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IN SEASON

LEAVES

Photo - Fergus Drennan

LEAVES

The way my mind works, or doesn't—depending on your point of view—means that once I start to think about a topic, my initial thoughts are almost immediately catalysed by a cascading awareness of radical connection, of the mutual dependence and inter-relation of all things. Perhaps this is a state of mind inherent not just to long-term foragers, but to all those directly and deeply engaged with the natural world, and one that is experience regularly or as a perpetual state? So as I sit here reflecting on the current topic at hand; leaves and the multiplicity of ways they can be creatively used in the human diet, my thoughts turn to the whole plant-grown carcass of the very recently deceased deer I'm currently working with, because one such deep engagement with nature, with wild foods, with leaves, is to eat them and thereby transform them into living breathing tissue, into bone, blood, muscle, and brain, and, by extension, birth them anew into the very thoughts and dreams that animate the wild human life, my life. As I type, the whole deer skin is boiling on an open fire on its way to becoming glue, the meat is in the freezer, the sinews are drying for cordage, a bone broth is brewing on the aga, the head has found a new body—a wood ants nest—as I experiment (feeding badgers permitting) to see how long the ants take to clean it down to bare bone, the intestines are washed and salted (for sausage making), a jar of pure deer oil to the left of my keyboard slowly sets as fat turning from a clear golden amber to a creamy off-white solid (for cooking and soap making), and finally, the cleaned out stomach is in a tanning solution—its partially digested leafy contents spread out to dry on newspaper in the conservatory (for paper making). Where does leaf end and deer begin or deer begin and leaf end?

Photos - Fergus Drennan

Could you stomach this? It is known that many hunter-gatherers, including the Inuit and Cree ate the stomach contents of animals such as deer because it provided useful amounts of vitamin C and other nutrients.

http://www.smithsonianmag.com/smart-news/rethinking-the-paleo-diet-would-you-eat-the-contents-of-a-deers-stomach-180947685/?no-ist

A pungent sea of wild garlic leaves

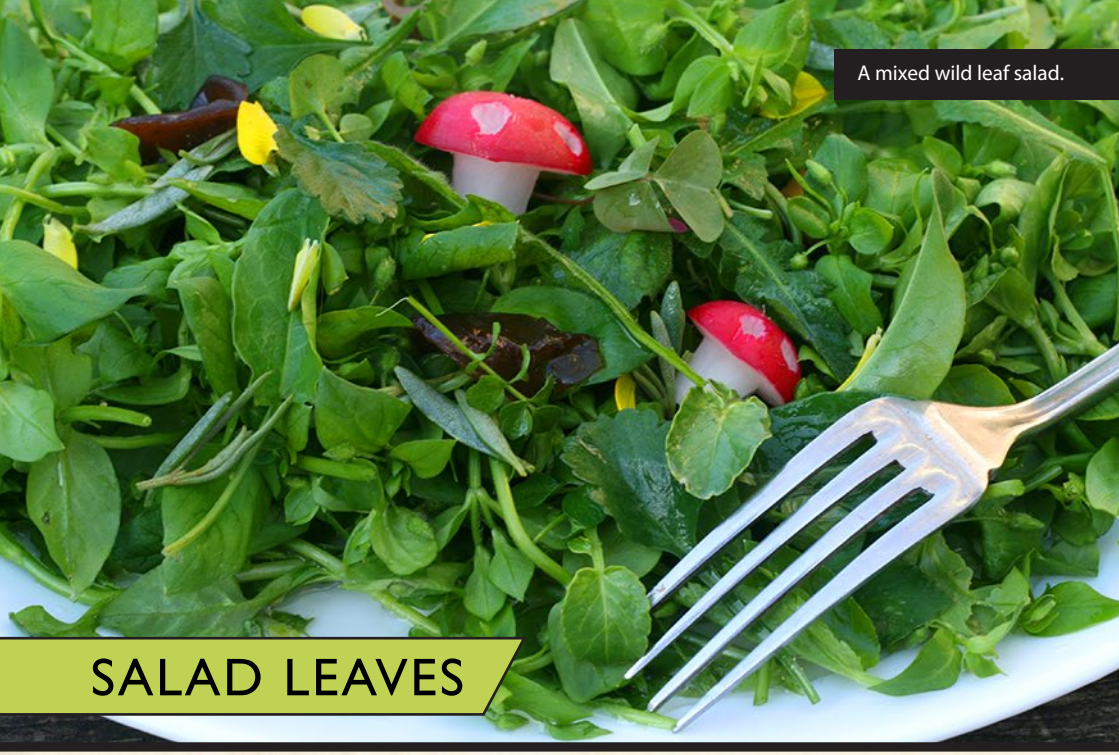
Photo - Fergus Drennan

THE WILD LEAVES OF APRIL AND MAY

Adria Bellflower, alexanders, annual sea blite, bilberry, birch, bistort, black mustard, black nightshade, bramble, bristly ox-tongue, broad-leaved dock, buckshorn plantain, burdock, charlock, chickweed, common mallow, cow parsley/wild chervil, crow garlic, daisy (common), dandelion, dittander, Douglas fir, duke of Argyll's tea plant/goji, elder, fat hen, fennel, field madder, garlic mustard, gingko, golden samphire, ground elder, greater/common plantain, ground ivy, hairy bittercress, hawkweed ox-tongue, hawthorn, hedge bedstraw, hedge mustard, hogweed, honesty, horseradish, Hottentot fig, Indian balsam, ivy-leaved toadflax, Japanese knotweed, juniper, lady's smock, lesser celandine, lime, marsh samphire, marsh thistle, mugwort, nipplewort, oak, opposite-leaved golden saxifrage, orpine, ox-eye daisy, pelitory-of-the-wall, perennial wall-rocket, pennywort, pignut, pineappleweed, pink sorrel, poppy, purple deadnettle, rape, reedmace, ref¬lexed stone crop, rock samphire, rosey garlic, salad burnett, scented mayweed, Scot's pine, scurvey grass, sea arrowgrass, sea aster, sea beet, sea buckthorn, sea campion, sea kale, sea plantain, sea purslane, sea radish, sea sandwort, sorrel, sow thistle, spear mint, spring beauty, spruce, sweet cicely, swinecress, tansy, three cornered garlic, watercress, water Celery/ Fool's watercress, water mint, water-pepper, western hemlock, white deadnettle, white mustard, wild cabbage, wild carrot, wild celery, wild garlic, wild pea, wild thyme, willow, wintercress, wood sorrel, yarrow, woodruff.

Given the diverse range of their possible use, the topic of 'leaves' really is a vast and potentially overwhelming one, so to make it more manageable I'll provide a brief overview of leaf-utilizing ideas and then narrow down to focus on two less well known ways to bring wild leaves into the diet; through making oxidized leaf teas/tisanes, and by candying them, although not just in sugar but more playfully and creatively, in a syrup made either from the same leaves or another part of the plant from which they came, for example; oak leaves candied in acorn syrup. In focussing in on those two leaf uses, as well as providing an overview of more traditional usage, I hope this article will appeal to a diverse range of interests, in particular, partners and children as they begin to explore the wild food side of bushcraft.

Above is just a selection of the more obvious wild, or at least foragable leaves available in April and May, and how we use them in the diet will depend on the variables of differing size, shape, texture, flavour, aromatics, stage of growth, abundance, and whether or not they can be eaten raw or are best cooked such as is the case with lesser celandine. I've categorized them here according to their different uses, but do bear in mind that such categorization is really just a general aid to structure thought, because of course many leaves will defy categorisation or, at least, can cast their range of potential use across many of my arbitrary categorisations. For example; the leaves of Ramsons *Allium ursinum* can be used as a salad leaf, in salad dressings, as a side vegetable, for soups, and in sauces such as pesto, for protein extraction to make a pungent curd, for pickling and lactofermenting, for flavouring cheese and butter, and for pureeing and adding to fresh pasta dough, among many other uses.



A mixed wild leaf salad.

SALAD LEAVES

Photo - Fergus Drennan

One of the simplest ways to use spring leaves, and one that involves a minimum of processing, is to add them to salads, either extending a salad made from leaves you have bought or grown or a completely wild one. Sometimes while out walking in the spring, by the time I arrive home I've grazed on so many fresh leaves that I've eaten the equivalent of a large salad, and on the move is a good way to eat such leaves. But, if you do gather some to take home, an awareness of the differing qualities of the leaves can help you blend and balance different textures and flavours. For instance, sometimes I make a large salad from 50+ different leaves. That can be fun to do but can also result in a somewhat riotous conflict of flavours. So at times it can be good to just use 2-3 ingredients, for instance by balancing mild tasting and pungent leaves, with delicate and succulent leaves, an example would be chickweed or lime leaves (delicate and mild tasting), pennywort (mild and succulent), and dittander (wasabi pungent). It is not to everybody's liking, but remember too that wild flowers are a wonderful addition to salads in terms of both flavour and appearance.

Here are a few examples of how you might categorise salad leaves according to their different qualities. Note: I've not included 'tender' as a category, as I'm assuming a certain amount of discrimination when you are harvesting. In early spring most of these leaves will be tender although, especially in the case of edible tree leaves, the window of opportunity to harvest tender leaves is quite short – sometimes only a week or two at the most (birch, white willow, beech). Remaining tender up to a month after coming into leaf: hawthorn, and a bit longer: lime.

Mild tasting: chickweed, hawthorn, lime, bristly-ox tongue, spring beauty, willow, bellflower, birch, nipplewort, ox-eye daisy, beech, reedmace heart leaves.

Mid-range: Garlic mustard, charlock, wintercress, hairybittercress, hedge mustard, cow parsley

Strongly flavoured: Ramsons, dittander, water pepper, black mustard, ladies smock, ground ivy, watermint, watercress.

Succulent: Pennywort, sea purslane, orpine.

MICRO AND SPROUTED LEAVES

Charlock seed: easy to harvest in large quantities and sprouts very easily.

Photo - Fergus Drennan

Another way to incorporate very young and tender leaves into a salad is to harvest and sprout your own seeds. The main considerations are to do with ease of seed harvesting and how readily they germinate. The seeds I most frequently sprout are those of charlock and wild garlic, but I've also had success sprouting the following seeds to use in salads: Nettle, love-in-the-mist, dandelion, sea campion, pink campion, shephard's purse, penny cress, alexanders, goosegrass, common dock, greater plantain, corn poppy, garlic mustard, redshank, burdock, chickweed.

SALAD DRESSINGS

Finely chopped and flavoursome leaves such as wild garlic, chives, and dittander can be added to vinaigrette-type salad dressings or low fat salad dressings. The latter can be made by replacing some or all or the oil content with botanical extracts. Carrageenan extracted from carrageen seaweed or greater plantain seeds work well in this regard, holding the chopped leaves in suspension throughout the dressing (when bottled).

Sometimes people add honey to salad dressings to give a bit of extra sweetness, a similar result can be had from mixing in some of the botanical syrups left over after leaf candying (see below).

Of course, salads can be made warm or cold and made from other things rather than simply leaves; rice, potatoes, beetroot etc. In this case wild leaves can be utilised for an accompanying sauce/dressing; mint or sorrel sauce (the latter being a great accompaniment to white fish as well), or pesto of various varieties, wild garlic, nettle, or rocket for instance.

Here is a link to a 100% wild salad dressing I made whilst living on entirely foraged food for a couple of months. It does surprise me that I used carrageenan powder rather than the fresh extract though.

http://fergustheforager.co.uk/1st-year-long-attempt-to-eat-100-wild-food-for-a-year/

AS SIDE VEGETABLES

There are many leaves one could use as a side vegetable cooked very simply by streaming or boiling in a little water. Seabeet, sea kale, sea aster, common hogweed (with leaf stem), and Alexanders (with leaf stem) lend themselves especially well to this way of being eaten. Tossing in melted butter and adding a squeeze of lemon, some sea salt and freshly ground coarse pepper also increases the delights of such vegetables. The above selection work well not just due to their agreeable taste and texture, but because they are relatively common, abundant and require very little effort to prepare. There are other leaves that can be used in a similar way that are equally or even more common and abundant but require just a bit more processing. For instance, the leaves of common dock can be eaten and enjoyed the way described provided they are boiled twice for 30 seconds in two changes of water to remove the excess tannins.

Common hogweed stem and leaf; both delicious cooked together or separately, as are the sheath-enclosed flower buds steamed as a side vegetable or cooked in a light tempura batter. The seeds are a great spice too, although the flowers are somewhat off-putting, smelling of stale urinal (seriously, give them a smell). Harvest stems, leaves and sheaved flower buds with caution to avoid getting the sap on your skin, as this can cause blistering if the skin is then exposed to sunlight.

Photo - Fergus Drennan

TEMPURA

Dipping certain leaves in a light tempura batter and deep frying until golden brown is another way some wild leaves can be used as a side vegetable, garnish or as a simple course in its own right. Comfrey leaves have traditionally been given the tempura treatment, and for good reason—it works well. Fellow forager and wild food enthusiast Monica Wilde provides a good recipe in the following article using common comfrey, whilst providing a well-researched and balanced appraisal of the somewhat misinformed and hence controversial debate around pyrrolizidine alkaloid content and edibility: *http://monicawilde.com/is-comfrey-edible/*

The following leaves also work well prepared this way: bristly ox-tongue, buckshorn plantain, hogweed (very young leaves), fennel, rock samphire, reedmace cores, reflexed stonecrop, sea aster, sea kale, three-cornered garlic, and wild celery.

LEAVES FOR SOUP MAKING

The following tender spring leaves are excellent as the main flavouring ingredient in a soup with a simple base of leeks, onions and, perhaps, potatoes: Alexanders, bistort, chickweed, Duke of Argyll's tea plant/goji, black nightshade, fat hen, ground elder, common hogweed (in a soup it tastes more like celery than celery!), sea kale, watercress, sorrel (all varieties), water celery, wild cabbage, pelitory-of-the-wall, small and common/stinging nettle.

The following, on the other hand, are best used as a component in soup as an addition to other wild leaves, bearing in mind as always, that this is a rough guide, as what is or isn't best is very much down to personal preference of course: annual seablite, black mustard, bristly ox-tongue, broad leaved dock (after leaching out the tannins), common mallow, sea mallow, cow parsley, dittander, honesty, lesser celandine, marsh samphire, sea aster, seabeet, sea purslane, and wild garlic.

Lycium barbarum (goji/Duke of Argll's tea plant) can be used as would be *Lycium chinense* with the same flavour and benefits. The plant is surprisingly widespread in hedgerows throughout the country. *https://data.nbn.org.uk/Taxa/NBNSYS0000004032*

The berries are more widely known, but the leaves before the plant flowers are excellent as tea, in salad, and in soup. The Chinese value the plant (fruit and young leaves) for their sexual libido enhancing quality—especially in men over 40.

Another delicious member of the nightshade family is black nightshade, which, to the surprise of many people (perhaps negatively associating it with poisonous deadly nightshade), has leaves that have widely been used as food. Respected American forager Samuel Thayer discusses the plant's use in this informative piece:
http://foragersharvest.com/black-nightshade-2/

Some leaves have traditionally been used as both a flavouring and thickener. Perhaps the classic example is the middle eastern molukhia soup that can be made using various species of mallow or related plants. Nevertheless, I have found the texture of such soups to be too slimy and therefore somewhat repulsive when common mallow is the main ingredient. However, common mallow used in moderation, for example in nettle soup (using ¼ mallow leaves and ¾ nettles) does work wonderfully well in my opinion. Such proportions give thickness without sliminess!
http://www.timesofisrael.com/mallow-soup-a-taste-of-jerusalems-independence/

Thus far I've been working on the assumption that any soups made will be served hot. In actual fact, of course, many soups are refreshing served cold, especially in the summer months. This is when wild mints can be incorporated or traditional **borscht** -style soups are best served. The classic sour or acidic flavours of borscht come from lactofermented vegetables (see below). Beetroot is the most common fermented ingredient but common hogweed and many other wild plants have been wildly used as well.

LEAVES FOR PICKLING

Many leaves can be used in pickling. More tender and aromatic leaves can be used to flavour vinegar (for pickling or other use), whereas more robust and succulent leaves are more suitable for hot or cold pickling. In the latter situation the following work very well:

Annual seablite, buckshorn plantain, Hottentot fig, orpine, pennywort, marsh samphire, rock samphire, reedmace (esp cross-sections), reflexed stonecrop, scurvy grass, sea aster, sea purslane, and sea sandwort.

Apart from leaf selection (well cleaned leaves in best condition are most appropriate), the main considerations concern the type of vinegar (strength and flavour) to use, and whether you are going to pickle hot or cold. Cold pickling leaves in a mild flavoured light vinegar will best serve an emphasis on the selected leaf's natural flavour and texture, but will not keep as long as a hot pickle. On the other hand, hot pickling in a strong (high acidity) vinegar will provide extra shelf life but may overpower the flavour of the leaves and make them quite soft. Play with the variables. Hot pickling alone can involve varying techniques all of which will produce a different outcome, for instance you can hot pickle by boiling the leaves in vinegar, by pouring hot vinegar onto leaves in a pre-warmed jar, or by adding leaves to a jar of cold vinegar, and then immersing in cold water which is then brought to the boil. ***Note: some members of the stonecrop family need to be hot pickled in order to render them safe to eat.***

Sea sandwort makes an excellent hot or cold pickle.

Photo - Fergus Drennan

My two favourite leaf pickles are sea sandwort and reflexed stonecrop. The latter plant is particularly suitable for pickling as the plant can be divided up and made into separate pickles e.g leaves and flower buds, flower buds, or leaves on their own.

http://fergustheforager.co.uk/wp-content/uploads/2013/04/ck09junepickofthepickles.pdf

Reflexed stonecrop plant detail, and divided up for pickling.

Photos - Fergus Drennan

LEAVES SUITABLE FOR WINE, BEER/ALE, AND SPIRIT MAKING – INCLUDING COCKTAILS

The first wine I ever made, over 25 years ago now, was a traditional oak leaf wine. It was truly repulsive! When making alcoholic drinks, getting the balance of flavours right is as crucial as knowing why a particular ingredient has traditionally been used. My basic and classic error was to consider that if some oak leaves were good to use then much more must be even better! But, the oak leaves are used mainly for their tannin contribution and only secondarily for their flavour.

Below I have discussed leaves suitable for tea and for candying (with syrup by-product). All such teas and syrups are suitable for creating distinct wines, beers and spirits. On the other hand, particularly where cocktails are concerned, one can make all sorts of bitters—classic or otherwise—with leaves such as feverfew or alehoof/ground ivy. In addition, sweetened spirits or liquors can be delicious in their own right or as part of a cocktail. One such classic spirit is the delicious beech leaf noyau. This classic recipe can be made with other leaves too such as those of birch or young spruce needles.

Here is a recipe for beech leaf noyau from my friend Andy Hamilton. Indeed, if you have a particular interest in wild booze, his book ***Booze For Free*** is well worth looking at.

https://foragekent.wordpress.com/2014/05/14/andy-hamiltons-beech-leaf-noyau/

If you don't want to wait the months required before such drinks are ready, you can always just blend up some flavoursome leaves with vodka, gin, or rum and sugar, filter (or not, depending on your state of inebriatic urgency) and serve over ice as in this sweet Alexanders gin served on the rocks.

Virtually instant Alexanders gin on the rocks.

Photo - Fergus Drennan

LEAVES FOR KIMCHI AND GENERAL LACTOFERMENTATION

Like many of the subsections in this article, this particular one could easily be the subject of a whole book, and indeed, many have been written. Two of the very best are by **Sandor Katz**: ***Wild Fermentation*** and ***The Art of Fermentation***. And, of course, these days a Facebook group can be found for many subjects, and lactofermentation is no exception. Such groups are well worth joining for real-time advice and shared information:

https://www.facebook.com/groups/WlidFermentation/

But what is lactofermentation? Essentially it is a way to preserve and develop the nutritional and flavour profile of various chopped leaves harvested at their prime (often in the spring), by tossing them in a little salt (roughly 1 heaped tablespoon per 1 kg of plant material to be fermented), and compressing them down under their own extracted juices (the salt draws them out). Multiple species of lactobacillus bacteria naturally present on the leaves, will, over time, feed on the leaf sugars, multiply, and raise the acidity level (by producing lactic acid). Sandor's second book is aptly named because there are so many variables effecting the final outcome, that crafting a successful lactoferment really is more of an art than a science. The taste can be mild or strong depending on the leaves used and length of fermentation. My personal favourite is one I allow to ferment for up to 3 years comprised of wild garlic, nettles, ulva intestinalis seaweed, grated daikon radish and, of course, salt. Eating lactoferments on a regular basis is very good for the microflora of the intestines, and a healthy gut microflora has immense beneficial knock on effects in terms of maintaining over all good health.

Kimchi is a traditional Korean lactoferment that includes spices such as chilli and shrimp paste.

USING LEAVES AS SEASONINGS (SALT AND PEPPER)

Hard boiled quail's eggs with *(from left to right)* marsh samphire, annual seablite and sea purslane salt. *For further details: http://fergustheforager.co.uk/recipes-articles/wild-and-random/*

Photo - Fergus Drennan

A number of plants, in particular halophytic saltmarsh and estuary plants that naturally take up a significant quantity of salt from the ground water, are superb dried and powdered. Over the years I have tried every single plant species growing on saltmarshes that can be found in relative abundance and that are not a protected or threatened species. Such research has led me to conclude that the three best plants to use are sea purslane, annual sea blite, and marsh samphire. These all provided a significant salty flavour, sea purslane being the mildest and marsh samphire being the most salty of all. Annual seablite and marsh samphire can be harvested from May–September, whereas sea purslane can be gathered all year round. Simply wash, dry, and crush the leaves, separate out any hard woody stems and grind down to a fine powder. The ratio of fresh plant to final green plant salt is roughly 1kg:100g. The leaf salt can be used on its own sprinkled on food or combined with other botanical salty (dried) seasonings such as sea-water-washed seaweeds. I love to use them with hard boiled eggs and on gorse -branch flash-fire beach-cooked mussels. The marsh samphire salt is particularly excellent for seasoning homemade potato crisps..

Note: many salt marshes and estuaries trap pollutants in muddy sediment, including heavy metals such as lead that are subsequently taken up by the plants growing there. Therefore, use plants gathered from these areas with caution, whether fresh or dried. If uncertain, check with the relevant authorities such as the environment agency or land owner.

Another way to use these salts is in the creation of your own ***gomashio*** mixes. Traditionally this is a blend of salt and sesame seeds, but not only can you play with using different salts you can substitute some or all of the sesame seeds for foraged (and lightly toasted) seeds, for instance poppy, pendulous sedge, and greater plantain seeds.

Finally, leaf-wise (some fungi work well too), the definitive peppery tasting plant is the aptly named *water pepper*, also known by its less appealing name *arse smart* ***Persicaria/Polygonum hydropiper***. The pungent taste is produced by the potent sesquiterpenoid insect anti-feed waburg***anal*** *(my emphasis!)*. So, if you do want to be a foraged-pepper, substitute-making smart-arse, give this common plant a go. You can even, with caution, use it to treat the haemorrhoids of friends and family who don't eat enough fibre containing wild food, or perhaps use the even more aptly named *pilewort* (lesser celandine).

LEAVES FOR CURD MAKING (PROTEIN EXTRACTION)

I first read about this technique years ago in relation to the production of high protein feed for goats derived from grass cuttings, and have since adapted the technique for small-scale curd production in the kitchen. Essentially the idea is to select some non-toxic leaves (the higher the natural protein content the better), break open the cells to release the raw protein, then gently heat to the point of coagulation, strain and compress. It may seem like a lot of work, and the yield small in relation to the quantity of leaves harvested. This is true on both counts, but, depending on the leaves, the final curd can be so potent flavour-wise that a little goes a long way. That certainly is the case with curd produced from wild garlic leaves, the exact process for which can be seen here:

http://fergustheforager.co.uk/wp-content/uploads/2013/04/ckjuly09curdsaway.pdf

Alexanders, ground elder and nettle leaves also produce a good curd, and are the only other plants I've utilized in this way. Given the large initial quantity of fresh leaves required, key considerations before attempting this must be how abundant, common and sustainable is it to make use of the leaves you wish to experiment with? How easy are they to harvest, and does the leaf's reported protein content point to potential success? Fresh seabuckthorn leaves harvested in August are reported to be up to 25% protein by dry weight, so I have been tempted to try these, and yet given both how delicious they are when used to make tea, and the substantial labour required to hand pick them, I've so far shied away from that particular curd challenge.

Wild garlic leaf curd: A considerable effort to make but a little goes a long way.

Photos - Fergus Drennan

Note: In spite of the high reported protein content of some fungi and seaweeds, the cells are too small to be broken open with equipment you might have in your kitchen, rendering them unavailable for curd making – I know, having tried unsuccessfully.

For those of you intrigued by leaf curd possibilities and potential see David Kennedy's excellent and informative downloadable 100+ paged booklet: Leaf for Life.

Hand harvested seabuckthorn leaves: great for tea, but perhaps too difficult to produce curd from in spite of the reported high protein content of the leaves.

USING LEAVES IN DESSERTS

Any leaf that is suitable for candying (see below) is suitable for inclusion in a dessert, be that as a garnish for cakes, ice creams, sorbets, meringues, tarts or virtually anything...

And of course, the botanical leaf syrups produced as a by-product of the candying process, can be used in any dessert situation where the use of a sugar syrup would be appropriate. And in cases where dry sugar is required, many of these botanical syrups can be slowly dried and ground down to produce a fine and uniquely flavoured sugar. In addition, any wild leaf that you find enjoyable as tea (especially as a sweet tea) can also be turned into a flavoursome syrup. That can be done simply by adding more sugar to a regular strength tea or by making a full-on concentrated and sweetened decoction with the leaves. Leaves in the form of syrups transformed into wine or steeped in alcohol to extract the flavour can be used in jellies and trifles. And any leaf that works as a sweet tea or syrup can be gently heated in milk or cream to make uniquely flavoured milk and cream-based desserts such as yoghurt, rice pudding, mousse, and panna cotta for instance. In fact, both botanically flavoured milk and sugar syrups can be used to craft your own distinctive chocolate bars which can then, of course, be used in any dessert requiring chocolate. The possibilities really are absolutely endless!

Finally the distinct apple-skin tart flavour of sorrel leaves (Oxalis or Rumex genus) work well as sweet purees in many desserts such as this sweet sorrel tart recipe:

http://www.localgreens.org.uk/recipes/sweet-sorrel-tart

Sweet blackberry juice candied baby bramble leaf: Suitable for garnishing blackberry ice cream but also many other desserts.

MISCELLANEOUS USE OF LEAVES

Vanilla panna cotta decorated with wood sorrel leaves.

Various leaves can be used in pasta sauce or in pasta dough (this can be a good way to use thistle leaves after pureeing and passing through a fine sieve), in risotto, pies, sushi, chopped and mixed into hot mashed potato, dumplings, used as 'nori' sheets, boiled and dried with soy sauce, or dried and flaked or fresh and chopped in bread and pastry. More obviously, any leaf can be used raw (if safe to do so) or cooked as a garnish for both sweet and savoury dishes. The pretty tri-folate leaf of wood sorrel is one of the most popular wild leaf garnish used by chefs. And both nettles and cleavers leaves are great deep fried for 10 seconds or so until they turn crisp and translucent, then salted or sprinkled with sugar – depending on what you wish to garnish.

Photos - Fergus Drennan

Nettle leaves brushed (one side) with sesame seed oil, sprinkled with liquid aminos (like soy sauce) and dehydrated. These make a great savoury garnish. If storing, use an airtight container and add a pack of silica gel or crystal desiccant to keep them crisp.

Many of the more aromatic or pungent leaves can be gently dried and used to flavour oil or can be chopped raw and mixed into butter, wild garlic being the obvious example of the latter use. Other leaves can be used to flavour milk for homemade cheese production or used to encase the cheese such as nettle leaves in the classic Cornish yarg.

Various leaves are wonderful used to make savoury smoothies. Indeed, this can be a great way to consume nettles raw without getting stung, as can juicing whole leaves for a really intense green botanical hit. The latter is best done in a specialist wheatgrass juicer, alternatively leaves can be blitzed in a food processor or liquidizer and then squeezed in a fine cloth to extract the juice.

Nettle leaf, avocado and tofu smoothie (with lemon and cayenne pepper).

Photos - Fergus Drennan

Wilted garlic mustard leaves stuffed with fairyring mushrooms.

Photos - Fergus Drennan

Many leaves are suitable stuffed or as wraps much in the same way that vine leaves are used in Greece and Turkey. The leaves can be used raw, such as those of wild garlic, lime, or garlic mustard, or boiled and cooled prior to wrapping. The stuffed/wrapped parcels can then be eaten as they are or dipped in tempura batter and deep fried. Minced beef, or rice and other grains are suitable for wrapping, as are cooked mushrooms and many other things. As always it is down to your imagination.

Large pre-boiled horseradish leaves make excellent wraps after using a sharp knife to remove the somewhat inflexible central leaf vein.

WILD LEAF TEAS

Wild brews tend to be made from highly aromatic leaves, for instance mints, wild marjoram, and fennel or, turning the focus away from leaves, make use of fragrant flowers such as those of elder, meadowsweet, and dog rose. These can be a fantastic addition to the diet and store cupboard, and the use of flowers for tea in particular is well worth exploring over the summer months, but here I'd like to turn the focus to leaf teas in general, as well as the specific application and technicalities of a particular process: oxidation.

Sun-drying yarrow leaf bunches. Yarrow leaf is excellent as a tea or for beer making.

My understanding is that a brew made from a herb, foraged or otherwise, is a tisane rather than a true tea, that is, a brew made from genuine tea leaves, stems or twigs of the *Camellia sinensis* plant. More generally though, wild non-camellia brews are referred to as tea, as I'll be doing from here on. This distinction set me thinking that, apart from the obvious specific botanical of so-called genuine tea, what else is distinctive about it? Although white, green and black tea leaves are processed in different ways, the world's most popular tea is that produced by blackening the leaves of *Camellia sinensis* through oxidation. The alchemy of that process moderates the tannins and other flavour compounds, and is a process generally not applied to non-camelia tea production, redbush tea being the obvious exception.

Photos - Fergus Drennan

Left: piles of wilted tea prior to bruising.
Right: Finished oxidised and dried wild teas.

So, yes, of course, loosely speaking, although many of the seasonal leaves mentioned in this article are far more suitable to some of the food uses outlined above, one could brew up almost any of the in-season leaves listed here to produce a hot drink, but which ones would benefit from being taken through the process of oxidisation?

Left: Seabuckthorn leaf tea (unoxidised).
Right: Seabuckthorn leaf tea (oxidised). Some wild crafted teas taste better fresh rather than oxidised, and some much better oxidised, but really it is down to personal preference. Experiment and decide which way you prefer it.

A few years ago in early May I decided to explore this question using some of the leaves that were available in large quantities. It is a fairly random selection or at least one determined by the specifics of time and place. In foraging for leaves in your specific situation, an entirely different selection may be appropriate. Those I've chosen to work with are only somewhat randomly selected though because to a large extent I tried to gather leaves with a high tannin content as these tend to respond best (flavour-wise) to oxidisation.

Although the appreciation of flavour is subtle, nuanced, and highly subjective, from the list below I have highlighted in bold text the leaves that I found to be more enjoyable as tea when oxidised: **willow (white and weeping), bramble, ash, oak (various species), beech, dog rose, silver birch, mugwort, fig, goji, wood avens**, yarrow, elder (caution – see candying section below), Japanese knotweed, common nettle, hawthorn, sea buckthorn, fennel, sow thistle, dandelion, bilberry, passion flower, gingko.

Photos - Fergus Drennan

Oxidised and dried oak leaf tea.

The oxidisation of tea is different from fermentation, although damp and warm oxidizing tea can quickly transition into fermentation after a few days so there is an art and discernment required to understand and find when the point of maximum oxidisation has occurred so the tea can be dried and the move to fermentation halted (although there are some special and unusual teas that are deliberately allowed to ferment).

Once the fresh and tender spring leaves have been gathered there are four stages to the process:

1) Spread the leaves out on a sheet and leave over night or up to 24 hours to wilt and naturally lose moisture.

2) Place the leaves on a hard, flat surface and bang with a hard object. I use the full length of a large wooden rolling pin. The idea is to evenly (as far as possible) bruise the leaves rather than pound them to smithereens.

3) Wrap the leaves in a damp-wet towel and leave somewhere warm (between 20–30°C) for 24–48 hours, opening up the towel (and re-wetting if necessary) to turn over the leaves half way through the process. I use a food dehydrator, but before I had one of those I'd wrap the leaves in a wet Merino wool thermal top and place this on a black rebounder (mini trampoline) in the garden, in full sun with a black dustbin lid on top. I mention this just to emphasise that although food dehydrators work brilliantly, I know that as inventive and ingenious bushcrafters you can readily come up with substitutes for such devices.

4) Dry the leaves spread out in the sun, in a food dehydrator, solar dryer or low oven. Store in a suitable container.

All wild crafted teas will be caffeine free, but you can still make something that approximates the taste and strength of regular black tea, if that is something you desire. 2–4 tablespoons of oak leaf tea provides the nearest equivalent. For me, the real fun comes in making up unique blends. One of my favourites is a strong brew of an oak, white willow and seabuckthorn leaf tea.

If you're a fan of the famously smoky flavoured lapsang souchong tea, you can easily replicate a similar smokiness by cold smoking an oxidised tea such as oak leaf for 10 minutes to an hour just before the final drying. Pine with its uniquely resinous flavour contribution is traditionally used when smoking lapsang souchong, and it's a good tradition to follow, although I personally enjoy smoking my teas with the wood of the same plant the leaf came from (if a tree or woody shrub) or the dried leaves themselves. Such teas can also be worked into cocktails as described here:

http://drinkstraightup.com/2013/09/26/the-smoked-cocktail/

Photo - Fergus Drennan

Oxidising mugwort tea. This also makes excellent tobacco, 'sailor's tobacco' as it has been known. Stick it in a pipe and use the smoke to lapsang souchong-ify your tea.

CANDYING LEAVES

Candying leaves may strike some of you as being more about food craft than bushcraft, as well as being a somewhat niche and chefy activity. For me it is all these things at once. From a bushcraft perspective, the careful leaf selection required for this technique, and the range of plants across which the general candying principles described here can be applied, provides a great opportunity to really look closely and in great detail at leaf forms, observing natural variation in shape, size, texture and colour, whilst also stepping back slightly to observe the fullness of the context in which the plant grows, the varying conditions of soil, light, moisture and range of companion plants and fungi. Such keen observation really serves to deepen one's understanding of individual plants, revealing fresh details even in plants one has worked closely with for years. From a food perspective too, through candying leaves, one can gain a great deal of information about how the specific texture, flavour and aroma profiles of individual plants may work in different recipes.

Most frequently I use candied leaves to garnish desserts such as small tarts or ice cream, indeed in most cases the syrup remaining after candying can become the main flavour component in homemade ice cream or can be used for wine, beer or cocktail making.

The simplest way to candy any leaves is to weigh them and then make up a syrup using the same weight of sugar, bring the syrup to the boil, remove from the heat, then stir in the leaves. Leave for 12 hours, then strain off the syrup, reduce it down by a quarter of its original volume and then, while still hot, stir in the leaves again. Repeat this process four times. Finally, remove the leaves, wipe off excess syrup and place them on a nonstick surface to dry. You can use a food dehydrator or oven on its lowest heat setting to do the final drying. In the interests of playing, creativity, and to intensify flavours it can be an advantage to use a flavoured syrup rather than plain sugar syrup. Below is a list of all the leaves I've candied over the past few years and the syrup used. Leaf and flower syrups were made by decocting before adding the sugar, whereas fruit syrups were made from the sweetened juice of the fruit. Nut syrups were produced by decoction after finely crushing the nuts.

Young fig leaves perfect for candying and hard green figs suitable for making green fig syrup.

Perfect young fig leaves (showing natural variation in shape) ready for candying.

A very young green-fig-syrup candied fig leaf.

Photos - Fergus Drennan

All of the leaves *(listed right)* candied very well, apart from the last 5 on the list, although some of the thinner leaves were hard to remove from the dehydrator sheet in one piece due to their fragile nature—for instance elder, mulberry, nettle, and beech (although bending and rolling back the dehydrator sheet under itself can help prevent this problem).

A well candied leaf should be hard, inflexible, non-sticky to the touch, and have the appearance of stained glass. When using a fruit syrup or maple syrup it is important to still add the same weight in sugar, but even then, the final result can be a little sticky. The final five did candy in a sense but didn't turn out successfully for various reasons. The wood sorrel and cleavers leaves were simply too fiddly to work with, the lime and Japanese knotweed produced a syrup that was too mucilaginous which adversely affected the final result, the leaves remaining still very sticky even after drying. The birch remained sticky due to the syrup being too concentrated (but would have turned out fine at maple syrup strength).

LEAVES I'VE CANDIED

Alexanders leaf in Alexanders seed syrup
Ox-eye daisy in ox-eye daisy leaf syrup
Bramble leaf in blackberry syrup
Hawthorn leaf in hawthorn blossom syrup
Oak leaves in acorn syrup
Meadowsweet leaves in meadowsweet flower syrup
Chestnut leaves in chestnut syrup
Gingko leaves in lime syrup
Elder leaves in elder flower syrup
London plane, sycamore and field maple in maple syrup
Pennywort in lemon syrup
Reedmace core leaves in mature seed head syrup
Redcurrant leaf in redcurrant berry syrup
Black mulberry leaf in mulberry syrup
Nettle leaf in nettle leaf syrup
Fig leaves in green fig syrup
Wild angelica leaf in angelica stem syrup
Wood avens leaf in wood avens root syrup
Sweet cicely leaf in sweet cicely flower syrup
Sweet violet leaves in violet flower syrup
Wild strawberry leaf in strawberry syrup
Coltsfoot leaves in coltsfoot flower syrup
Common sorrel leaf in sorrel leaf syrup
Yarrow leaf in yarrow flower syrup
Checkerberry leaf in checkerberry fruit syrup
Hazel leaf in hazel nut leaf syrup
Walnut leaf in walnut syrup
Ground ivy leaf in ground ivy flower syrup
Weeping willow leaf in willow leaf syrup
Watermint leaves in watermint flower syrup
Beech leaf in beech leaf syrup

Birch leaves in birch sap syrup
Wood sorrel leaf in wood sorrel leaf syrup
Lime leaves in lime blossom syrup
Japanese knotweed leaf in Japanese knotweed stem syrup
Cleavers/goosegrass leaf in roasted cleavers seed syrup

Young London Plane leaves prior to candying in maple syrup.

Photo - Fergus Drennan

My personal favourites are London plane, gingko, fig, oak and elder, for the following reasons. London plane leaves are a joy to work with after they have just burst forth and are no larger than a 50 pence piece, and, of course, virtually anything cooked in maple syrup is bound to be delicious. The gingko leaves just look so beautiful and are something I've taken herbally for years, and inspired my first ever whittled spoon (using gingko wood).

Fig leaves have such an intriguing aroma, and provide an opportunity to use the delicious and unusual green fig syrup (produced by candying over 4–5 days). The oak leaves look great and derive value, for me, by being used in such an interesting and non-traditional way (their main traditional use is for wine making), and it is fun to expand one's knowledge of the species by working with leaves from many different varieties.

Top tip: Kew gardens has a fantastic oak walk with at least 20 different oak species planted next to each other. I candied a leaf from each tree.

Finally, the candying of elder leaves as food extends the elder plants use in a curious way, the most usual parts utilized of course being the flowers and berries. Indeed, given the lack of traditional food use for elder, walnut, and sweet chestnut leaves, it is important to boil them in a couple of changes of water prior to immersing them in syrup. In terms of elder leaves, it has only been in the last 3 years, encouraged by the excellent work of American herbalist Stephen Harrod Buhner, that I have begun using them medicinally, primarily for their anti-viral properties. In his book *Herbal Antivirals*, Stephen provides a great antiviral elder recipe that includes dried elder leaves, dried elder stems, elderberry syrup, fresh elder leaf tincture, and elder stem bark tincture. In one of his periodic and delightful rants dotted throughout the book, he has this to say about the use of elder leaves:

"Rant: In reading articles about elder it is common to continually be exposed to the phytohysterical pronouncement that the plant is poisonous. Well, it is not. The various parts of the plant are emetic (and purgative if you take enough) if used fresh. That simply means that you will feel nauseous and possibly vomit if you take too much…..Boiling the plant (that is, the leaves, berries, bark, or root), beginning with cold water and raising the heat, for 30 minutes will reduce the cyanide (or HCN) content to nearly nothing….The many chemical compounds contained in the plant are much stronger in the leaves, stems, and roots and by this I am talking about not just the HCN content but the antiviral compounds, the antibacterial compounds, the anti-inflammatory compounds, and so on." p 146 and 149.

Gingko spoon made from gingko wood

Photo - Fergus Drennan

Generally speaking the techniques required for candying leaves are the same as those used for candying more robust botanicals as I describe in the following article. The only real difference is that you have to treat leaves with additional care due to their more delicate and fragile nature: so less or no boiling, and special care taken when transferring to and from drying sheets.

http://fergustheforager.co.uk/wp-content/uploads/2013/04/ck09deccandidaboutcandy.pdf

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