



Writtle COLLEGE

a partner institution of the University of Essex

CHELSEA FLOWER SHOW EXHIBIT 2003

The Nettle

FRIEND OR FOE?

*"The stinging nettle only
will still be found to stand:
the numberless, the lonely,
the thronger of the land,
the leaf that hurts the hand.
that thrives, come sun, come showers;
blow east, blow west, it springs;
it peoples towns, and towers
above the courts of Kings,
and touch it and it stings."*

A E Housman (1859 - 1936)
The Stinging Nettle



The Nettle

FRIEND OR FOE?

The stinging nettle – *Urtica dioica*.

Also known as:

CHINESE NETTLE
COMMON NETTLE
COMMON STINGING NETTLE
GREAT NETTLE
GREAT STINGING NETTLE
HOKEY-POKEY
DEVIL'S PLAYTHING
JINNY NETTLE
HSIEH-TZU-TS'AO
STOR NÆLDE
ORTIE DIOIQUE
GROÙE BRENNESSEL
ORTICA COMMUNE
STORNESLE
BRENNESJLE
BRENNETO
BRENNHUTTU
NØSLE
NJÅSJLE
ORTIGA MAYOR

Nettles - one of our commonest native plants - are often portrayed as a 'villain of the countryside'.

But are they really the natural nuisance that they are portrayed as? Many of you may agree with W. Keeble Martin who described it in *The Concise British Flora in Colour* as being "too common".

That sudden, sharp, stinging pain followed quickly by a swollen rash is often one of the less pleasurable - although lamentably common - experiences of the British summer.

Ironically, this fearsome plant is an example of a species that has prospered, chiefly through humankind's activities. Far from being restricted to rural locations, the nettle has followed human activities right into the heart of our cities. Nettles naturally prefer fertile, muddy, slightly disturbed ground that is rich in organic matter and phosphates, such as may be found in woodland glades or by riversides. Human activities frequently result in such growing conditions in fields, roadsides and indeed our gardens. The nettle of course, finding these conditions much to its liking, quickly

colonizes these areas and makes a home for itself, literally in our own backyard. Being difficult to ignore, many people would happily have the nettle eradicated, seeing no benefit from its continued co-existence with humanity. This view, however, was not one that was shared by our ancestors that had many uses for this remarkable plant.

The nettle is, in fact, a plant that still finds many uses in the 21st Century. Whilst this may seem a strange idea to some of you now, read on and find out just why this plant deserves our respect and admiration. It is a plant that offers more than meets the eye.





Nettles and Biodiversity

The stinging nettle is arguably one of the most important native plants for wildlife in the UK, supporting over 40 species of insect including some of our most colourful butterflies. Strangely enough, it is the presence of the stings that has allowed this relationship with numerous insect species to develop. The stings are so effective that few grazers - with the exception of goats and hungry sheep - will touch nettles when the stings are active. Insects on the other hand, can move between the stings with impunity whilst benefiting from this rich food source – safe from the risk of being eaten by a passing cow for instance.

The new growth provides food for overwintering aphids that, in turn, are an early food source for predatory insects such as ladybirds and agile bird species like blue tits. Later in the spring, small tortoiseshell and peacock butterfly larvae can often be seen feeding in large groups hidden in silken tents at the top of the stems.

Nettles stimulate the growth of many plants in their neighbourhood and old nettle beds are a perfect place to plant a new fruit tree giving it a good start early in its life. Try growing clumps of nettles between currant bushes. If you keep cutting off the heads they will not spread but they will attract a hoard of beneficial predators that will help to control pests in the fruit patch as well as providing a rich source of compost and plant food.

Nettles play a very important role for wildlife throughout the whole growing season. Some insect species - such as the nettle weevil - live only in the nettle patch. Patches must be big enough to support any sort of diversity – three to four square metres is a basic minimum – but many gardens could easily support this sort of space. Try combining features such as log piles with the nettle bed. It will ensure that the occupants of the log pile go undisturbed throughout the summer period and provide valuable cover for an even wider range of species.



Nettles Growing in a Shady Spot

Even a modest sized garden will have an odd corner that could easily accommodate a nettle patch.



Small Tortoiseshell

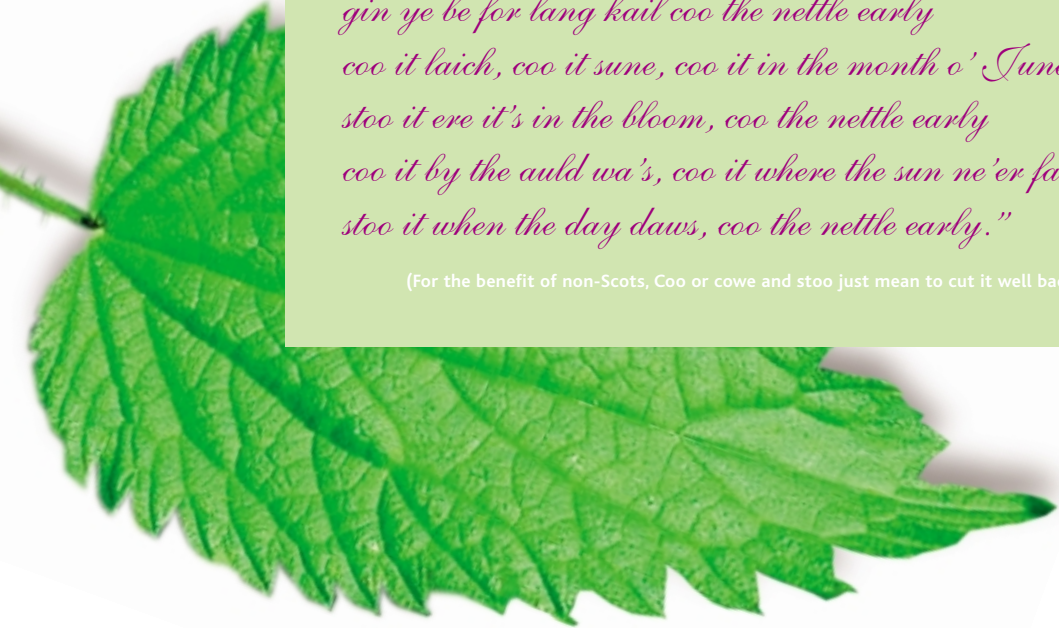
Butterflies such as this small tortoiseshell depend upon nettles as food for their caterpillars.



Logpile

Combining a log pile and a nettle patch provides valuable cover and food for a wide range of species.

OLD SCOTS RHYME



*“gin ye be for lang kail coo the nettle, stoo the nettle
gin ye be for lang kail coo the nettle early
coo it laich, coo it sune, coo it in the month o’ June
stoo it ere it’s in the bloom, coo the nettle early
coo it by the auld wa’s, coo it where the sun ne’er fa’s
stoo it when the day daws, coo the nettle early.”*

(For the benefit of non-Scots, Coo or cove and stoo just mean to cut it well back).

Writtle College

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Remember that 21 – 30 May is National Be Nice To Nettles Week.
For more information go to: <http://www.nettles.org.uk/>

Special thanks to the Royal Botanic Gardens, Kew, for helping supply some of the more unusual Urticaceae family members on the display. Thanks also go to Travis Perkins Landscape Centre, Chelmsford for the loan of materials used on the exhibit.

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A Botanical Marvel

Urtica Dioica – The Common Stinging Nettle

The nettle is a highly successful plant found all over the temperate areas of the world. It often spreads by means of seeds and underground rhizomes just under the surface of the soil. Its jagged leaves, held in pairs along the square stems, are easily recognisable - particularly after having experienced the sting!

The plant itself is variable growing from 0.6 to 2 metres plus in height. It can be found in a variety of habitats and soil types. The botanical name for nettles – *Urtica* - derives principally from the Latin word *Uro*, which means, "I burn." The species name of the common stinging nettle - *dioica* - means 'two houses' and refers to the fact that the male and

female flowers are normally carried on separate plants.

The nettle's sting is very similar to a hypodermic needle, predating that man-made invention by millions of years. Each sting is a hollow hair stiffened by silica with a swollen base that contains the venom. The tip of this hair is very brittle and when brushed against, no matter how lightly, it breaks off exposing a sharp point that penetrates the skin. It was once thought that the venom was formic acid but recent research has shown that the main chemicals are histamine, acetylcholine and 5-hydroxytryptamine (serotonin) with some formic acid present. A fourth ingredient has yet to be identified.

The nettle family - *Urticaceae* – is a rich and diverse one. Only a relative few of these family members sting but some of these can be even more fearsome than our own familiar nettle. One species in Timor causes a burning sensation and symptoms like lockjaw, which can last for days or weeks, whilst a species from Java has even caused the death of some of its unfortunate victims.



Stinging Hairs on stem of *Urtica dioica*

Both the leaves and stems of nettles are protected by stinging hairs.



***Urtica* - stinging hairs**

The fearsome stinging hairs of the nettle have tips that break off to release their venomous contents.



U. urens

The annual stinging nettle (*Urtica urens*) stings equally as fiercely as its longer-lived cousin despite its smaller size.



Nettle Cordial

Nettles have been used to make a variety of foodstuffs, including a refreshing cordial drink.



Picking Nettle Shoots



Fresh Picked Nettle Shoots

Fresh picked nettle shoots from young plants are the most nutritious but must be collected with care!

Food from Nettles

People have eaten the nettle for many centuries - at one point it would have been relished as springtime treat! Samuel Pepys wrote in his diary of having eaten '...some nettle porridge, which was very good'. The 16th century Polish herbalist Syrenniusz, mentions nettle cooked with snails, and George Lang's Cuisine of Hungary mentions the same dish in Hungary.

Nutritionally the nettle is an excellent source of vitamin C, calcium, magnesium, iron and numerous trace elements. The sting disperses when you cook them and the young shoots can be used in soups and stews and in place of spinach. Why not try steaming or boiling them lightly and serving them with butter & lemon?

It is not only humans that have benefited from the consumption of the nettle. Dried nettle hay loses its sting and becomes palatable to livestock. In Sweden the nettle is sometimes cultivated for this purpose and fed to milk cattle because of the increased milk production that results. Horse breeders have often added nettle seeds to horse feeds to give the animals a sleek coat.

Medicinal Uses

Nettle leaves have a long tradition of medicinal use. The most radical, and perhaps the most daunting, is one called urtication that dates back at least to biblical times. This practice involves thrashing inflamed joints – such as those affected by rheumatism for instance - with the sting. Despite its sounding rather extreme, urtication often provides considerable relief. Nettles grow in many countries and all of these have developed a reputation as a treatment for arthritis. For the less adventurous of us, a fresh nettle tea or eating nettles will offer the same long-term benefits.

Cosmetically, nettles are used mainly for their astringent quality and deep cleansing ability. Some herbalists even use the seeds in a tea to stimulate growth and to cure hair loss.

A protein called letin, produced within nettle leaves, stimulates the proliferation of human lymphocytes; cells that play a very important role in destroying foreign pathogens. Nettle leaf tea has also safely been used as a diuretic, as a treatment for prostrate conditions and fresh leaf juice applied to cuts reputedly stops bleeding. The latter point is further backed by studies that suggest that nettle leaf tea aids blood coagulation and formation of haemoglobin.

Textiles and Fibres

The name 'nettle' derives from a similar root meaning as 'spin' and 'sew'. It is also quite possible that the name nettle is derived from the ancient Germanic word *Noedl* - meaning a needle - referring to the stinging mechanism in the nettle leaves. Equally plausible however, is the suggestion that it comes from the Latin word *nerē* and other similar old European verbs meaning to sew.

This latter derivation would seem to be an appropriate origin, as the mature nettle stems yields a fine fibre that has been spun and woven into cloth for many centuries. Nettle has been used to make fabric since prehistoric times, it being processed similarly to flax. Nettle cloth has reportedly been found among the clothing in the Scandinavian graves at Birka in modern day Sweden, whilst the cloth was also used in Poland from the 12th up until the 17th century when it was replaced by silk. It is known to have been used, for tablecloths and sheets in Scotland but it is difficult to ascertain the extent to which it was used, as the term *nettlecloth* came to be used for

all manner of fine material whether made from nettle or not. Indeed, it appears to have been widely used throughout Europe during the 18th century, although it is thought that the use of the nettle for cloth was widely driven out by the arrival of flax.

Being similar in texture to those materials produced by flax and hemp fibres, the cloth also became widely used by the German army during the First World War when there was a shortage of cotton for the soldiers' uniforms. Some of the reports may have been propaganda but is clear that nettle fibre was used alongside that of the nettles' Asian cousin, Ramie - *Boehmeria nivea*. The juice of the stems and leaves has been used to produce a permanent green dye. In Britain, this was used to colour camouflage nets that were needed in the run up to the D-Day landings. A yellow dye can also be obtained from boiling the roots and both this and the green dye have been used extensively in Europe for centuries.



Nettle Fibre Bag

Nettles yield a fine fibre that can be used to make a variety of items such as this bag made in Nepal.



Boehmeria nivea

Ramie (*Boehmeria nivea*) is an Asiatic, non-stinging cousin of the nettle. The fibre that it yields possesses some very valuable properties; it is not only much stronger and longer than any other known plant fibre, but almost equals silk in its brilliance.



Nettle Stories

“She groped in amongst the ugly nettles, which burnt great blisters on her hands and arms, but she determined to bear it gladly if she could only release her dear brothers. So she bruised the nettles with her bare feet and spun the flax.”

Hans Christian Anderson – The Wild Swans

Nettles have long captured people's imagination. There are so many stories attached to them that it would be impossible to relate them all. Here are a few of the commonest, most interesting or just plain bizarre!

- In the Victorian "Language of Flowers", nettle means cruelty or slander.
 - Native American braves would flog themselves with nettles to keep themselves awake while on watch and Roman soldiers brushed themselves with nettles – allegedly to protect them against the cold climate.
 - According to another ancient practice, "a person who is unwillingly forgetful should pound stinging nettle to a juice, and add a bit of olive oil. When they go to bed, they should thoroughly anoint both chest and temples with it. If this is done often, forgetfulness will diminish."
 - It was also once believed that you could help a sick relative to recover if you 'grasped the nettle' by the stem and pulled out the root whilst reciting the name of the ill person, or their parents.
 - Nettles have long been magically associated with protection, healing, exorcism, lust and purification although not always necessarily in that order! Nettle cloth also had superstitious uses: Slavic people have attributed magical properties to nettles since ancient times, using it to "defend against demons, disperse storms and protect against lightning."
 - In the highlands and islands it was believed that the nettles grew from the bodies of the dead, as they would still be growing strong long after people had left the land. In Denmark, people thought that clumps of nettles grew on the blood that was shed of innocent victims. Nettles - also called devil's claw/devil's plaything - were thought to mark the living place of the elves and the stings were deemed protection against sorcery, and prevented the milk from being affected by trolls and witches. Nettles gathered before the sun rises and fed to cattle were believed to repel evil spirits (and let's face it...who wants cows with evil spirits?).
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