

South Australia Kids for Landcare Invests in the Future

Melanie Moore and Chris Bayly

Today's children are the custodians of tomorrow's environment - and, with that in mind, an all-out effort is being made to educate South Australian children about their important role in the future of Australia as an agriculturally sustainable and profitable nation.

Thousands of trees are being propagated, soils are being studied, water is being tested for salinity, frogs are being counted, kids are singing songs about caring for the environment, and country and city schools are linking together.

The banner being waved by teachers, children and parents is 'Kids for Landcare' - a long-term program developed in 1990 by the Departments of Education and Agriculture, as part of the national Decade of Landcare.

Kids for Landcare coordinator Chris Bayly says the multifarious program is proving to be an outstanding success.

Environmental education now has a true position on all school's curriculum. The Kids for Landcare phone is always ringing hot with enquiries from teachers about what schools can do to involve their students in landcare, and parents are showing new-found interest in their children's environmental studies.

Kids for Landcare has prompted a ground swell of interest in environmental education by teachers, parents and children.

Accordingly to Mr Bayly, active participation by students in landcare activities is the key to the success of Kids for Landcare.

Doing is the best way of learning, whether it be planting trees, collecting tree seeds, establishing a school garden, making compost heaps, or propagating seedlings.

State Associate Director-General of Education, Garth Boomer, says SA schools are taking the Kids for Landcare program very seriously.

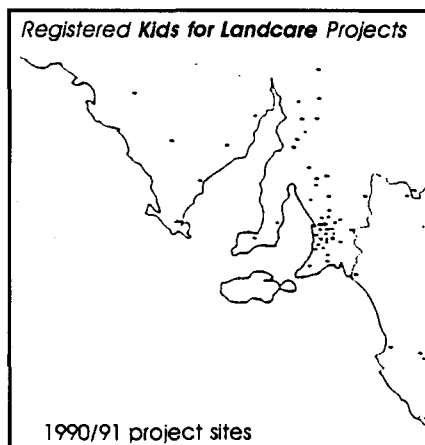
Ms Melanie Moore is a journalist with the Stock Journal.

Mr Chris Bayly is the 'Kids for Landcare' coordinator.

Teaching young people to care about the land is an issue which should concern all Australians - it is important that school children do not see the problem as being out there and belonging to someone else.

Land degradation is now Australia's most pressing environmental problem. Improved farming practices, research and technology all have important contributions to make. Lasting change will rely on our ability to convince young people that, as future stewards of the land, they have a central and powerful role to play in its conservation.

From 1992, all students completing the new two-year SA Certificate of Education can study a unit on landcare as part of the compulsory Stage 1 subject Australian Studies. Also, new optional subjects such as Environmental Studies and Natural Resources Management are being introduced which will offer students tremendous scope to learn about landcare.



Although Queensland, NSW and Victoria have established programs similar to Kids for Landcare, Mr Bayly says SA is setting the pace in environmental education.

Some \$715,000 of Department of Education funding has been distributed to twenty-six schools, now known as Centres of Excellence in Environmental Education. Funding has been used to extend projects at the Centres of Excellence, and to implement new projects at nearby schools.

Thousands of South Australian students have visited Port Noarlunga Primary School, a Centre of Excellence, to participate in its aquatic and environmental education program. Port Noarlunga Primary School deputy principal Mr Wal Anderson says funding has given students the opportunity to rehabilitate degraded dune and estuary areas, plant trees, saltbush and ground covers.

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Mr Bayly says the highlights of the Kids for Landcare program have been the extremely popular projects of Frogwatch and Saltwatch.

The Saltwatch project requires students to collect water samples, to test salinity levels, and to record these levels on maps of SA. These maps outline areas where salinity is a problem, and are a guide to where revegetation should occur.

More than one hundred and ten schools participated in the Saltwatch program in 1991 and it is hoped that more than two hundred schools will be involved in the 1992 Saltwatch program.

Frogwatch, a project to identify how many and what types of frogs there are in SA has been adopted by fifty schools. Students visit local creeks and dams, with an adult, and record frog calls on a tape recorder. They take this back to the classroom and compare the frog calls with those on the master tape. Using computers they can identify species of frogs from their colouring and call. Decline in frogs indicate areas of increasing pollution and land degradation.

Many programs established for the Decade of Landcare focus on adults. Kids for Landcare provides an opportunity for the whole community to work together and expand their environmental knowledge. Kids for Landcare is helping young people to become educated and willing participants in the challenge to save the land.

Mr Bayly advises that:

Students and schools participating in landcare projects in South Australia should register their project with Kids for Landcare - and any students and schools are eligible to win the educational section of the state Landcare and prestigious National Landcare Awards.

In 1990, Glossop High School students won the SA education division \$1,000 prize for their tree planting project at Barmera, their rehabilitation of the Berri Evaporation Basin and their ongoing environmental monitoring program. In 1991, the Telecom Education Landcare Award in South Australia was won by Aldgate Primary School. Applications for 1992's awards close in September.

Another extremely successful facet of the Kids for Landcare program has been city and country student exchanges which provide children with an opportunity to experience the difference between rural and urban communities. The 'Landlink' exchange, developed by the Departments of Agriculture and Education and the peak farmer union body, the United Farmers and Stockowners, provides city children with an opportunity to experience life on a farm, and for country children to appreciate city life. City children learn to appreciate how a rural community maintains itself and to learn the important role of children on the family farm. It breaks down the barriers between city and country people.

In 1991, three extremely successful 'Landlink' exchanges were made. Marion Primary School students visited Brown's Well Area School, Paruna, in August. Aldgate students visited Carrieton Rural School and Orroroo Area School and Black Forest students visited Naracoorte South Primary School.

A puppet theatre production with an environmental theme, produced by

SA's Patch Theatre Company, has proved very popular among SA school children. Originally scheduled to last for six weeks, "Clucky and the Vegetable Matter" was shown for two terms. Chris Bayly reports:

The role of worms in improving soil health, vegetation retention and erosion control are highlighted by the energetic Patch Theatre players.

Curriculum support for environmental education has been developed through the publication *Environment* and the *Kids for Landcare Kit* which are on sale at the Education Department's sales outlet - The Orphanage.

Developed by the SA Department of Education Curriculum Directorate, the material supports eight key concepts which should be taught across the school curriculum. These include:

ecosystems: all things are connected and share the same resources from the sun and earth;

resources: all living things have varying degrees of access to the resources they need to survive;

growth: the ability of the environment to sustain growth is limited;

heritage: natural and built environments provide a sense of belonging;

aesthetics: environment is an inspiration for creativity and offers sources of beauty and joy;

environmental ethics: humans have a moral responsibility for the well being of all living things in the global community;

decision making: effective decision making about environmental issues requires consideration of ecological and social factors;

participation: everyone should be prepared to take action for the environment.

Land resource degradation in South Australia centres on the following problems:-

- Water erosion has the potential to affect 2.9 million hectares of mainly duplex soils such as those

found in the mid north and Eyre Peninsula and extensive areas of the arid zone. The annual loss of production is estimated at approximately \$0.82m.

- Wind erosion has the potential to affect 8.3 million hectares of agricultural land, in particular, sandy soils such as those found in the Mallee and on Eyre Peninsula and extensive areas of the arid zone. The annual loss of production is estimated at approximately \$1.17m.
- More than 225,000 hectares of land on Kangaroo Island, Eyre Peninsula, the Mid North, the Murray Mallee and the Upper South East are affected by salinity associated with rising groundwater levels, and the area is increasing. The annual loss of production to dryland salinity is valued at approximately \$27m.
- Acidification of soils is an increasing problem affecting the subterranean clover-based pasture country in the high rainfall of the South East, Kangaroo Island, Mount Lofty Ranges and the higher rainfall cropping/livestock areas of the lower Eyre Peninsula and the lower, mid and upper north districts of the State. The total area of soils prone to acidification is estimated at 2.5 million hectares. The annual loss of soil acidification is estimated as close to \$10m.
- Water repellence affects 2.2 million hectares of light textured soils across the State, consisting of 1.5 million in the South East and southern Mallee, 0.5 million on Eyre Peninsula and 0.2 million in the upper Mallee and on Kangaroo Island. The annual loss of production resulting from water repellence is valued at approximately \$2m.
- Decline of the chemical, physical and biological status of soils due to inappropriate management practices is a concern throughout the State that causes an annual loss of approximately \$60.9m.
- there is a decline in the capacity of arid lands to maintain production due to the suppression of natural

vegetation species under the grazing pressures exerted by domestic and feral herbivores. Such grazing pressures lead to long-term changes in surface cover and the composition of natural vegetation. The estimated annual loss to the pastoral industry from rabbits is close to \$17 million with an additional \$5 million loss in agricultural areas.

- There has been an invasion of undesirable plant and animal species in both agricultural and arid zone lands.
- There is a decline in water resource quality and quantity in wetlands and riparian environments due to increasing salinisation, turbidity, other contamination (eg. bacteria,

nutrients and pesticides) and siltation from streambank and soil erosion.

The total losses due to land degradation is estimated at approximately \$123 (farm gate) of a total South Australian agricultural production of \$2 billion (farm gate). As this is a growing problem emphasis on landcare is a vital issue for all Australians. ♦

Students from Aldgate Primary School at work on their Landcare Projects.

