# In praise of the nettle

In the autumn I participated in a couple of weed workshops and farm walks organised by the Soil Association and was struck by the relationship that many farmers have with weeds. Docks, in particular are hated with a passion, but creeping thistle, spear thistle, creeping buttercup, ragwort and nettles all got a share of farmers' ire.

Some of the fields we walked were remarkably clean of weeds, which made me wonder how much weed control is done just for show, for cosmetic rather than agronomic reasons. A chief motivator appeared to be the pride taken in a 'clean' farm and peer pressure, of what the neighbouring farmer might think. Don't get me wrong, there is a need for control and to ensure that certain problem species don't take over, but we also need to recognise the value that weeds can have in a system and in society.

The wildlife benefit of weeds is well recognised and often encouraged through the prescriptions of environmental stewardship. Indeed many field trials of GM crops have been slated as they fail to provide ecological benefits in terms of weeds and their associated food value for wildlife. As organic growers, we should be proud of the biodiversity that our systems promote - a 'Public Good'. One weed that can perform many valuable functions in an organic system and can even be marketed is the humble stinging nettle.

## The common nettle (Urtica dioica)

The common nettle is a rhizomatous to stoloniferous perennial, abundant and generally distributed in the UK and is recorded up to an altitude of 2,700 ft. It is native on riverbanks and in hedgerows, grassy places, near buildings and where the ground is littered with rubble. It is favoured by conditions in woodland clearings and at the early stages of coppicing. It likes high nitrogen levels and can survive in moderate shade. The rhizomes have difficulty penetrating compacted soil and it prefers open textured soils of pH 5.0 to 8.0. It can also be an indicator of high phosphate levels in the soil. The wooded sites of Romano-British settlements on the Grovely Ridge near Salisbury are still dense with nettles, thriving on remains of a long-distant human occupation. It is a coloniser of waste ground and will leave the soil in good order, well structured and rich in humus.

As a perennial weed, common nettle can be troublesome around the margins of arable fields and in gardens. It is also prolific on the rich land that borders meadows and pastures, often encroaching into the field. However, it does not spread far into arable fields except as isolated seedlings. In a study of seed banks in arable soils in the English midlands in 1972-3, common nettle seed was recorded in 13% of the fields sampled in Oxfordshire and 41% of those in Warwickshire but never in large numbers.

In a survey of 502 grassland farms in 1980 nettles were considered a problem by 17% of farmers, though these rarely consisted of more than a few isolated patches. Dried nettles however, provide excellent fodder and are readily eaten by farm animals. If cut before flowering and thoroughly dried, nettles make excellent hay with protein content equivalent to lucerne/clover. Despite the stalky nature it is well digested by stock animals even pigs, fowl and rabbits. The plant accumulates iron, calcium and magnesium and is considered to have medicinal value.

For many years John and Ruth Daltry of Chevelswarde in Leicestershire have been able to sell a good quantity of annual nettle (*Urtica Urens*) to Weleda for making into a skin cream. Fibres from the stem were used to make linen and ropes, even being used

to make uniforms for German soldiers during the First World War. Nettles have a long history of food use when young and tender. In past times they were hawked in the streets of London to the cry of "Nettles with tender shoots, to cleanse the blood". Sir Walter Scott describes in his book, Rob Roy, the old gardener at Lochleven raising nettles under cloches as 'early spring kail'. Although it is hard to imagine them flying off a market stall when fresh spinach and other leaves are available from a tunnel, there are plenty of recipes around for creamed nettles, nettle soup, nettle quiche, nettle gnocchi and nettle porridge, amongst others. Last year in May, we had a stall at the Lutterworth farmers' market promoting the cooking of nettles. Nettle beer and wine can be made and there are even some commercial brands including the organic River Cottage Stinger ale.

## **Biodynamics**

Nettles have a special place in biodynamic agriculture and were considered irreplaceable by Rudolf Steiner. They are used in Preparation 504 (cut in full flower and placed in a pit for a year), to support the activities of other preparations and to 'confer on manure and soil the ability to deal with matter and forces rationally and attune themselves specifically to the crop grown at the time.' Indeed the textbook *Bio-dynamic Farming Practice* gives full instructions on how to grow it as a crop!

### Nettle fertiliser

Nettles are commonly used by many small scale organic growers and amateur gardeners to make a liquid feed. Take 1kg of fresh nettle to 10 litres of water and allow them to stand for 1 week at 15-20°C. Some growers stir daily to avoid anaerobic processes and strong smells! The mixture is then diluted 1:5 or more, often 1:10 before use. Swedish research found that extract from younger plants contains the highest amounts of N, P and K, while older nettles produce a liquid feed higher in Ca, Mg and S. The soluble N in the feed consists mainly of ammonium.

Nettles also make an excellent compost activator. They are an easily available source of nitrogen for the bacteria that start the

decomposition process. They could make a valuable 'mobile green manure' (See OG15 pp 5), using the leaves as mulch or incorporated into the soil.

#### Nettles and wildlife

The stinging nettle is one of the most important native plants for wildlife in the UK, supporting over 40 species of insects. The small tortoiseshell and peacock butterfly larvae feed in large groups hidden in silken tents at the top of the nettle stems. Nettles are also hosts to Commas and Red Admirals. There are concerns that they provide ideal conditions for over-wintering aphids and indeed carrot fly, but these provide an early food source for ladybirds and other beneficial predators, as well as food for blue tits and other birds. If they grow well into the summer, they will provide a food source for many of our seed eating birds, but to use the foliage and still keep them growing, cut them back only twice a season, preferably not cutting all the nettles down at the same time. Mid-June would appear to be the best time for cutting to allow predators to build up and then be moved on to nearby pest infestations.

## **Biology**

The common nettle flowers from May to September. Plants bear only male or female flowers that are usually wind pollinated. Flowering is inhibited by drought and shade. Plants cut down in flower do not produce viable seed though if cut when the perianths are green but with the seeds at the milk stage, seeds will ripen and germinate normally. Seeds are able to germinate immediately on a bare soil in full sunlight but germination is delayed in closed vegetation, but those sown in field soil and cultivated periodically emerge sporadically through the year with a peak in April. Plants do not flower in their first year.

Common nettle has tough yellow roots and creeping stems rooting at the nodes. The horizontal shoots develop a short distance below the soil surface. New rhizomes are formed in late summer or autumn from older rhizomes or from the stem bases of aerial shoots. They continue to grow until the death of the aerial shoots and they then turn upwards to form new shoots. The shoot tips may die back if frosted.

# Persistence and spread

Nettles produce seed abundantly although most is short lived, but some viable seeds can remain after five years even in cultivated soil. Seeds have been recorded in large numbers in the soil beneath pastures even when the plant was poorly represented in the vegetation. The seed can be dispersed in the droppings of cattle, deer and magpies, excreted in worm casts and catch on clothing and animal fur to aid dispersal. The seeds can float in water for one week.

The rootstock is tough, creeps extensively and enables the plant to spread rapidly. Rhizomes that are broken up by cultivation can readily re-root.

## Management

Control, should you need it, is by removing the rootstocks as thoroughly as possible when the nettle patches are small. The collected material should be burnt, disposed of in a council green waste



Peacock butterfly on nettles

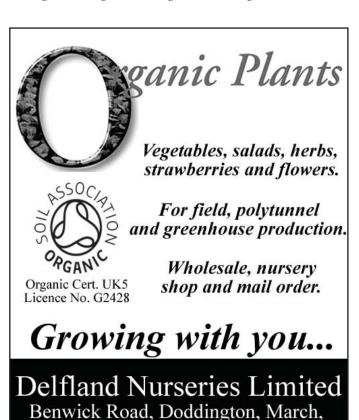
collection or anaerobically composted. Repeated hoeing will exhaust the rootstocks eventually. Seedlings may be destroyed by frequent surface cultivations in spring and autumn. In grass or other permanent crops, such as fruit plantations, regular cutting begins when shoots appear in spring and repeated each time shoots reach 6-12 inches, and this should effectively destroy it.

The regular trampling of cattle can wipe out patches of nettle. Salt licks around nettle clumps will attract stock to trample the weed. Overgrown areas of nettle are best cut in dry conditions to allow the surface roots to dry out in the sun and wind. On grazing land, stock will avoid the growing plant but readily eat cut and wilted nettles. Rabbits will also avoid it.

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For more information: www.nettles.org.uk Lots of info on how to be nice to nettles!

www.organicweeds.org.uk Garden Organic's weed management website.



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