

## **CARING FOR THE LAND - CARING FOR THE COMMUNITY**

**Mark Butz**

Aranda Community Landcare Project PO Box 128 JAMISON ACT 2614

'Growing Homes' is a volunteer-driven community landcare project established in 1993 in the Aranda area of Canberra to demonstrate Landcare principles and practical techniques in an urban setting. That setting is located within the catchment of Lake Ginninderra and Ginninderra Creek, a tributary of the Murrumbidgee River.

The project site lies mostly in community open space and partly in the grounds of Aranda Primary School (which has 400 students), within a short distance of several remnant forest and woodland areas and a number of conservation reserves.

The site was once at the interface of dry open forest and woodland communities but was almost entirely cleared for grazing many decades ago. The site has been irrigated grassland since suburban development around the site began in 1967.

The name of the 'Growing Homes' project was deliberately chosen to challenge assumptions, to provoke questioning and to convey that the project encompasses community action and learning beyond 'trees' to 'habitat and ecology'. It has evolved as a direct result of the concerns of students at the school about the effects of loss of wildlife habitat since European settlement of the area in the 1820's, and particularly since urban development.

The students propagated and planted native species so that wildlife could return to the school grounds. As their awareness of the need for structural diversity grew they added understorey and ground cover species. And as they realised the need for corridors of green to link isolated remnant bushland and conservation reserves, they also realised that their rate of progress, while encouraging, was too little, too slow to make a real difference during their time at the school.

At much the same time sustainability became an issue. In financial terms, the ACT community could no longer afford to maintain all the irrigated public landscapes it had inherited from days of Commonwealth planning and administration. In environmental terms, the scale and intensity of management of these landscapes was a waste of water, and of energy used in mowing, as well as leading to impacts from chemical fertilisers in the soil and in runoff water. In addition, we found that the soil at the site had become very compacted and poor in soil fauna.

The decision was taken to escalate the revegetation project in both size and speed, to address these issues more effectively. Partnerships were formed, a plan was drawn up and an initial grant for ground preparation and plants was obtained under the ACT component of the National Landcare Program. The project is developing under the umbrella of the comprehensive Aranda Primary School Community Environment Program and provides the vehicle for the most extensive community outreach from that program.

### **METHODS**

'Growing Homes' was conceived to convert unsustainable artificial landscapes to native landscapes which are more structurally and floristically diverse, and more ecologically sound. This would also improve wildlife habitat in a corridor being created between remnant forest and woodland areas. At the same time, we could improve the ability of the soil to take up and retain water in the area to improve the quality of runoff.

To prepare for this we permanently cut off irrigation, sprayed out grass, fenced the perimeter with re-used materials, deep-ripped and rotary-hoed with a tractor, and excavated and lined a bog garden area to reduce and filter surface runoff.

We chose to re-plant the area with a high diversity of plant forms (trees, shrubs, ground covers, grasses, rushes and lilies) and a diversity of species. There was a lot of research into species suitable for the area, which would attract birds (both seed eaters and honeyeaters) and insects (especially butterflies) throughout the year. Other species were chosen because they have become rare and endangered in our local region.

We gained a high community profile through an official launch which also opened our 'Butterfly House' which we had purchased for plant propagation. The revegetation work took place through a series of community planting events and student planting sessions. For the first of these we held an Earth Fair for the whole community and this combined the planting with displays from community groups and government agencies, activities in the arts and construction of a permaculture garden. A big community effort provided much needed follow-up in mulching and watering during the long and hot summer which followed.

Students have played many key roles in the whole project, particularly through the school's Park Care Juniors/ Junior Landcare Group. They have carried out much of the research into local and rural bushland and grassland ecosystems, catchments and water quality, seed collection and plant propagation, shadehouse management, methods for erosion control, bush regeneration and revegetation.

In addition to participating in planting and mulching, most of the school's students have taken turns in a roster to bottle-water the first plantings.

Students have also been constructing nestboxes to cater for a range of bird and mammal species prior to the formation of natural hollows.

The project has helped to develop skills for problem-solving and design. During the project students have devised new ways to do things better, including the use of small-scale trailer-mounted bins of water-absorbent materials like Terrasorb, delivered by the simple Gloop Scoop made from old two-litre milk bottles. They also devised new methods of moving and spreading mulch to save labour and damage to small plants.

At the same time the students experimented with simple methods for erosion control in the playground. Having inspected erosion control works with their counterparts at the rural Hall Primary School, they devised a small gabion filled with re-used materials which could not be recycled - a plastic mesh onion bag and styrofoam pellets, pinned to the ground with tent pegs. Through trial and error this was later refined to use stronger orange-bags, and for really heavy duty applications, 20 kg onion bags now seem to be the best.

For their contribution to 'Growing Homes', the school's Park Care Juniors recently won the 1994 ACT Earthworm Environment Award for Schools, and now go on to the national finals.

Further profile was previously gained through production of a video by the Park Care Juniors for the Landcare Australia Schools Video Competition, in which Aranda was a prize winner. This resulted in filming of a Landcare Minute at the school and a strong feeling of community pride in their achievements.

An Information Bulletin for the project and newsletters for the environment program also help to spread the word and build connections with schools and community landcare groups across the region and in other States.

Very recently the project was the catalyst for formation of a new landcare group and project at the nearby Canberra High School. The two projects will be linked by revegetated areas in a new ACT Government approach to sustainable urban landscapes recently launched in the Belconnen area, which has also been stimulated by the development of 'Growing Homes'.

During 1994-95 a learning trail is being developed by volunteers as a whole-community resource. This will be multi-layered both in learning themes and in age groups addressed, and will make use of the revegetation area and adjacent bushland remnants.

Measurement of reduced inputs of water, fertiliser and herbicides, and observable improvements in water quality and wildlife habitat, are being developed into learning resource materials for a range of ages.

The whole school community are also developing skills for native plant seed collection, propagation, planting and care, with the recent acquisition of a shadehouse. This will reduce the need to buy plants and assist propagation of reliable indigenous varieties of grasses, shrubs and trees for revegetation throughout the local catchment and region.

## RESULTS AND DISCUSSION

At its simplest level, for results we can cite plants in the ground (nearly two thousand to date), which have grown on despite very dry seasons and severe frosts.

We can also cite the hundreds of people who have participated, and the lasting coalitions and partnerships of community, government and business which have resulted.

In economic terms, the project already saves the ACT community each year over \$5000 in maintenance and some 6 million litres of water.

And although the project is still quite small in area, it links remnant forest and woodland areas and other local community landcare projects in a 'green web'. It thus has a value far greater than its area would suggest, as a vital link and as a catalyst to other projects.

The project has captured the imagination of the broader community and stimulated intense interest in the range of techniques which it is using, because it is distinctive from a number of points of view:

- it is designed to comprehensively model landcare principles in an accessible urban location
- it explores and models aspects of sustainable land management in a catchment context
- it is based on sound educational principles, integrating community action with educational practice, supporting most key learning areas in school curriculum and program
- it is built on extensive networks and coalitions of support involving a wide range of government agencies, community groups, businesses and educational interests
- it helps to develop (in all age groups) skills of participation and positive attitudes for environmental action
- it demonstrates the value of landcare as an agent of community development, provided this is by design rather than default
- it is producing tangible results which stimulate other groups to form and take similar action
- it has developed a high profile in the broader community and is being extensively documented to assist sharing of experience.

While some may doubt the value of the kind of artificial ecology being created through the project, it does fill a vital and often neglected niche in community education:

It demonstrates to a broad community audience in their own backyard the value of

local environmental action and of 'weaving a green web', and makes sustainability a very real and concrete issue which is relevant globally, locally and personally.

### ACKNOWLEDGMENTS

The 'Growing Homes' Aranda Community Landcare Project evolved from and continues to be strongly shaped by the interest, initiative and enthusiasm of students, staff, parents and friends associated with the Aranda Primary School Park Care Juniors/ Junior Landcare Group and the Aranda Primary School Community Environment Program.

The Project gratefully acknowledges the support, advice and/or material assistance of:

- National Landcare Program (ACT Community Vegetation Management component)
- ACT Parks and Conservation Service  
City Parks, Conservation & Wildlife, Agriculture & Landcare, Yarralumla Nursery,  
ACT Department of the Environment, Land and Planning
- Richmond Fellowship LEAP program (through Canberra Nature Park)
- Greening Australia (ACT and SE NSW)
- Econuts contract tree growers
- Native Nooks
- CSIRO
- TESAL (Towards Ecologically Sound Australian Landscapes)
- Society for Growing Australian Plants (ACT Region)
- Friends of Aranda Bushland Park Care Group
- Australian National Botanic Gardens
- Healthy Cities Canberra (through the ACT Health Promotion Fund)
- Learnscapes Environmental Communication
- Australian Association for Environmental Education (ACT Chapter)
- other contributors to Earth Fair '93, including:  
Aranda Primary School Parents' and Citizens' Association, Aranda Multi-Arts Program,  
Judy Chapell, Permaculture ACT, Canberra Organic Growers, ACT Special Events and  
Festivals, ACT Office of the Environment, Revolve, CSIRO Double Helix Club,  
ACT Waste Management (Department of Urban Services), 1st Aranda Cub Scout Group,  
ECKO (Environmental Caring Kids Organisation), Questacon Travelling Science Show,  
ACT Life Be in it.