

amount of valuable material made available from it.

What to Compost

Practically all materials can be composted, but the following are best burnt or otherwise disposed of: Virus-infected and insect-infested materials, perennial weeds, materials containing paints, creosote, and oils, glass, plastics, and printed matter.

For best results plant refuse should be mixed with animal refuse such as stable manure or poultry manure. Besides giving a more balanced compost the manures assist in the breakdown of the plant material. Materials such as sawdust, shavings, and straw are all valuable in the compost heap, but should be used sparingly, and in any case should be mixed well with animal refuse or fresh plant refuse such as lawn clippings. All household refuse such as peelings, tea leaves, and food scraps, including bones, build up in quantity in a surprisingly quick time and provide valuable material for composting. The rubbish tin should therefore contain nothing but coal ash, tins, bottles, and the solid materials mentioned previously.

Building the Heap

The compost heap is best built in the most sheltered part of the garden, such as under a shelter tree or on the sheltered side of a hedge or shed. This will guard against leaching of plant foods by heavy rains or excessive drying out by winds.

The compost heap is best built directly on the surface of the soil. If the soil is heavy and drainage poor, a layer of very coarse material such as hedge clippings or shavings should be laid down first. If drainage is good, a shallow depression can be dug to coincide with the area of the heap. The heap can then be started in this. Aeration of a heap is important, and, if it is not efficient, the breakdown of the material will not be thorough. The illustration below shows how an old bed wire has been used to assist aeration. The bed wire can be stood on bricks, and to ensure that air reaches the centre a field pipe or length of metal down-piping should be fitted as shown. Some means of preventing vermin from entering the heap should be fitted to the outer end of the pipe. The heap can be begun around the ventilating apparatus. The size of a heap also governs the speed of breakdown. If a heap is too large,



[Photo News Ltd. photo.]

Compost heaps are best built in the shelter of hedges or fences. This reduces drying out by winds or leaching of nutrients by rain.

air may not reach the innermost layers; if it is too small, the material may dry out rapidly and the heat generated by the micro-organisms is lost rapidly from the relatively large surface area. For best results heaps should be at least 1 cub. yd.

The order in which materials are incorporated can vary considerably, but a few points should not be overlooked. Green or fresh material should be alternated with dry material such as straw. Animal or poultry manure should be alternated with other materials and, if possible, mixed with straw, sawdust, shavings, and other dry matter. A suggested order would be:—

1. Coarse material as a foundation.
2. Finer vegetable matter 6in. thick.
3. Straw or other dry materials, dampened and lightly trampled, 1ft. thick.
4. Animal manures 3in. thick or a generous sprinkling of nitrogenous fertilisers.
5. Soil or compost about 1in. thick.

To ensure alkaline conditions and thus encourage micro-organism

activity lime should be incorporated. It can be applied with the soil or sprinkled lightly over the coarser materials. This can be done also with the nitrogenous fertilisers, such as dried blood or blood and bone. Layers can be repeated as material becomes available. If little animal manure or fresh material is available an activator will be necessary for satisfactory breakdown. This can be made up by mixing sulphate of ammonia, superphosphate, muriate or sulphate of potash, and lime in the ratio of 4:3:1:2 parts by weight. A liberal sprinkling of activator on each layer of plant refuse will assist breaking down. All dry material such as hay is best lightly tramped down, as it then comes into contact with the activator better and also tends to hold more moisture. The same material probably will require the addition of water.

If heaps are large, a rake handle or similar object can be built into the heap in a vertical position about 1ft. from the base. When the heap is completed the rake handle can be withdrawn and the vent remaining will assist in improving aeration. To exclude flies and vermin the heap should be coated with a layer of soil about 2in. thick. If the sides have been built to taper gradually to an apex, the soil will remain firm and the finished heap will shed excessive moisture. If desired, a covering of iron can be fixed, but a watch should be kept to see that the heap does not become too dry. If the heap appears to attract flies, it can be sprayed with a D.D.T. preparation.

Turning

To break down organic matter efficiently micro-organisms require ample supplies of air and moisture. This is why good ventilation and ample moisture content in the original plant refuse are recommended. If heaps are too large, are packed too tightly, or are not moist enough, breakdown can be slowed up considerably. Also, breakdown may not be as rapid in bins constructed of brick or concrete or during the cooler periods of the year.



[Sparrow Industrial Pictures Ltd. photo.]

An old bed wire used to provide ventilation in a compost heap. Material can be built directly on the grid.