2006 Eco Schools Grant *$2,500*

FORSTER PUBLIC SCHOOL: WE DIG OUR VEGGIE GARDEN

overview of the project

In 2006 Forster Public School, on the mid-north coast of NSW, successfully planned, designed and constructed a permaculture vegetable garden including compost bins, worm farm and a water tank within the school grounds. The vegetable garden successfully educated students from all years about the environment, sustainable ecosystems and food production and nutrition, by providing them with a combined theoretical and practical learning experience. Students from the school are now changing their attitude to the environment and are more aware of healthy eating.

The success of this project has been recognised by being awarded the NSW State winner for the Sustainable Garden Challenge in 2007.

PHOTO COURTESY: FORSTER PUBLIC SCHOOL

Vegetable Garden drum plot and water tank

how the project was carried out

A site was selected within the school grounds and fenced to form the vegetable garden. Raised garden beds were established in 32 recycled olive export drums that had been cut in half (drum plot). Prior to filling the drums with soil, holes were drilled in the base and aggregate placed in the floor of the containers to allow free drainage. Organic matter from the school's compost bins and worm castings from the worm farms were added to provide nutrients prior to planting.

PHOTO COURTESY: FORSTER PUBLIC SCHOOL

Fresh vegetables from the garden

Students planted a variety of different seeds and seedlings, with planting methods varying depending on the age of the students, e.g. kindergarten students planted larger seeds into egg cartons with cotton wool and older students planted seeds and seedlings directly into drums. A layer of sugar cane mulch was placed on top of each drum to retain moisture. Students helped teachers plan crop rotations and over time the students are establishing which vegetable varieties grow better in certain areas of the garden and are managing plant placement in accordance with this.

The garden is maintained with compost and fertilisers. Compost is produced from food scraps collected from the canteen and student's lunch boxes which is deposited in the worm farms and compost bins. Pest control was carried out using an organic concoction, including garlic, chilli, natra soap, dipel (*bacillus thuringiensis*), coconut and mineral oils, coffee grounds and herb infusions. A water tank has also been installed on site. To allow the students to reflect and learn bench seating has been constructed within the vegetable garden.

outcomes now and in the future

One of the main outcomes of this project has been the change in attitude of students to gardening and the environment. The knowledge the children have gained at school is taken home and this has extended the educational benefits of this project into the local and broader community.

The produce grown in the vegetable garden has been used by students to make sauces, salads, pasta, bread and many other nutritious foods, thereby helping students to understand the processes from production to consumption. The vegetable garden has also provided a substantial amount of healthy produce for use in the school canteen and has resulted in a reduction in waste at the school due to using foods that do not generate packaging.

The vegetable garden has been a great success as a teaching resource and for food production.

A small orchard has been established, with citrus fruits, figs, olives and nut varieties. A bush tucker garden is planned, to help Indigenous students connect with traditional knowledge and customs and to assist non-indigenous students share our heritage.

benefits, challenges & lessons learned

This project has provided students with practical skills in seed harvesting, soil maintenance, water conservation, crop tending and rotation and harvesting of produce. The result of student involvement from all school years in the maintenance of the garden has changed attitudes to the environment and adoption of healthy eating habits by students.

The drum plots can be set up anywhere within school grounds and can be moved if necessary, making it cost and space efficient as there is no need for a shed or hothouse. This project could easily be adopted in its current form by other schools or adapted to suit the school by using only a few drums.

In order for projects like this to succeed teachers need to be provided with the appropriate environmental and horticulture knowledge and skills to impart to students. Teachers at Foster Public School were provided with training and advice from horticulture experts, local Landcare facilitators and environmental officers from the local council.

our environment it's a living thing
NSW GOVERNMENT PROGRAM

NSW Environmental TRUST

DECC 2009/739 Published November 2009