

**VEGETATION INVESTMENT PROJECTS
(AUSTRALIAN CAPITAL TERRITORY)**

Building stepping stones for biodiversity, on a landscape scale

Australian Capital Territory:

Region: Murrumbidgee and ACT.

Affiliated Regional NRM Group: Murrumbidgee

Background

In 1999, Greening Australia ACT & South East NSW (GA ACT & SE NSW) received funding for the Vegetation Investment Project (VIP) through the Natural Heritage Trust to work with land managers in buffering, linking and protecting native remnant vegetation across three significant areas in the ACT.

CSIRO Wildlife and Ecology conducted research using the 'focal species' approach (Lambeck, 1997) and bird surveys were completed on 70 woodland sites in the north of the ACT. The study identified the habitat needs of 25 species of insectivorous birds and developed vegetation management guidelines, assisting GA ACT & SE NSW in identifying, improving and connecting patches of bush significant to local fauna.



The VIP project involved 55 land managers in protecting 102 hectares of remnant vegetation and re-establishing 249 hectares of native vegetation linking the Murrumbidgee across to Hall in the northern parts of ACT.

VIP South builds upon this success and applies the landscape conservation guidelines to the southern region of the ACT.

The objectives of VIP South are:

- to buffer, link and revitalise remnant vegetation in the southern parts of the ACT and surrounding NSW;
- tackle threats to biological diversity;
- implement proven revegetation guidelines developed through VIP;
- develop and ground truth a monitoring and assessment program;
- educate and engage southern rural land holders, landcarers, and organisations in a revegetation program that will link and complement northern activities, as part of the 'bigger picture'.

Vegetation activities involve enlarging vegetation patches, enhancing plant diversity, creating bridges between isolated habitats, establishing vital east and west vegetation links and providing buffers from urban development.

INTEGRATION OF BIODIVERSITY INTO REGIONAL NRM PLANNING

The project actively involves local landcare groups, rural leaseholders and the ACT Government in protecting, extending and linking farm remnants to Bullen Range, Gigerline and Googong Nature Reserve and Namadji National Park.

Achievements to Date:

- ❖ VIP South has created a number of essential corridors and 'stepping stones', with over 55 kilometres of fencing erected to protect 54,500 trees, shrubs and grasses, and over 130 kilometres of direct seeding.
- ❖ VIP South achieved over 100 hectares of native vegetation re-established and over 440 hectares of remnant vegetation protected and enhanced.
- ❖ In order to address threats to biodiversity, the project addressed the protection of high quality remnant vegetation, the enhancement of depleted remnant vegetation and the re-establishment of vegetation communities in highly modified land.
- ❖ Very few sites were identified as high quality remnant vegetation that only required the protection of grazing. In most cases, remnant vegetation required the enhancement of understorey species such as shrubs, forbs and grasses to increase biodiversity.
- ❖ The re-establishment and enhancement of native vegetation involved identifying species suitable for each site. Individual species lists were developed for all sites with consideration to indigenous species and suitable species to survive in modified landscapes.
- ❖ Guidelines developed through the original VIP were applied when assessing sites for VIP South and priorities for site selection were based on the following:
 - site extends, encloses or links an area of largely intact high conservation value vegetation;
 - site is of sufficient size and appropriate shape to meet the habitat needs of the focal and intermediate species;
 - work on the site will be maintained and managed to minimise the impact of threats such as urban development, weeds, feral animals, excessive grazing regimes, inappropriate burning regimes, etc;
 - protects and/or extends an endangered community or habitat for threatened flora and fauna;
 - sites which can be inspected, used for demonstrations, monitored and evaluated throughout a number of years.
- ❖ Under the CSIRO guidelines, ten VIP Sites were greater than 10 hectares, with two sites reaching 100 hectares. Sites smaller than 10 hectares were selected, based on connectivity to other sites or remnant vegetation, to reduce isolation:
 - across 5 kilometres, 62 hectares was protected and re-established amongst 16 sites to create a connected network of patches that functions like a series of large and complex patches or 'stepping stones';
 - revegetation of some sites addressed many threats to the environment such as dryland salinity and erosion, as well as habitat loss;
 - linear plantings included corridors along riparian systems and links between remnants;
 - linear plantings were an average 25m wide and all sites were established with at least 20% shrub cover.
- ❖ Small rural residential development caused some concern during the establishment of VIP South because most properties are smaller than 10 hectares, questioning the benefits to biodiversity. However there was great interest from land managers to be involved in

revegetation activities and as the number of properties increased, more sites became connected and created bigger stepping stones.

- ❖ In a small area with a large number of land managers, the project was able to engage the community to work together, encourage neighbours to be a part of the project, identify gaps and approach owners of these areas to get involved.
- ❖ More than 1,300 community volunteers have planted over 16,000 native trees and shrubs and contributed more than 3,400 work hours to create bush stepping stones.
- ❖ By working in these newly developed rural residential areas, VIP South was able to engage and educate people who are very new to conservation activity. This resulted in a newly formed landcare group, Royalla Landcare, to source additional funding to continue the work.
- ❖ On-going monitoring is carried out at each site by the land manager including inspecting plant survival and species performance, weed infestation and competition, natural regeneration, fauna activity, follow-up maintenance and photo records.
- ❖ A monitoring manual was developed to monitor original VIP sites and is also used to monitor VIP South sites. The monitoring manual records information on the following:

Ecological parameters

- weed infestation;
- revegetation plant growth and survival, including from photo points;
- level of natural regeneration;
- climatic conditions and impacts on project outcomes;
- species of birds present.

Implementation parameters

- degree and level of management requirements by land manager;
- land manager perceptions;
- barriers to adoption;
- flow-on effects.

Information Used:

National data sets:

- ❖ National Land and Water Atlas.

State data sets:

- ❖ Environment ACT data base and mapping information.

Regional data sets:

- ❖ CSIRO Wildlife and Ecology surveys.
- ❖ GA ACT and SE NSW data sets.

Market and Non-Market Mechanisms for Biodiversity Conservation:

Economic instruments (financial mechanisms):

- ❖ Devolved grant scheme used to allocate funding for on-ground revegetation;
- ❖ As part of maintenance agreements, funding is provided to assist weed control and replacement plantings.

Community measures (motivational mechanisms):

- ❖ Local facilitators to assist landholders to plan and implement.
- ❖ Access to external information.
- ❖ Development of partnerships with research institutions such as CSIRO Wildlife and Ecology.
- ❖ Ecological surveys.
- ❖ Focal species approach.
- ❖ Comprehensive monitoring systems in place for biodiversity and community involvement.
- ❖ Awards (winner of a Bushcare Nature Conservation Award at the ACT Landcare Awards).
- ❖ Land managers sign agreements to maintain sites for a minimum of 10 years.
- ❖ Education and awareness.
- ❖ Community engagement.

Critical Success Factors:

- ❖ Project is based on a scientific approach, with focal species methodologies, comprehensive surveys, mapping of sites, recording of site information and monitoring of biodiversity targets.
- ❖ Priorities are established for revegetation, based on guidelines developed by CSIRO to enhance the connectivity of remnants;
- ❖ Landscape level approach, with priority areas identified and landholders approached for involvement, in order to link up the larger landscape.
- ❖ Biodiversity outcomes integrated with other resource management issues, such as salinity.
- ❖ Success of the first project (VIP) expanded on into the second project (VIP South).
- ❖ Project is aligned with regional and national priorities.
- ❖ Simple and effective devolved grants scheme that is tied to focused outcomes and allows landholders to get rapid approval.
- ❖ Strong partnership between CSIRO, GA ACT and SE NSW and local landholders.
- ❖ Strong interest from land managers in small rural residential areas means engagement and education of people who are new to conservation activity.

Further Reading:

Fact Sheets on:

- Remnant Vegetation;
- Living With Salinity;
- Australia Natives – Seed Collection & Propagation;
- Revegetation With Natives – Tubestock Planting & Direct Seeding;
- Monitoring and Evaluation;
- Biodiversity on Hobby Farms.

Contact for Further Information:

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Quote:

“These projects have been a real incentive for landholders to think about what they might do over the next five to ten years”.

Susie Wilson, GA ACT & SE NSW.