

# RAINWATER TANK, WORM FARM AND DEVELOPMENT OF STUDENT GARDENS

## overview of the project

Bellbird Public School is a large primary school near Cessnock. The school principle and general assistant initiated this project to develop a vegetable garden and provide the garden with an environmentally sustainable water source. From this beginning, the project has led to the creation of an environmentally sensitive garden, composting of school organic waste and the addition of a range of long term environmental actions in the School Management Plan. The school established an Environmental Group, a team of students who were interested in developing the garden area. Members of this group adopted many environmental management roles including educating their peers about the importance of waste management. They also carried out a biodiversity audit to help plan the garden and to improve the habitat to attract native fauna. The project formed part of the school's overall grounds management plan, and encouraged learning about how ecosystems work and the principles of ecological sustainability. The project was a successful exercise involving the whole school community in growing and marketing vegetables, using sustainable means to feed and water the garden.



Students with the school's compost bin

## how the project was carried out

To develop the garden the group purchased tools, hoses, gloves, a range of native plants, and herb and vegetable seeds. In addition they purchased a worm farm to incorporate waste management with the garden. All classes were involved in the project. Stage 3, the senior students, worked in the vegetable garden. The Environmental Group consisting of about 20 students managed the worm farm, collecting fruit scraps to feed the worms and harvesting the worm castings for use as fertiliser. The Environmental Group also monitored the movement of waste in the school, conducted biodiversity audits and helped their peers understand the importance of waste management. The ongoing maintenance of the garden was the responsibility of all students, as was the care of the garden equipment.

Community involvement was important in the project. The school harnessed local contacts to buy the rainwater tank from a company in Cessnock. Stage 3 students, with the help of a parent, designed and built the tank stand with aesthetics, safety and sustainability in mind. A local family offered help through their business, supplying free labour and expert advice for the garden.

## outcomes now and in the future

The management plan at Bellbird Public School now incorporates a range of long term environmental actions. The school now has not only a system for using fruit scraps but

recycles paper and cardboard fortnightly. Tree planting days take place as a regular part of the plan and the students sell the products of the garden at school fetes, assisting school finances. The project has given students an opportunity to examine biodiversity in a practical way, and the older students share their knowledge with younger ones. Future plans include developing the garden into an outdoor learning area, which will include a frog pond and seating. The recycling program will be expanded and the worm farm enlarged to take all food scraps. All the project activities were integrated into student learning in the subject areas of Human Society and its Environment and Science and Technology, in understanding peoples' interactions with the environment.

## benefits, challenges & lessons learned

This project was initiated to address a school environmental problem, but inspired other activities that became part of the overall School Environmental Management Plan. The initial idea of providing a water tank for the new garden was expanded to include a waste management plan and a biodiversity audit. The garden has improved the school environment and the native plants will ultimately increase the biodiversity of the school grounds. The project has involved all children at Bellbird Public School in learning by action.