

## 17 Composting with Schools

Children are usually more receptive to good ideas than adults, and if they think something *is* a good idea they are quite likely to encourage their parents to do more. If we want to encourage the use of organic “wastes”, and for any increase to be sustained in the future, getting children interested and involved is essential.

### ***Helpful advice***

Schools are increasingly making use of their grounds as a teaching aid, but they may need advice, and encouragement on making and *using* compost. All too often a school compost heap, if it exists, is made in a rather haphazard fashion, and then the compost is never used – perhaps because no one knows where or how to use it.

If a Community Composting project can work with schools, making curriculum links, and providing back-up advice, they are much more likely to do something. On-site training could perhaps be provided at the school, or the composting site.

### ***What do kids get out of it?***

By making and using composts and leafmould children can feel empowered. They will be doing something positive to counter the images of environmental doom and destruction that abound. Taking tins, bottles and so on to a recycling centre is all very well – but how do we know their fate? Are the newspapers really recycled or simply burned or dumped? With composting, kids can see unwanted materials being converted, by an almost magic process, into useful products. They can then use these products on the school’s flowerbeds and borders and see how they improve the soil and plant growth.

### ***What do teachers get out of it?***

If teachers are to be encouraged to make compost in school, there must be something in it for them, other than the feelgood factor. Fortunately, a compost heap can fulfil a wide range of curriculum requirements in a diversity of subjects at all Key Stages.

### ***Compost in the National Curriculum***

#### **English**

Discussions What happens to rubbish when it goes into the bin? Do we have to simply throw it away? What else might happen to rubbish? What will rot and what won’t.

Reference materials Books and leaflets are available for pupils to study at all Key Stages.

Writing Discuss the various possibilities as a result of using, or not using, compost. Write to local recycling departments to find out what is going on in your area. Present findings to rest of school.

## **Maths**

*Data collection* How much of what sort of waste material do they have in school? What proportion can be composted? The difference between weight and volume. Who does what at home? What does the school do as regards recycling?

## **Science**

*Life and living processes* Studying mini-beasts – the creatures that inhabit the compost heap and make compost work. Plant response to the application of compost (effect on growth and health). Food chains in the heap. Difference in decomposition of various materials.

## **Design technology**

Design a perfect compost bin. Compare with others. Use a range of materials, recycled and new.

## **IT**

Use computers for graph work and data collection and analysis.

## **Geography**

*Environment* Look at the problems of landfill. How can composting improve the landscape? Investigate conflicts over land contamination as a result of leachate.

## ***Compost boxes***

Schools could have a great time designing and making compost boxes, using the criteria listed on the *To Contain or Not?* Card.

Where vandals are likely to destroy a compost box, a free standing heap, covered with an old hessian-backed carpet or sheet of polythene can be used.

## ***Other involvement***

Under the Schools Challenge and other initiatives, schools are often looking for projects. It might be possible to use schools to promote the composting message in your community.

## ***Health and safety issues***

Teachers and others working with children are always rather nervous of compost heaps – seeing them as a prime source of ‘germs’, and attractor of rats! As long as the usual hygiene precautions are observed, compost making is generally quite safe. However there may be some risk to individuals with breathing problems or immune deficiencies.

## **Infection from pathogens**

Meat wastes, animal manures, cat and dog faeces can carry pathogens that may infect humans. Plant wastes generally do not.

### **Inhalation of “bio aerosols”**

The fungus *Aspergillus fumigatus* is common in compost heaps. When a heap is turned, spores of this fungus are released in higher quantities than are normally found in the air. These spores can cause allergic reactions, particularly for asthmatics, those with breathing problems and people with immune deficiency problems.

### **Tetanus**

Tetanus spores lurk in soil, manure and compost. They can infect people through cuts and grazes. Check the children have had anti-tetanus inoculations.

### **Rats and Weil’s disease**

If compost is made in an area where rats are endemic, it may well be visited by these creatures – even if food waste is excluded. In this situation a ratproof compost bin could be used. A compost heap alone will not attract rats to an area – but it does make their presence more obvious to people. Weil’s disease, which can be passed on to humans, is transmitted in rats’ urine. The disease infects through cuts and abrasions, so keep them covered. It can also enter the body via the mucous membranes of the nose, mouth and eyes – so keep dirty hands away from your face.

### ***Sensible precautions***

- Limit contents of compost to botanical (plant) material only
- After handling compost, wash hands well with soap and running water
- Keep cuts covered
- Keep people with breathing or immune deficiency problems away when turning a heap
- Keep anti-tetanus protection up to date

### ***Other relevant cards***

- To Contain or Not
- All compost making cards

### ***Useful contacts***

- HSE Information Centre
- HDRA