## WILD FOOD SCHOOL

# Pocket RIVERSIDE FORAGING GUIDE



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The format of the pages in this E-guide are designed so that the images can be printed out on standard 10 x 15 cm photo paper, then ring bound. You may like to laminate your printouts for durability.

For wild food recipes check out the *Cooking with Weeds*™ eBooks at www.wildfoodwisdom.co.uk

Whether you want to forage to provide extra provisions while you're out fishing for the day, or for fun, welcome to the Pocket Riverside Foraging Guide – courtesy of Wild Food School. It is not designed to be the 'definitive' wild food guide but to provide you with basic information on some of the edible wild veggie greens found around rivers and similar watery habitats.

Many more edible wild plants are available but fill books, and berries like those of the bramble and wild rose are not covered since they are too well known to most people. However, the species listed here will keep you supplied in terms of basic greens, and some can be positively delicious when harvested at the right time of year and if properly prepared.

A general rule of thumb for harvesting the best wild greens is to gather them before the plants are in flower – but I recognise that that inevitably means you need to recognise a species before it IS in flower. Given a couple of years observation [I won't say study] of the plants covered here and you should be able to spot them at whatever part of their life-cycle you come across them.

Marcus Harrison November, 2008

#### On the LEGAL side in the UK...

• it is illegal to uproot ANY wild plant without 'authorisation' (ie. permission)

• it is illegal to disturb or collect plant material from any PROTECTED wild plant

• the law of trespass exists, so gain permission before entering someone's land

• a plant is the 'property' of a landowner even if it is a weed, so you really should gain permission

## On the ETIQUETTE side...

• only take what you need [in the case of small populations of less than 10 specimens of a wild plant, select a little foliage from each plant so the plant may continue to thrive]... of course with weeds like thistles, nettles and dandelion this is hardly a problem

• FOLIAGE, FLOWERS and FRUIT are the parts which may be gathered of species that are not 'protected'

• respect the environment that you are collecting from and leave it as undisturbed as possible

• during breeding seasons try not to disturb natural wildlife in the environment you gather from. • Only harvest wild plants from safe stocks. Study the landscape for sources of contamination [factory fallout, water run-off, effluent seepage etc.].

• Avoid plants from busy roadsides, near landfill sites, or foul water.

• Avoid gathering plants from areas that may have recently been sprayed [look for telltale signs of wilting, chemical deposits on leaves, or even chemical drums].

• Avoid harvesting / consuming discoloured, diseased and dying plants. Never eat dead leaves.

• For more scarce plants only harvest what you need, leaving stocks behind to propagate [although invasive weeds covered in this guide hardly need help with that]. It is better to select a few leaves from several plants rather than take all the leaves from one plant specimen.

• Wash all your harvested plants thoroughly before use.

• Never consume a wild plant unless you are absolutely certain of its identification and its safety for consumption.

This is one of THE *most* important things to check before you launch yourself into eating any edible wild plants in quantity. Over a number of years WFS hands-on courses have shown that wild greens too, may cause reactions in some hypersensitive folks so please do be careful. I have come across folks who react to sorrel and to elderberries, while I personally don't tolerate hawthorn berries too well.

Most of the plants covered in this guide have been used as food for a long time or in survival situations before, so the real question is your own personal tolerance.

The first time you encounter one of the plants as a potential food source the recommendation is to take a small piece of the raw 'part', suitably peeled or whatever, bite on it a few times to get a little of the sap on your tongue and inner lip then spit everything out. Do not ingest. Wait for 20 to 30 minutes to see if you have any bad physical reaction – nausea, headache and so on.

Assuming your initial tolerance test is fine, you next need to try eating a piece of the plant. If it is one of the mild salad plants, then just consume a small leaf, or part of a larger one. If it is a bitter tasting plant or needs to be cooked then boil one of the leaves, or specified part of the plant, and consume a very small portion. Again wait for about 30 minutes to an hour and keep an eye on your reaction.

If everything is fine then the suggestion is to go ahead with eating a small quantity - about a tablespoon or two - of the plant cooked. Once you've eaten the food just keep an eye on how you feel for 2 to 3 hours. If everything is okay, then you're in business. Whatever you do, never eat large amounts of any of the plants which follow without having tested your tolerance to it. Everyone is different and you may not be tolerant to something here.

There are also some plants that have constituents which can have a cumulative effect in your body [such as the oxalates] and should therefore not be consumed on a too regular basis or in large quantities. This is particularly the case with the sorrels. This pocket guide contains pictures of 18 species with edible parts, and I have also listed some other useful ones at the very back. About 30 species are covered in total which is plenty for a riverside forager to be getting on with.

There are many other species which I have not included because using some of them can be fraught with troubles, and there isn't space in a small guide like this to go into detail. That sort of stuff I do in courses where there's more explanatory space and time.

However, the plants listed here should stand the riverside forager in good stead. In fact, if you know your dandelions, nettles, chickweed and thistles you can actually survive on those. Additional species just make life for the riverside forager more interesting, and provide fallbacks when things are a bit thin on the ground.

If you fish a section of river on a frequent basis then you also need to 'manage' your foraging resources so that they are available to you on a regular basis. Leave some 'annuals' (plants which flower and die in one year) to go to seed to provide next year's resource.

Biennials like burdock work on a two year lifecycle, while perennials last more than two years providing a food resource year after year. In fact perennials are the forager's best friend in terms of harvesting because once you know where a plant population is located it is then simply a matter of returning on a regular basis to harvest - saving time and energy. While this sounds like an ideal world note, however, that even perennials can be killed off by over-harvesting.

In gathering edible wild plants from riverside habitats it is important to ensure that you can trust the cleanliness of water source. Are there any obvious signs of pollutants or rat activity (things like Weil's disease may exist where rats are active). Even in the UK's great Outdoors I always recommend that any edible, ground-based, vegetation sourced from aquatic environments is cooked.

For wild food recipes check out the *Cooking with Weeds*<sup>™</sup> eBooks at www.wildfoodwisdom.co.uk.

#### WILD ANGELICA - Angelica sylvestris

Strictly speaking wild angelica isn't a 'food' plant but one for flavouring, hence its inclusion in this small guide. Like its garden equivalent this perennial species has similar aromatic qualities but much more coarse – so you might end up not bothering with this plant. Still it's something to experiment with if you happen to find it close to water, frequently where there is some shade from trees but not always.

The plant frequently has solid purple stems while the mass of flowers also can look claret coloured.

As angelica is part of the *Umbellifer* family which includes poisonous **hemlock** and hemlock **water-dropwort**, it's essential that you make a 100% positive ID for this plant. Leave well alone if you are the slightest bit hesitant in its identification.



#### **BROOKLIME** - Veronica beccabunga

Brooklime is a succulent freshwater plant with glossy leaves. Sometimes it is found in running water / streams in which case the stems float, on other occasions it will be found growing in soft damp or wet ground around ponds and streams. Frequently brooklime is found growing alongside watercress.

In the past the plant was regarded as one of the springtime food tonics (after a winter on pickles and salted meats). However, for modern palates the young leaves are generally a little too bitter for salads but can be added to pottages and soups as an additional veggie ingredient.



#### **BROOKWEED** - Samolus valerandi

Although quite widespread brookweed is not a particularly commonly abundant plant so harvest just a few leaves from each plant and add them to your cooking pot.

As the name suggests this perennial species likes moist conditions and you'll frequently find it in watery locations near to the coast, and in ditches and marshy grassland with a little salinity in the soil. The leaves of the young plant are very soft and are almost reminiscent of a cross between **brooklime** (*Veronica beccabunga*) and **lamb's lettuce** (*Valerianella olitoria*). The small white flowers have five petals.

Like lamb's lettuce the young leaves do not really taste of very much at all when young, although some bitterness begins to creep in as the plant ages. As there's very little literature on brookweed perhaps use only occasionally and mixed with other greens in case there are some strange chemical constituents in its make up.



#### CUCKOO-FLOWER / LADY'S SMOCK -

Cardamine pratensis

Cuckooflower is one of the late spring, early summer flowering plants with pale lilac-white flowers about 1cm in diameter. It likes moist ground such as water-meadows, river banks, and marshy areas. Although I have heard reports of the species carpeting areas, in my own experience it doesn't always do so and you may only find a few specimens growing at a time (so harvest wisely).

It is the leaves that you are after, particularly the early base leaves rather than the flowering stem leaves, and they have a hot peppery cress-like flavour with a warm aftertone. As such they can be used in salads to add something extra. The flowers and flower buds can also be similarly used, but even though it's a perennial if there's only a small colony don't pick the flowers and leave the seeds to propagate the colony.



#### **DANDELION** - *Taraxacum* officinale

Dandelion has to be one of the best known plants, though it should be said there about 200 micro-species in the British Isles... all of which can be eaten. Two leaf shapes are pictured to the right. Dandelion is not specifically a riverine plant but is found virtually everywhere and hence included in this guide.

The plant is a perennial, so unless you are digging up the roots for dandelion coffee (an extremely good substitute for the real thing) you can repeatedly harvest this plant which is full of vitamins.

The young leaves are best, however they are bitter and may not be to your liking. If you like raddichio and chicory then you should get on okay with the leaves. One way of reducing the bitterness is to light-blanch the growing leaves use a black bin liner, upturned flowerpot or some similar item. The resulting leaves are a pale yellow-white colour and make a nice salad crop.

Also useful are the unopened flower buds which may be pickled, and the flowers which some folks use to make wine or may also be made into an interesting dandelion flower marmalade.



#### **OPPOSITE-LEAVED GOLDEN SAXIFRAGE -**

Chrysosplenium oppositifolium

This small, low-lying plant with tiny, almost inconspicuous yellow flowers, is an inhabitant of moist shady places, and appears to be quite commonly found in some parts of the country. Although it is frequently found alongside streams it only seems to need to have fresh moving water to thrive. Frequently it carpets moist areas. You'd be looking for it in small tributaries rather than on a main river bank itself.

The slightly blunt-toothed roundish leaves are supported on square stems, and with age the leaves become rather bristly on their top surface, and not particularly nice.

As a young plant the young springtime leaves and small stems can be cooked – in soups, pottages, and even as a veggie.



#### **GOOSEGRASS / CLEAVERS** - Galium aparine

Goosegrass is not specifically a plant of river and watery habitats but is included in this guide because of its common occurrence just about everywhere, and the young spring seedlings can be added to soups or pottages.

Goosegrass is an annual climber, the 'sticky' stems growing to about 4ft. in length and straggling over other vegetation (sometimes almost to the point of smothering the supporting plant). That 'stickyness' is due to the fine recurved hooks which cover the foliage surface, rather than any glue-like substance.

The parts to use of this are the VERY young spring seedlings which make a tender cooked vegetable. Any more than about 3 or 4 inches tall and the square stem starts to grow fibrous and is revolting. When the plant is slightly older the little tufts of upward pointing top leaves can also be nipped out and cooked up.

Finally, the seeds are used as a coffee-type substitute. Don't wait till they are dead and brown, but use them when they become purple in colour. It isn't exactly a wonderful 'coffee' but if you have nothing else then you might consider it.



#### LESSER CELANDINE - Ranunculus ficaria

This plant is part of the buttercup (*Ranunculus*) family most of which have poisonous principles deleterious to humans. For that reason when using lesser celandine leaves I always mix them with other wild greens and never use in quantity on their own - just in case there IS something bad about them – and I always cook them.

However, there are mentions of the plant being used as a food source in the past and the part to use are the young leaves with or without their thin leafstalks. Plants which are in bud and beyond are generally bitter (and may also be developing some curious chemicals so I leave them alone).

A perennial, with shiny yellow petals, lesser celandine likes moist habitats and sunshine. The leaves are usually mottled as can be seen in the lower picture.



#### MARSH MALLOW - Althaea officinalis

Marsh mallow is a perennial species which is generally found in moist habitats with some salinity in the water table. You will frequently find it growing on the upper parts of river banks on esturine and tidal rivers in the southern part of Britain.

The leaves are velvety and may be cooked, though they have no flavour and are simply a vegetable green. The green seed pods are also tasteless but have a slightly crunchy texture and so make a salad or sandwich ingredient. If you feel so inclined, newly opened flowers may be eaten.



#### MARSH SAMPHIRE - Salicornia europeaea

Marsh samphire is one of the veggie treasures of esturine river habitats and salt marshes, generally growing on shingle covered by a muddy or sandy layer.

As water quality can never really be trusted I always cook this samphire, but only lightly... either stir-fried after washing, or blanched for a couple of minutes in boiling water then drained and served with butter or a drizzle of olive oil.

The fronds are crunchy with a salty taste. If you find your batch too salty for your taste buds then soak the fronds in cold water for a few hours and then use. In past times this samphire was pickled.

When picking, the whole upper green part of young specimens can be eaten. For older ones nip off the top branches as the central stem develops a cord-like centre.

This samphire is an annual so it's important to harvest only what you need and leave a good number of plants to mature and self-seed for the colony to thrive.



#### MEADOWSWEET - Filipendula ulmaria

Meadowsweet is a plant frequently associated with moist and damp habitats, even on the side of roads where ditches collect water.

It is not a 'vegetable' plant (the leaves contain chemicals used in herbal medicine) but the scented flowers offer the forager a flavouring source.

Put a couple of flower heads in a mug and add hot water for a beverage - sweetening with honey if you like. The flowers may be dried for a tea too, and add fronds when stewing fruits like apple. You can also flavour vinegar with the flowers, and custard too, and also make a syrup which is diluted down for a refreshing drink or may be added to those cooking fruit mentioned above.



#### **COMMON / STINGING NETTLE** - Urtica dioica

It is doubtful that you need any introduction to the common, or stinging, nettle. Look out for this plant where there is good, rich soil, frequently where there is lots of humus from leaf fall.

Nettles only briefly need to be exposed to heat to denature the 'sting' which is actually formic acid. In the spring the whole young shoots up to about 3 or 4 inches tall make an excellent cooked veggie. For later growth the best leaves to harvest are the top two or four fresh green leaves, sometimes six. The lower ones aren't really worth bothering with if you are looking for 'quality'.

Be adventurous with nettles, don't confine yourself to that TV celeb chef fallback of nettle soup. Use nettles like a substitute for spinach - so nettle aloo, nettle roulade, pasta primavera &c.

The leaves may also be dried for later use, and also used as a beverage.

A plant long associated with nettles is the **broadleaved dock** (*Rumex obtusifolius*). And the VERY young leaves of this may be eaten once cooked. They're more survival food than pleasant eating.



#### **ORACHE** - Atriplex

There are numerous members of the orache family and you can sometimes find them in esturine rivers where there is some salinity in the water table, and salt marsh land.

The orache family is closely allied to the *Chenopodiaceae* which includes **fat-hen** and the leaf shapes can look remarkably similar making it quite easy to confuse various members.

The two you are most likely to come across near the coastal areas are *Atriplex patula* and *hastata* (pictured). The leaves of both of these can be cooked up as a vegetable green or added to soups, pottage &c.

If you're on one of the heritage or conservancy esturine areas please don't pick the orache – or any other forage green for that matter.



#### PLANTAIN, RIBWORT - Plantago lanceolata

A very common temperate perennial weed that has an affinity with moist and damp soils and is frequently found on river banks (pictured top and lower right).

The young new leaves of ribwort are edible and make a quite good veggie green in the winter months when almost everything else around the sides of a river are dead or beyond their sell-by date. The leaves should be no more than 2 or 3 inches long and will not have developed the coarse ribs which run along the length of the leaf and which make the plant inedible in its mature state.

If you come across ribwort's cousin, the **greater plantain** (bottom left picture) the VERY young leaves of this plant too can be used as a pottage or soup green. Young leaves are no bigger than about an inch in length are the best, and should be gathered from good soil habitats rather than the stony or impacted footpath habitats that greater plantain is normally associated with. Greater plantain is quite a good vitamin source.



#### **REEDMACE, LESSER & GREATER -**

Typha latifolia and angustifolia

Everyone who has walked alongside rivers or lakes is sure to have seen one of the reedmaces at some time or other. Also known as cat's-tail because of that distinctive brown flowering top the two species have a wealth of edible parts to offer the forager.

In times of emergency the roots can be dug out of the mud and the starch extracted for food use. For folks pottering around the riverside while fishing it is really the young inner shoots and leaves which make most sense to use. Strip away the outer cellular sheathing and cook up the tender inner parts. The bottom of the flower stalk before the flower develops may also be cooked up. Parts of the immature green flower may be cooked but are rather gritty in terms of texture. And then the pollen may be used – generally as a wheat flour extender.

Like other aquatic edible plans, if you cannot guarantee the quality of the water in which these species are growing then they need to be cooked to be on the safe side.



## **SCURVY-GRASS** - Cochlearia officinalis

Now scurvy-grass might have a name that conjures up the vision of some unimaginable disease but in fact it was used as part of the medicinal cure for scurvy in the old days because of its high vitamin content.

Scurvy-grass a plant that likes saline conditions so will be found growing right on the sea coast as well as the banks of esturine rivers and salt marsh habitats.

The leaves have a peppery, almost horseradishlike pungency which you may or may not like. The leaves are only good before the plant comes into flower because, as the scurvy-grass ages, it develops a kind of acetone overtone which is unpleasant to nostrils and taste-buds alike. When young, however, it can add an interesting flavour accent to salads and dips.



# **SORREL, COMMON** - Rumex acetosa

Sorrel is an amazing edible - if you like the sort of acidy taste of lemon, rhubarb or gooseberries. It's a very common perennial with leaves which can best be described as arrow-like at the base, having ears that extend backwards towards the leaf stem.

Common sorrel is a plant of meadows, pasture and hedgerows so you are very likely to come across it on the grassy banks of inland rivers.

The whole plant (as in leaf and stem) has a lovely fresh acidy taste and may be used raw in salads or it can be cooked like spinach. When cooked, however, the leaves turn a dark green that doesn't look particularly appealing but the taste improves and it makes a great pudding ingredient for crumbles and turnovers. Don't eat too much sorrel or too often, but enjoy as an occasional riverside treat.

A note of CAUTION. There is one poisonous plant which has leaves very similar in shape to sorrel when in its young state. That plant is the **Cuckoopint** or **Lords & Ladies** (*Arum maculatum*). You may well recognise the *Arum* in autumn, as the plant at that stage in its life has a cluster of scarlet berries on a stalk.



## WATERCRESS - Nasturtium officinale

There can be hardly anyone who has not encountered watercress in domestic food at some stage, and watery outdoor habitats offer foragers an opportunity to hunt for the wild version. You are unlikely to find it on the banks of a main river but more in smaller tributary streams.

Watercress has distinctive cress-like leaves as can be seen in the bottom picture, and a cluster of small white flowers.

As wild watercress can harbour the liver fluke parasite it is wise to always cook the young leaves and stems. This is certainly the case where the plants are harvested from areas in which sheep are grazed (almost everywhere in other words) and the water is slow moving.



## **OTHER SPECIES WITH SOMETHING TO OFFER**

The majority of the vascular plants covered in the previous pages are what might be regarded as edible weeds. Here are a few more which might provide you with some extra flavours PLUS a number of ornamentals that folks might be growing in a neighbourhood near you.

#### ELDER, COMMON - Sumbucus nigra

This probably needs no introduction. The flowers can be used to make a so-called 'champagne' and also the ripe berries for wine. The unopened flower buds can be pickled and used like capers.

## GORSE - Ulex europaeus

There always seems to be lots of this prickly shrub around. It isn't a great provider in terms of edible foliage but the flowers have a flavour and smell of coconut. They can be used to flavour vinegar, make wine, and also a gorse and honey ice cream.

## WYCH ELM - Ulmus glabra

A tree with a liking for moist habitats the early forming seeds are edible.

#### HORSERADISH - Cochlearia armoracia

You may well find this perennial in waste ground, as well as hedgerows near rivers although you will need permission to dig up any root material for making your own horseradish sauce the young, fresh green, springtime leaves may be cooked and eaten. Older leaves are horribly bitter.

#### MARSH THISTLE – Cirsium palustre

As its name suggests this is a thistle with a liking for wet habitats. Strip the young stems (before the flower buds appear) of their prickles and outer sheathing and then cook up.

WATER MINT - Mentha aquatica

Water mint is much more coarse in flavour than either spearmint or peppermint, but the species which grows in watery habitats can also be used. A small clutch of leaves or flowers placed in a mug with hot water and then sweetened can form a riverside beverage.

## A FEW BEVERAGE IDEAS...

Dried green blackberry leaves can be used as a tea. Raspberry leaves can similarly be used (don't use either during pregnancy).

Young leaves of the wild / dog rose (*Rosa canina*) may also be used for an infused beverage.

Elder flowers, partly covered previously, may be dried for later use as an infused beverage.

Dried flowers of the lime tree (*Tilia*) made a tea known as Linden Tea in former times. It's got some herbal qualities so it's probably best to drink this in moderation.

Although it's not something I have tried the leaves of mountain ash (*Sorbus aucuparia*) have been used to adulterate tea in the past so there might be some scope there for experimentation.

The dried leaves of ground ivy (*Glechoma hederacea*) may be used as a tea substitute, while an infusion of the fresh leaves can also provide you with a beverage.

If you have permission to dig up dandelion roots then these make an excellent coffee substitute once roasted. THE GOLDEN RULE...

If you cannot identify a wild plant with 100% certainty as being one of the edible species NEVER use it as food. If you have the slightest hesitation over a plant's identity be safe and MOVE ON. Similarly, if you cannot remember which part of the plant is used leave it alone.

# MOST IMPORTANT ....

Check your personal tolerance to ANY new edible wild plant before consuming in quantity. If you have a medical condition or are taking medication then you should seek professional medical advice before consuming edible wild plants as they may contain constituents that impair or amplify that medication.

#### AND DO...

Be 'aware' of the environment that you are gathering from. Is there possible contamination from effluent, car exhaust emissions, sprays, dogs and so on?

#### LASTLY ...

NEVER consume dead or dying foliage, or that which is discoloured (although the plant COULD be just discoloured from bad soil nutrients it could also be an indicator of weedkillers at work).

