

TO WEED.. OR NOT TO WEED

THAT IS THE QUESTION



“ADOPT THE PACE OF NATURE: HER SECRET IS PATIENCE.”

- RALPH WALDO EMERSON

PHOENIX VOYAGE



PRODUCTIONS



How Weeds Can Be a Valuable Resource

We often hear people complaining about their problems with 'weeds'. But really, a weed is just a plant that is particularly well adapted to the growing conditions where you live. You might not have planted them and they may sometimes spread like wildfire, but that does not mean that weeds are not useful. By working with nature rather than fighting it, we can create abundant and productive growing areas and thriving, sustainable communities. Making use of weeds is just one part of the picture and is a great step forward on the way to a better way of life.

We need an attitude adjustment when it comes to how we think about weeds. Weeds can be an incredibly valuable resource. Unlike grass lawns, weedy patches are bio diverse, useful and even provide a source of easily obtained and abundant food. You can find out more about the food sources of various common weeds in different climates in the section below. First, let us look a little more at how weeds can be of use to gardeners and land owners.

How Weeds Can Be Useful

Weeds can be useful in a range of different ways. Eradicating all plants that you perceive as 'weeds' from your garden would be a damaging and counter-productive thing to do. While you may not wish to encourage the spread of all weeds, allowing some wilder corners to thrive will bring forth many benefits.

What weeds can tell you about your land:

The first thing to do when designing a garden or food-growing space is to look at it closely. One thing it is important to look at is what is already growing well there. The plants already thriving (including the ones perceived as weeds) will help you determine which other plants will do well. The native weeds on site can tell you about the soil make-up, how acid or alkaline it is, how well it drains and the nutrients it contains. Where on your land weeds thrive can also tell you about the micro-climate of your land.

Weeds for land reform and improvement:

Native weeds are often pioneers that colonise a piece of land before other plants take hold. They can sometimes be of use in improving the humus content of soil over time and in establishing a fertile top soil. They can improve moisture retention or solidify waterlogged land. These hardy plants can ready the land for more delicate plants, giving them the conditions they need to grow. Weeds can also break up compacted soil and bring nutrients from far below the ground closer to the surface, where they can be used by plants with shallower roots. Some weeds can even cleanse the soil of pollutants.

Weeds for fertilisation:

Weeds can often be a valuable source of biomass. Biomass is the natural vegetative waste that your land creates. It is a resource that can be returned to replenish the soil and feed your plants. Since weeds grow so readily and often so quickly, they are an abundant source of biomass. This biomass can be extremely valuable to food growers as fodder for compost and for the manufacture of nutrient rich liquid feeds.

Weeds for health:

Some weeds from around the world have great health benefits. The use of such plants in herbal medicine still remains in folk remedies from around the world. Some weeds may contain chemicals that can aid our immune systems and improve general health, while others have specific uses for topical application or in unguents and balms.

Weeds for crafting and practical applications:

There are certain weeds that offer other aids to a more sustainable way of life. Some can be used to make fibres and fabrics, or to dye cloth. The common stinging nettle, for example, can be used to make a fine cloth as an alternative to cotton. Though it has now fallen out of favour for the most part, nettle cloth is still made in certain parts of the world. Other weeds also have unusual and unexpected practical uses in crafting and in the creation of a more sustainable way of life.

Weeds for food:

Some weeds grow so quickly that they can quickly take over an area of land. But sometimes, you can slow their spread by regularly harvesting the weed as a food crop. Many weeds are not only edible but also delicious. A number of weeds were eaten regularly by our ancestors and it is only since the advent of extensive mono-crop agriculture that our modern diets have become more restricted. We can all eat a more diverse and healthy diet by turning our attention to the plants we have ignored and called weeds for generations. No matter where in the world you live, weeds can provide an abundant source of food right on your doorstep.

Which weeds you will encounter regularly will depend upon where in the world you live. Below are some of the most common weeds found in the various climate zones, along with the uses that can be made of them. It is worth saying that you should only eat weeds that you can be sure you have identified correctly, as there are also a number of poisonous plants growing wild in our environment. If in doubt, always get the help and advice of an experienced forager.

Weeds from Temperate Climate

The following weeds all thrive in various conditions in a wide range of climate zones. Each has its own uses as an edible plant.



Stinging Nettle (*Urtica dioica*)

Stinging nettle is a common weed. It is native to Europe, Asia, northern Africa and western North America. The presence of nettles in the garden is a good sign of a moist, fertile, nitrogen rich soil. Stinging nettles can be a literal pain to gardeners. As the name suggests, their sharp spines inject chemicals that create a stinging sensation on human skin. In spite of the sting, however, you may be surprised to learn that nettles have long been used as food and for other purposes by people around the world.

Nettles will lose their sting when wilted and can be cooked like spinach for use in a number of different recipes. They are at their sweetest and best when young and are best used for food in early spring. Nettles have also been used to make fibres for fine cloth and to make a green dye for fabrics. Nettles can also be used to make nitrogen rich plant feeds.

Dock Leaf (*Rumex obtusifolius*)

Dock will often be found growing near nettles and can be gently squeezed onto the skin for relief from nettle stings. The leaves can also be used to relieve a range of other skin irritations. Dock leaves can also be eaten when young, used in a similar way to collard greens or spinach. The older the leaves the more bitter they will be. Boiling the leaves will reduce the bitterness. When the plant is older and has gone to seed, dock seeds can also be dried and ground and turned into a flour that can be used to make breads, though this flour is best used in combination with flours from other, better known grains.



Plantain (*Plantago major*)

Broadleaf Plantain, not to be confused with the tropical fruit, can also be used as a delicious alternative to better known edible greens such as spinach or brassicas. It is native to most of Europe and to northern and central Asia. It was introduced to North America, likely by European settlers. Similarly to dock leaves, plantain can be used to relieve skin irritation and is often used as a poultice on small wounds or bites. This is a highly nutritious wild edible and is rich in vitamins A, C and K. Tender young leaves can and should be eaten raw in a delicious wild salad, while older leaves can be wilted or boiled.

Cleavers (*Galium Aparine*)

This widely distributed weed has a number of different names in various places. Its sticky strands and buds can be a nuisance and it can quickly spread if left unchecked. However, if you catch the plants early in the spring then they can be a great foraged green. When young, the plants will not yet have developed their sticky and tough coating and can taste wonderful wilted down like spinach. Eating this plant while young can prevent its spread throughout the garden. It will also tide you over during the 'hungry gap' in the spring. When older, cleavers can be used as a natural sieve or filter for water. The fruits, dried and roasted, have been used as a lower caffeine substitute for coffee.



Ground Elder (*Aegopodium podagraria*)



Ground elder can be a problem weed if left unchecked. The plant is native to Eurasia and spreads prolifically to create a dense ground cover. If you have ground elder on your land then you are unlikely to be able to eradicate it entirely. Instead of attempting to do so, choose to embrace this wild edible. It is best eaten when young, certainly before it flowers. Later leaves do not last as good and may have a mild laxative effect. The young leaves and tender young

stems are best wilted down and used as a pot herb or spinach. They taste great in a stir fry when very young and tender, especially when used in combination with other wild greens.

Lambs Quarters (*Chenopodium album*/ *Chenopodium berlandieri*)

These edible species of chenopodium are found, respectively, in Europe and Asia and in North America. They have been widely used throughout history both as food for humans and as fodder for livestock. In Northern India *Chenopodium album* is widely cultivated as a food crop, though elsewhere it is often considered to be a weed. The young greens are another great alternative to spinach and leafy greens, though these should be eaten in moderation due to their high levels of oxalic acids. The seeds or grains (similar to quinoa) are also eaten around the world and are mixed into gruel-type dishes.



Good King Henry (*Chenopodium bonus-Henricus*)



Another chenopodium often considered to be a weed is Good King Henry. It has a long history of cultivation, but has largely fallen out of favour as of late. New shoots can be eaten as a substitute for asparagus, which is why it's sometimes called the 'poor man's asparagus'. Its leaves are similar to spinach or brassica greens and can be picked and cooked throughout the spring and summer months. This perennial plant will return each year if tended and not over-harvested and is now regaining some popularity in perennial vegetable patches.

Chickweed (*Stellaria media*)

Native to Europe and naturalised in many parts of North America and elsewhere, chickweed is a common weed which is good as food, not just for chickens as the name suggests but also for human beings. Chickweed is delicious for foraged salads in the spring and is commonly eaten during the Japanese spring-festival. Chickweed is also used in herbal medicine and is said to have a range of different health benefits.



Purslane (*Portulaca oleracea*)

Purslane has been spread by humans to many parts of the world and in some places is known as a weed. For others, however, purslane is an edible treat with a slightly sour and salty taste that perfectly complements the other ingredients in a range of different dishes. The stems, leaves, flower buds and seeds are all edible; the latter is used by Australian aborigines to make seedcakes. Purslane has also been used in traditional medicine and in general is considered extremely healthy as it contains high levels of omega 3.



Dandelion (*Taraxacum officinales*)

One of the most easily recognisable weeds is the dandelion. All too often, people spend a fortune and pollute the environment in a misguided attempt to remove these useful plants from their lawns. Dandelions are bitter, though young leaves can still be a great addition to mixed salads or for use in stir fries. The flowers can also be eaten – dandelion fritters are one option. In addition, dandelion roots can also be eaten in root vegetable recipes or roasted as a coffee substitute.



Weeds from A Sub-Tropical Climate

In sub-tropical climates you will often also find many of the above weeds. Here are a few more examples of useful, edible weeds commonly found in sub-tropical climates.



Amaranth (*Amaranthus*)

Wild amaranth grows on verges and wild spaces as well as in gardens over a wide distribution area. There are several different 'weed' varieties but these weeds share characteristics with their cousins, which are used as grain crops in some parts of the world. The leaves can be eaten and have a taste similar to spinach and will grow better than many leafy vegetables in a hot climate. The seeds can also be eaten raw as a good source of protein or can be ground into flour.

Mallows (*Malva*)

Mallow is a plant family with a number of species and these are widespread across not just subtropical regions but are also found in temperate and tropical zones of Europe, Asia and Africa. In the Americas, where they are not native, they are sometimes cultivated for flowers in gardens but are often considered to be a weed. Mallow leaves can be eaten raw and taste much like a mild lettuce, while they can also be cooked and used like any other culinary green. Buds and flowers also look and taste lovely in salads.



Velvet Leaf (*Abutilon theophrasti*)

This plant is found around the world, having been introduced (unsuccessfully) as a plant for fibre crops. It is often a bane to world farmers who curse the plant as a weed for its infiltration of food crops such as maize. As an agricultural pest, the fact that it has edible parts is often forgotten. In fact, the unripe seeds of the plant are delicious; a little like sunflower seeds. Ripe seeds are bitter and are usually turned into flour, which was traditionally used to make noodles in regions where the plant is native.



Violettas (*Anoda cristata*)

Native to Mexico and some parts of Central America, this plant has become a common invasive species in Australia and is a common agricultural weed in subtropical regions of the Americas. However, in Mexico and other regions, these flowering plants are tolerated or even encouraged as a side-crop because they themselves are edible and are also sometimes used in medicinal remedies.





Turkey Rhubarb (*Acetosa sagittata*)

Turkey rhubarb, also known as rambling dock or potato vine, is native to southern Africa and has become an invasive weed in Australia and New Zealand. The good news for those battling this invasive species is that the leaves and young stems can be eaten – a great way to reduce its spread. The plant is actually sometimes grown as a cultivated vegetable in Java. The leaves have a sweet-sour flavour and can be used as an alternative to tamarind in stews.

Cobbler's Pegs (*Bidens pilosa*)

Also known as black-jack, beggar-ticks or Spanish needle, this flowering member of the Aster family is native to the Americas but is widely known as an introduced weed in other places including Eurasia, Africa, Australia and the Pacific Islands. Its barbed seeds can be a pain when stuck in a pet's fur or on clothing. However, this weed also has its uses. It is well known as an edible plant in Africa and in Vietnam, where it became known as the 'soldier vegetable' during the war. The plant is also used in traditional Chinese medicine. Leaves can be eaten cooked (not raw due to saponins) and are also said to be a good substitute for tea. The seeds are also eaten.



Prickly Lettuce (*Lactuca serriola*)

Prickly lettuce is native to Europe, Asia and north Africa and has been naturalised elsewhere. It is a common weed found across climate zones in orchards, roadsides and alongside field crops. This is the closest wild relative of cultivated lettuce and as you might imagine, it can be used in salads, though it does have a slightly bitter taste and so is best used in a mixed leaf salad. The younger the plant, the less bitter it will be and the better it will be for use in salads. Towards flowering, the plant begins to produce a

mild narcotic which has a slight soporific effect. Young stems can also be used as an alternative to asparagus.



Nasturtium (*Tropaeolum majus*)

This common garden flower can quickly spread and get out of control in sub-tropical regions. In New Zealand, Lord Howe Island and Hawaii this is listed as an invasive species. However, this plant can be a blessing as it is highly nutritious and delicious. The leaves and flowers can both be used in mixed salads for a slightly peppery and spicy taste and the seeds can be pickled and used as a substitute for capers in various different recipes.



Scurvy Weed (*Commelina cyanea*)



The plant's name comes from the fact that it was used by early Australian colonists to prevent scurvy. The leaves can be used similarly to any other foraged green in cooked recipes such as frittatas, omelettes or stir fries, for example. The terminal buds can also be eaten raw or cooked. Though it has a pretty flower, this plant is often thought of as a weed because of its weak stem and flopping habit. It is often found abundantly in damp pastureland or any shaded areas of moist or disturbed soil across temperate and sub-tropical regions of Australia, Lord Howe Island and Norfolk Island.

Warrigal Greens (*Tetragonia tetragonioides*)

A common plant in parts of Australia and New Zealand, this plant was spread around the world after it was discovered and used (pickled, to fight scurvy) by Captain Cook and the crew of the Endeavour. The leaves of this plant can be eaten raw or cooked as a spinach-like green vegetable. The young leaves are best and should be harvested when shoots are around 8cm tall as this will encourage new side shoots and bushy growth. Later, leaves develop an acrid taste.



Weeds from a Tropical Climate

In addition to some of the herbs mentioned above, in a tropical climate you will also find that many plants commonly cultivated in other climate zones can easily get out of control. Some of the abundant herbs found in various tropical climates around the world can be found below.



Agave/ Century Plant (*Agava americana*)

Found also in some dry, warm temperate and sub-tropical climates, the agave is sometimes viewed more as a wild weed than as the edible food source that it is, though man has actually been cultivating and using agave for around 9,000 years. The flowers, stalks or basal rosettes of the agave can be roasted for food, seeds can be used to make flour and flower nectar can be used to make sugars and sauces. The sap is used to make tequila, though the other edible options are often overlooked.

Kudzu (*Pueraria*)

Kudzu is a trailing vine native to much of Asia, South-east Asia and some Pacific Islands. Where these plants have naturalised they are often characterised as an invasive weed. The plant grows so quickly over trees and shrubs that it can kill them by heavy shading. However, this is a very useful plant in many ways. Firstly, it is a nitrogen fixer and soil improver. Secondly, it is used for basketry and weaving. It has also been used as fodder for goats and other livestock. The plant is also edible to humans, though of course you should be absolutely sure that the plant has not been sprayed with herbicides before you try it. Roots, flowers and leaves all have their uses.



Cattail (*Typha latifolia*)



Cattail has been found in a wide range of climate zones. In a tropical climate it often tries to take over and is a pest and an invasive weed in some regions. In some areas, Cattail contributes to the degradation of salt marsh habitat. It is important not to attempt to eat this species when it is found in polluted water as it is a bio-remediator and absorbs pollutants. However, when found in clean water, the peeled stems and leaf bases can be eaten raw or cooked and the young flower spikes are also edible.

Burnweed (*Erechtites valerianifolia*)

Tropical burnweed is a member of the sunflower family. It is native to tropical regions of the Americas and is naturalised as a weed in many tropical regions of the old world. The young leaves are used as a leafy vegetable which is high in vitamin A and also has high content of protein, phosphorus, iron and zinc. It can be used and is used in some parts of the world in a number of recipes and it is prized for its delicious taste.



Jonghe/ Cupid's Shaving Brush (*Emilia sonchifolia* L.)



This tropical species of tassel flower in the sunflower family is widespread in tropical regions around the world, some in which it is native and some where it is naturalised. The leaves and shoots, raw or cooked, are sometimes treated as a vegetable and a tea made from the leaves is used in traditional medicine in China and elsewhere. Flower heads are also chewed in some regions as a remedy for tooth ache and to protect teeth from decay.

Water Spinach/ Kangkong (*Ipomoea aquatica*)

This tropical, aquatic plant can quickly become a weed in tropical garden ponds. However, it is actually one of the tastiest of the over-looked greens out there. While it is a common edible food in parts of East Asia, California, Florida, and Hawaii, it is considered to be a noxious weed, where its edible characteristics are often overlooked. Stir fried water spinach is popular in Southeast Asia and it is also a popular ingredient in Indonesian cuisine. It is important to know, however, that you should never eat raw from contaminated areas as it may transmit parasites.



Culantro (*Eryngium foetidum*)



Culantro is a tropical perennial herb that is found around the world, cultivated in some areas and considered as a weed in others. Though often confused with cilantro, culantro is not the same as coriandrum sativum, though they are said by some to have a vaguely similar taste. The latin name literally translates as 'foul smelling thistle' – not the most promising name for those looking for edible weeds. Culantro, however, is a good addition to a foraged diet and in many parts of the world is widely used as a culinary herb and a tropical alternative to cilantro. Culantro

also has a place in herbal medicine in a number of different areas.

Paco Fern (*Diplazium Esculentum*)

Often to be found in the wild in tropical regions, and often forming thick vegetation and encroaching on cultivated areas, this fern is often used as a vegetable or in salads in some parts of the world. Young fronds are picked while they are at their most tender and used in a number of different ways. This is probably the world's most commonly consumed fern, though in some regions this wild plant is not considered for culinary use. Paco fern is described as a healthy addition to a foraged diet and contains calcium, phosphorus, iron and vitamins A and B.



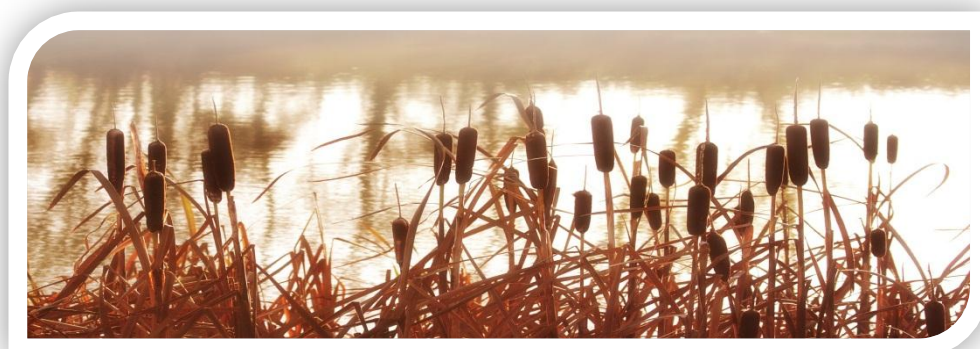
Indian Pennywort/ Centella/ Gotu Kola (*Centella asiatica*)

This frost-tender perennial is native to tropical wetlands in Asia and is often thought of as a weed in tropical gardens. This plant, however, has a long history as a medicinal herb and has a number of culinary uses in parts of south east Asia and Indonesia. It is used both in salads and as a leafy green. In Sri Lankan cuisine it is considered to be particularly nutritious and is often the very first leafy green to which a weaning child is introduced. As well as being

used for salads and cooked meals, this plant is also used to make a refreshing drink in Thailand. However, those new to tropical gardening often find this plant in their space and consider it to be a weed.

Malabar Spinach (*Basella alba*)

Malabar spinach is often viewed as a weed in tropical gardens, where it will reseed itself prolifically, though it is also commonly used as a leafy vegetable or spinach in tropical Asia and Africa. It is a fast-growing, soft-stemmed vine that can quickly take over if left unchecked. Rather than getting irritated with this prolific plant, harvest it for use wherever you would traditionally use spinach or other leafy greens. This green is extremely good for you. It is high in vitamins A and C, iron and calcium and also low in calories yet high in protein – yet another great edible weed for those living in tropical climates.



Tips for Preparing Foraged Greens from Edible Weeds:

'Spinach' as a Verb:

Many of the edible weeds above offer alternative sources of greens for salads, stir fries and a variety of cooked recipes. Often, you can use the weed greens in much the same way that you would use traditional spinach. This has given rise to the use in foraging circles of the word 'spinach' as a verb. To spinach is to wilt down any similar greens for use in your kitchen and is something you will find yourself doing a lot of if you get into foraging for edible weeds in your area. Wilting down edible greens of all sorts is the first step in a wide range of different recipes. Here are a few ideas to help you decide what to do with the various greens you have foraged and 'spinached':

- Wilt greens in oil with a little garlic (or another allium – one other edible weed from a temperate climate not mentioned above is wild garlic, ramps or ramsons, which are a wonderful wild alternative to other alliums). You can then eat these garlicky greens on toast or as a side dish.
- Add your wilted greens to an omelette or a frittata, ideally with free-range eggs, perhaps even eggs you have collected from your own chickens.
- Mix greens into a batter and fry in vegetable oil to make crispy fritters. You can add salt to the batter along with whichever other flavours you choose, so why not experiment?
- Stir fry to wilt greens with other vegetables and flavour with ginger and soy sauce, a sweet and sour sauce or spicy chillies for a dish with some kick.
- Add 'spinached' greens and other ingredients you choose to a base of onions and spices to make any number of different, delicious curries.
- Layer your greens with lentils, pasta sheets and a cheesy white sauce to make delicious vegetarian lasagna.
- Layer greens with a soft cheese and perhaps tomatoes in a pastry casing to make a delicate tart.
- Add greens to a soup or stew for added nutrition.
- Make some little filo parcels and fill them with seasoned, wilted wild greens, serve with a flavoursome sauce for a delicious snack or starter.
- Add wilted greens along with some pulses and other vegetables to rice, quinoa, bulgar wheat or cous cous for the base of a tasty warm salad.

These are just a few ideas for healthy, easy and delicious home-cooked meals that will cost very little and yet will rarely fail to impress.

Tips for Eating Foraged Greens and Weed Flowers Raw:

The foraged weeds you find do not always have to be cooked to be eaten – but you may be at a bit of a loss as to how to prepare and serve these unusual edibles to your family. Here are a few simple tips to help you create delicious salads and use up all of those healthy raw greens:

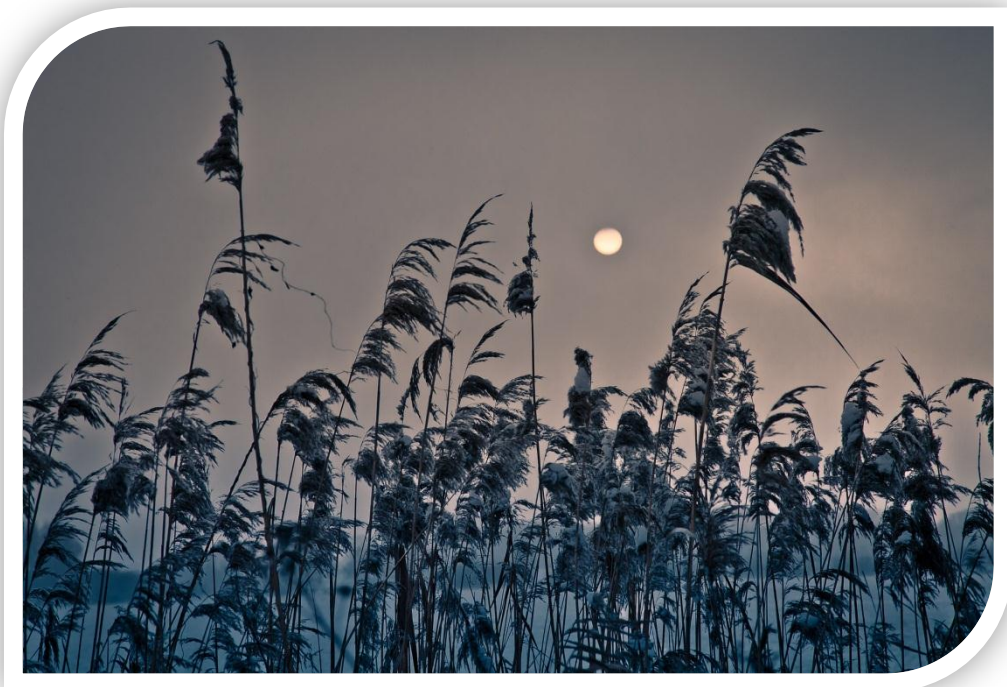
- Combine a range of sweeter and bitterer leaves for a more balanced salad with a more complex taste.
- Consider how your salads look as well as how they taste. A salad with some beautiful edible flowers and different colour leaves included can look far more interesting and appetising than a plate of leaves all the same shade of green.

- Consider texture as well as colour and taste. Try to include some more crunchy and crisp elements in your salad along with limper leaves. Do not be afraid to experiment with other ingredients to complement the weeds you want to eat.
- Use your imagination and taste buds to come up with salad dressing options that do not come from a store-bought jar. How about a fruit-based dressing, for example? (Perhaps even using fruits also foraged from your local area or grown in your garden.) Or how about a little spice? Open your mind to options that are a little more outside the box and you could open up a whole new world of exciting culinary experiences.

Tips for Feeding Reluctant Weed Eaters:

What about salads for those who say they do not like a salad? If you are struggling to get your family to eat the weeds with you, there are ways of disguising them somewhat and getting them to eat the weeds raw for their nutritional benefits without really realising it. One way to do this is to use a food processor or chop the greens very finely with a knife and combining them with olive oil, garlic, a little salt and pepper, some seeds or nuts and a little soft cheese to make a mild and tasty pesto which can be stirred into cooked pasta, rice or potato. Great a little cheese on top and even young kids will tend to enjoy this healthy meal without complaining about having another salad. This versatile pesto recipe can also be used in a variety of cooked meals and will allow you to slip in more healthy herbs and vegetables than your family will ever guess.

For some, eating weeds may seem like a rather odd pursuit. But edible weeds really are the plants of our future and if we want to create a sustainable way of life for ourselves and future generations then abundant native plants should be a part of the way we choose to eat. Once you experience the satisfaction of finding food for free and taking back control for the food on your plate, you will never go back.



Happy Weeding!