heritage Sustainable Schools Program: \$37,000 to 2016
- National Landcare Program and NSW Local Land Services South East: \$150,000 2015-2018
- NSW Environmental Trust: \$500,000 to 2021

Over the period 2012-2016, the K2W Partnership has achieved:

- 500 hectares of revegetation
- 5,000 hectares of weed treatment
- And almost 50,000 hectares of cross-tenure pest management.

With one year left to go in our Biodiversity Fund project, we have already well surpassed many of our targets, particularly in pest management. Our final year will be looking at establishing long term monitoring, fauna and flora surveys, and final mapping.

Working with community groups across the K2W

Each year we have run a round of community group grants to help build capacity within the K2W regions. We have also run community workshops on weed identification, volunteer weekends restoring treasured community lands, citizen science projects (who's living on my land), looked at traditional burning, and organised new landholder training, revegetation field days, pest animal field days and cross-property planning.

We have encouraged private land conservation: 25 properties have entered into a private land conservation agreement.

Restoring the "Glideways" of the K2W

Restoring the Glideways is a major project funded through the Great Eastern Ranges Initiative.

The K2W Link provides habitat for all five NSW-based glider species, with populations centred around Wombeyan Caves-Mares Forest National Park, Copperhannia Nature Reserve, and Abercrombie River National Park. Gliders persist in these districts despite pressures from habitat degradation and introduced species, but face continued decline if threats remain unchecked. Spatial analysis by the Office of Environment and Heritage (OEH) in 2012, conservation action planning

Seymour, March 2016

Biolinksalliance.org.au



by K2W partners, and local knowledge all highlight the need to strengthen landscape corridor connections, enhance the quality and extant of remnant habitat, and coordinate suppression of feral predators and threats to habitat quality (eg from intense wildfire).

The K2W Glideways project delivers an integrated package of activities designed to assist the conservation of gliders in priority locations across the K2W landscape, including:

- Increase awareness of the status of gliders and other species across three
 districts; involving local communities in citizen science activities to raise
 awareness, such as participating in hollow-bearing tree counts and
 monitoring of habitat condition.
- Coordinate landholder commitments to protect and link habitats across the landscape; protection of core glider habitat through some form of private land agreement, creating corridors of commitment across the landscape.
- Enhance remnant habitats with nest boxes and in-fill plantings with preferred feed species.
- Restore functional linkages through grazing management, natural regeneration, targeted plantings and feral predator control; integrated pest and weed control programs to engage landholders in local control programs.
- Strengthen local capacity to manage persistent pressures through fire planning and surveillance of invasive species.
- Monitor changes in glider distribution and abundance; long-term monitoring and also collection of genetic material to establish a baseline of current levels of genetic movement.

Baseline surveys

- Landholder awareness: surveys were across the whole of K2W to get a
 baseline assessment of awareness through mailouts and on-line surveys, and
 surveys at local agricultural shows. The surveys set out to discover what
 people know about gliders and their presence, ecology, threats and
 management. The surveys showed that not many people know about gliders
 and, if they did have knowledge of them it was through discovering them
 deceased by the roadside or caught in barbed wire.
- Habitat survey: ecologists carried out survey work to gather and presented preliminary data on habitat suitability and potential limiting factors to glider persistence such as the density of nectar, pollen and hollow-bearing trees, and key barriers to movement.

Seymour, March 2016

Biolinksalliance.org.au



 Glider presence and distribution mapping: ecologists used spotlighting and camera trapping as well as nest box and tree hollow checks. These reconnaissance surveys will provide information to enable planning and design of a more detailed population census of gliding mammals to be undertaken later in the year (September-November).

Awareness raising

- Cat tracker: the aim of this project is to educate cat owners and promote
 awareness of the distances that domestic cats can roam and travel. The
 project will involve attaching a monitoring device to domestic cats for up to 11
 days, to see where the cats have travelled. The information downloaded from
 the monitoring device will be provided to the cat owners. The project kicked
 off in Lithgow in March.
- Barb Busters: the program targets the replacement of barbed wire and has been very successful among Landcare groups in the region and we will be continuing this alongside a wildlife friendly fencing campaign. We aim to replace 4km of barbed wire in targetted areas across the K2W.



- Glideways BioBlitz: We will be running biannual bioblitzes across the K2W with first one scheduled for June 2016 at Trunkey Creek. It will involve a 24h surveying event, utilizing citizen science to improve our knowledge of the fauna species in the K2W area with a particular focus on gliders and will be combined with a schools education day.
- Planning Across Properties: This involves working with Landcare groups to improve habitat management across properties, including pest and weed management.

Habitat enhancement

Enhancement includes:

- planting of feed species for gliders
- community nest box building and installation.

Managing threats

In K2W we manage feral animals through a strategic and coordinated whole-oflandscape approach which includes:

Seymour, March 2016

Biolinksalliance.org.au



- Monitoring of pest species using remote sensing cameras, footpad traps and bait stations.
- Working across boundaries with landholders and public land managers to carry out trapping and other control programs.
- Monitoring of control areas (including areas with installed nest boxes) for reappearance of feral animals.
- Targeted trapping and/or baiting in areas where feral animals have reinvaded.

Science and investigation

- *Monitoring*: actions are being monitored, including planting success, nest box usage and feral predators.
- Research projects include: Barriers to movement using glider genetics;
 Where do our cats go at night?

Educational/Awareness raising activities

Seed funding was received through Foundation for National Parks and Wildlife for educational and awareness raising activities. These include:

Education days

The program started with a Biodiversity Day, a Cultural Day and a tree planting day. This involved 25 primary schools in local area (about 300 children), 6 partnering organisations including Taronga Zoo, National Parks and Wildlife Service, Aboriginal groups, Landcare groups, and Local Lands Services. On the Biodiversity Day, there were lots of different activities particularly on endangered species.

Links to learning program:

Schools approached the group to participate in this program of investigation and awareness campaign for secondary students. The pilot included tree planting, community nest box building with the men's shed and a visit to meet Squirrel Gliders at the zoo. This was a positive program that changed attitudes.

Seymour, March 2016 Biolinksalliance.org.au



Glideways teaching guide

Following the links to learning activities, OEH Sustainable Schools Program funded development of a curriculum-based guide including action learning, kids teaching

kids and a schools competition. Workshops with teachers and GER people developed a teaching guide Wildlife Corridors for Kids. The topics cover:

- the ecology of migration and dispersal in Australia's native species, and the principles of connectivity conservation in supporting these;
- the role of the Great Eastern Ranges as a natural corridor providing essential ecological, social/cultural and economic (ecosystem service) benefits; and
- the role of the K2W Link in connecting habitat for gliders and other native species as part of this system.

Stage 3 - Teaching Package

Wildlife Corridors for Kids



The Guide is a very valuable resource for primary and secondary school students and has attracted interest outside the region, with new funding coming from Taronga Zoo and Boeing Australia.

Gliding the Web

The Glideways website has been established at http://www.glideways.org.au/ to provide resources for schools and the public.

Further information

For more information on K2W visit http://www.greateasternranges.org.au/our-partners/ger-regional-partnerships/kanangra-boyd-to-wyangala-link/