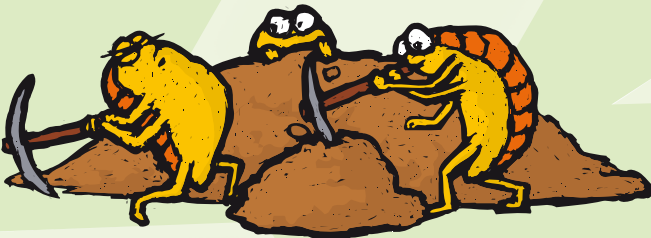


Compost



How is compost made?

- Compost is the result of the break down of organic matter. Organic matter is anything that was once living (animals and plants), although compost is usually made from plants and vegetables
- The breaking down of organic waste material is an aerobic process (involves oxygen) and is carried out by microbes and insects living in the soil



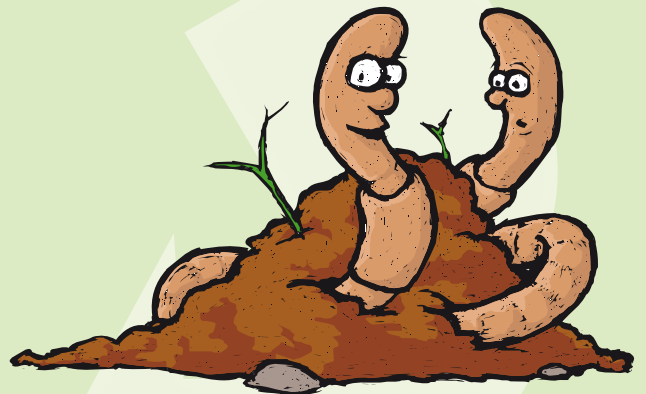
- Organic waste is made up of carbon rich material (browns) and nitrogen rich material (greens). The microbes use the carbon and nitrogen to reproduce
- There are two composting methods: Hot Composting and Cool Composting
- Hot composting requires a large heap or a well insulated small heap. The activity of the organisms generates heat. This heat causes the moisture in the compost heaps to evaporate, which can be seen as steam coming off large compost heaps. Insulating small heaps helps to contain the heat. As the decomposition process takes place the material gets broken down into smaller particles¹. Worms help in the process, working their way in through the bottom of the heap
- The cool composting method is principally the same as the hot composting method only it takes considerably longer as small bins or heaps do not generate sufficient temperatures to produce rapid decomposition of the material. The cool



composting method is not capable of destroying weed seeds and so it is necessary to be a little more selective of the organic waste put in the compost bin

Making compost at home

- Most people making compost use the cool composting method. Their heaps or compost bins are small and cannot retain the heat to make compost using the hot composting method
- To start composting, collect enough material to fill 30cm of the bin. The bin should be placed on bare soil to allow liquid produced in the process to drain into the soil and to let worms in



- It is important to get the right balance in the heap between green material (nitrogen rich) and brown material (carbon rich). The table below lists the different green and brown materials that can be composted

GREENS	BROWNS
<i>The wet, soft green materials, which are high in nitrogen</i>	<i>The dry, harder, absorbent materials, which are high in carbon</i>
Grass	Dead Leaves
Manure	Paper & Cardboard
Peas & Beantops	Wood Chippings
Raw Fruit & Vegetables	Saw Dust
Fresh Plants	Straw
Cuttings	Hay
	Dry Plant Stems & Twigs

WHAT CAN'T BE COMPOSTED?

- ✗ Diseased plants
- ✗ Pet faeces
- ✗ Coal ash
- ✗ Meat, fish & cooked foods
- ✗ Persistent weeds
- ✗ Nappies

- If you have space it is good to have a separate bin next to the compost bin with autumn leaves, paper, card, woodchips or sawdust which can be added to the bin at the same time as vegetable scraps and fruit. The idea being that when you put something wet in the bin add something that is dry and absorbent
- When the container is full (this may never happen) leave the compost to mature. If the lower layers have composted use them on the garden. Everything else should be mixed well adding water if it is too dry and dry material if it is too wet, put it back in the bin and leave to mature. This can take up to 12 months
- Schools or parents interested in starting to compost should contact Leicestershire County Council on Tel 0116 265 7339

Leicestershire Large Scale Composting

For more information about large scale composting please see our Leicestershire Centralised Composting sheet

Composting facts

- A teaspoon of healthy soil contains about 1 billion microscopic organisms, these are mainly bacteria and fungi ²
- If the right conditions are created in the compost heap the bacteria can double every hour and keep on doubling ²
- On average 38% of the rubbish in our bin is organic waste which could be composted ¹
- 38% of Leicestershire's waste amounts to more than 133,000 tonnes per year
- In 2004/5 Leicestershire composted 17% of the household waste produced

Weblinks

- www.littlerotters.org.uk
 - Childrens composting club
 - Classroom activities linked to National Curriculum & QCA schemes of work
 - Games and activities
- www.wasteonline.org.uk/resources/InformationSheets/Compost.htm
 - WasteWatch
 - Compost information page
- www.hdra.org.uk/schools_organic_network/index.htm
 - Tips & advice
 - Fact & figures
 - Links to the National Curriculum
 - Games & activities
 - Teaching Zone
 - Learning Zone
- www.compost-it.org.uk
 - Composting tips
- <http://www.soilassociation.org.uk/>
 - Organic consumer guide
 - Education resources

References

- ¹ www.wasteonline.org.uk
- ² Scott N., Composting for All, Green Books, Totnes, Devon (2003)

