

What is ecological gardening?

Ecological gardening is

- * an old cultural activity
- * based on scientific principles

Some ground rules

- * The greater the diversity of habitat, the greater the diversity of species in plant and animal communities.
- * Uniform habitats (monocultures, planting one variety only) often give rise to a richness of individuals but reduce the diversity of species (many creatures of one kind find a habitat that is only suitable for them, e.g. harmful insects that have no natural enemies can be kept in check only by the use of crop protection agents).
- * Human intervention in habitats (e.g. population densities, changes in the land and soil, artificial irrigation systems) always lead to changes in species, reduce the diversity of species, destabilise existing communities of life forms and even cause the extinction of various creatures unless enough habitats can be created for the native life forms ("ecological niches").
- * The art of ecological gardening lies in restricting the diversity of species.

Soil care and manuring

Soil care

An active soil life is vital for proceeding cultivated plants with healthy food. There are more creatures in a handful of healthy garden soil than there are people in the whole world. These countless soil-dwelling creatures in the soil are responsible for loosening the soil, the soil structure, providing nutrients, breaking down organic material, and for controlling harmful organisms living beneath the ground. The soil can be protected and its life forms encouraged and nourished by providing plenty of humus with compost and a covering of green plants or a layer of mulch to protect the soil from weathering (covering the soil with decaying organic material such as shrivelled lawn mowings, leaves, straw, green cuttings etc.). In order to protect the soil life and promote a good soil structure, the ground should not be dug over and never left fallow for long periods (a healthy soil will remain crumbly and loose even without frost action).

In late summer, patches of earth that are no longer required can be sown with a suitable interim crop so that the soil remains covered during the winter (e.g. spinach, phacelia, clover, yellow mustard). Patches that do not become free until the autumn can be covered with a layer of mulch.

Manuring

Manuring is best done with organic materials and only during the growing season. Well tended garden compost, possibly mixed with composted liquid manure from cows, horses or other mammals is suitable for basic manuring ; a total of 4 to 8 litres (= 1 to 2 shovels) of compost per square metre per year is sufficient. Plants that require a large amount of nitrogen should also be given a dressing of e.g. horn meal (30-50 g/m²), and

plants requiring extra potassium should be given wood ash (100-150 g/m²) or comfrey liquid. Phosphorus-rich manures such as chicken manure, bone meal, sewage sludge and certain compound fertilisers should be used with great restraint, and only in justifiable cases, since too much phosphorus will accumulate in the soil.

It is important to apply manure in the right quantity. Too much or too little can both lead to plants that are susceptible to disease.

Materials needed for improving the soil, manuring and composting:

Rock meal, horn meal, organic compound fertilisers, " Toresa " peat substitute, bark compost, dung compost, mulching materials, fleece, compost bins. Co-operation with nature should always be the prime aim when cultivating a natural garden ! This should always be borne in mind.

Practical tips:

Making use of all the organic waste from the home and garden for composting and mulching is the basic principle of garden manuring. Green manure plants can also be sown. By creating raised beds you can ensure a " fully automatic " supply of nutrients to the plants grown on them.

It may be appropriate to provide additional organic nitrogen manure for vegetables with a high nutrient uptake such as cabbage or cucumbers. Apart from organic commercial fertilisers (such as horn-shavings, horn meal), nettle liquid manure is also suitable.

Steep the nettle leaves in a butt of water for about 10 days ; the liquid manure can then be diluted 1 : 10 and applied as a liquid nitrogen manure.

If there is a calcium shortage, marl, slag lime or calcium carbonate may be used.