

## A few websites and resources for the 1000 Crops workshop

by Michael Pilarski, 2/18/2015 version

There is a great list of on-line plant databases on the Inland Northwest Permaculture Guild's website. Resources/links section.

Herb Pantry price list. ***We house over 700 herbs - Western, Chinese and Ayurvedic.*** This is a catalog selling retail. Gives you an idea of current pricing.

<http://www.theherbpantry.com/the-herb-pantry-catalog-93/product-information>

Visiting 4 big bulk herb sellers' websites I see that none of them currently post prices. Frontier Herbs, Starwest botanicals, Mountain Rose Herbs, San Francisco Herb Company, Pacific Botanicals.

**Plants for a Future** website. One of the best plant websites and a data base. Very oriented towards forest farming, agroforestry and permaculture. <http://www.pfaf.org/user/default.aspx>

<http://www.faculty.ucr.edu/~legner/botany/fibers.htm>

Lots of info on fiber plants.

Worth mentioning at your workshop; folks like us can provide land for folks who have none but a great farming idea in the way of a share crop. Its what we are doing with hay now. 600 acres near Ravalli...its how I started my Lavender biz as a share crop at Ten Spoon Winery. Lori Parr

[Lavenderloriparr.WordPress.com](http://Lavenderloriparr.WordPress.com)

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406-396-1514 ph/txt

<http://www.nwtaste.com/>

Northwest Taste: An annual Food and beverage show in Spokane in October. It gives marketing ideas.

NCAT,

As the importance of nutritionally dense, minimally processed food becomes more well known, many institutions across the country are changing the way they purchase and prepare food. One of the emerging markets for local food is hospitals and healthcare facilities, where foodservice managers, chefs, dieticians, and administrators are looking for ways to serve fresh, local food to their clients and staff. Montana is no exception.

NCAT recently held a Farm to Healthcare conference to bring together interested stakeholders in order to discuss successes and challenges in this market. [Read on](#) to learn about NCAT's "Farm to Healthcare" conference, which was held in Livingston on November 7, 2014. You can also [view videos](#) of the presentations from the conference.

Inland Northwest Food Hub

[www.inlandnwfoodhub.com/](http://www.inlandnwfoodhub.com/)

north central Idaho and southeast WA

**Longish directory by the State govt to Made in Montana farm products. Lots of ideas for value added products.**

<https://app.mt.gov/madeinmontana/Search/Results?query.Query=&query.SearchCategories=Food+%26+Beverage&query.SearchCity=&query.Page=2>

**Glacier Hops Ranch in Whitefish, doing research on varieties.**

**Hart's Garden Missoula**

We were born and raised in Montana. We are passionate about flowers. Montana is one of several states that sells so few flowers that the USDA does not keep statistics for the agricultural category 'cut flowers and floral greens.' We would like to change that. We hope to elevate the amount of flowers grown and sold in Montana. We believe Montanans want locally-grown crops and would buy flowers all year if they were available. We will make them available and show others how to grow this industry. We are a state licensed nursery. Our speciality flowers are LILIES - but we also grow many other flower & plant varieties. Please contact us for availability. What we grow might surprise you!

[mghart@bresnan.net](mailto:mghart@bresnan.net)

Kamut International has an extensive website that has recipes, nutritional information, and a searchable product database. Kamut International invites you to visit our website to sign up for our quarterly newsletter, 'The Kamut Report.'

(406) 251-9418

Email Address: [jamie.lockman@kamut.com](mailto:jamie.lockman@kamut.com)

Web Address: <http://www.kamut.com>

**Living Food Dehydrators.** A medium scale dryer for herb drying. I own 5 of these. You can run several thousands dollars worth of dry herbs through one of their jumbo models a year. You need a bigger scale dryer for a bigger business, but it is a good for a start. Also can be used for food.

<http://www.dryit.com/>

"Cheatgrass Management handbook – Managing an invasive annual grass in the Rocky Mountain region" Published by the University of Wyoming, Laramie, Wyoming and Colorado State University, Fort Collins, Colorado August 2013.

Montana is a large rural state, rich in natural resources like land, water, and clean air. Just over one million people live in Montana, topped by three million livestock. Two-thirds of our landscape is devoted to agriculture. A state like this should not have any trouble feeding itself, but we do. Overall, only about 10-15% of what we eat is produced in Montana, and each Montanan only spends an average of \$6 per year buying foods directly from farmers.

#### **Mission Mountain Food Enterprise Center (MMFEC)**

Ronan, MT

Mission Mountain Food Enterprise Center (MMFEC) is a fully functioning food processing, research and development facility in Ronan, MT.

Started in 2000, it continues to provide a venue for nurturing specialty food entrepreneurs and value added agricultural producers. In addition to helping many Montana food businesses achieve success, MMFEC has also initiated a Farm to Institution and Farm to Table program. Working alongside Western Montana Growers Cooperative (WMGC), a regional marketing and producer cooperative, MMFEC has processed and distributed regionally sourced products to a variety of locations. The Montana Lentil Patty is of particular acclaim, composed of 90% Montana made products and distributed to the University of Montana and several restaurants. For more information, go to <http://www.lakecountycdc.org/MMFEC%20Landing> or call 406-676-5901.

MMFEC's Lentil Patty

Photo courtesy of MMFEC

#### **Timeless Seeds' lentil crop success.**

A legume crop study group formed by 4 organic farmers from AERO (Alternative Energy Resource Organization). Lentils was hardly known in Montana when they started but since their initial successes, Montana has become a large exporter of lentils grown non-organically. How much of that Montana lentil industry is due to their pioneering work?

Founded in 1987 by four young farmers, Timeless Seeds processes and distributes certified organic lentils and other legumes to not only Montana and other US states but to countries around the globe. With a dedication to sustainability, Timeless Seeds is the only Montana company that is a member of the Sustainable Food Trade Association and has signed the organization's Declaration of Sustainability and submits a sustainability report annually. Timeless Seeds products can be found in numerous retail stores or through distributors in Montana, Idaho, Washington, California, and New England. In addition to the array of organic lentils, Timeless farmers also grow other organic crops such as Black Kabuli® chickpeas, heirloom grains, yellow split peas, and golden flax.

For more information about Timeless Seeds,

visit: [www.timelessfood.co](http://www.timelessfood.co)

#### **Washington state farm crops**

Industry website with statistics

<http://www.wagrown.com/our-top-crops/>

Free download of the fantastic classic book "**Tree Crops: A Permanent Agriculture**" by J. Russell Smith.

<http://www.versaland.com/2014/07/03/tree-crops-free-download/>

#### **Native Plant Dyes,**

List of dye plants and the colors they produce.

<http://www.fs.fed.us/wildflowers/ethnobotany/dyes.shtml>

<http://pioneerthinking.com/crafts/natural-dyes>

#### **Agritourism income opportunities for Montana farmers.**

Caroline Wallace is working on a project to expand the Abundant Montana Directory to include agritourism services by region. Agritourism activities include food-related events, farmers markets, farm to table dinners, on-farm sales, accommodations, farm workdays, tours, etc. In addition to the whole new category of services, there are now categories and search filters to find farms and businesses practicing permaculture, holistic management, organic, and more.

Follow the link below to learn more about this exciting project and add your farm or business listing to the Directory today!

<http://www.aeromt.org/2015/01/14/new-abundant-montana-site-to-launch-february-15/>

<http://www.faculty.ucr.edu/~legner/botany/fibers.htm>

Great site all about fibers.

All of the milkweeds have silky hairs on their seeds and several species are a source of stuffing materials. Milkweed floss is one of the lightest materials. It is very buoyant and a perfect insulator. It was used during World War II as a substitute for kapok. The pods contain oil and a wax that may have future applications. Some species yield textile fibers. In North America, *Asclepias syriaca* and *A. incarnata* produce abundant floss. In the Neotropics, *A. curassavica* has some value.

**Textile Fibers** are the most important in that they are used for fabrics, cordage and netting. To make fabrics and netting flexible fibers are twisted together into thread or yarn and then either spun, knitted, woven or in some other way utilized. Fabrics include cloth for wearing apparel, domestic use, awnings, sails, etc., and also coarser materials such as gunny and burlap. Fabric fibers are all of some commercial value. Netting fibers that are used for hammocks, lace and all forms of nets include many of the commercial fabric fibers and a number of native fibers as well. Both commercial and native fibers are used for cordage. For this the individual fibers are twisted together instead of being woven. Binder Twine, fish lines, hawsers, rope and cables are among the many types.

**Brush Fibers** are stiff tough fibers including small stems and twigs that are utilized for making brooms and brushes.

**Rough Weaving & Plaiting Fibers.** Plaits are fibrous, flat and pliable strands that are interlaced to make straw hats, baskets, sandals, chair seats, etc. The most elastic strands are woven together for matting and the thatched roofs of houses. The supple twigs or woody fibers are for making chairs, baskets and other wickerwork.

**Filling Fibers** are used for stuffing mattresses, cushions and in upholstery; for caulking seams in boats and in casks and barrels; as stiffening in plaster and as packing material.

**Natural Fabrics** are usually obtained from tree basts that are extracted from bark in layers or sheets and pounded into rough substitutes for lace or cloth.

#### Wickerwork

This includes chair seats, chairs, infant carriages, hampers and other light articles of furniture. Willows, rattan and bamboo are the main plants used.

<https://www.pinterest.com/pculture/food-forests/>

#### **GrainMaker.com**

(Stevensville, MT) has a bicycle powered grain mill.

#### **Fireweed and nettle harvest for fiber**

<http://www.urbanscout.org/fireweed-and-nettles-harvest/>

#### **Nettle Youtube**

4:21 Watch nettles being turned into fabric. This film shows harvesting, retting, stalk splitting, pith removal, carding, finger-spinning and knitting. This 'field-to-fabric' process can be used to give school age students an initial experience of extracting fibres from a plant and then turning them into fabric. The film can also be part of an exploration into the feasibility of local textiles production and can be used in Nettle Festivals or during the annual 'Be Nice to Nettles Week'.

<https://www.youtube.com/watch?v=361YVBkFylo>

#### **Paper on cultivating nettles for fiber. European experience**

Production and processing of organically

Grown Nettle (*Urtica dioica* L.) and its

potential use in the natural textile industry: A review

[http://orgprints.org/6926/1/AJAA18\\_3\\_2003\\_nettle.pdf](http://orgprints.org/6926/1/AJAA18_3_2003_nettle.pdf)

**6-hour workshop for \$65 from the WOLF College. Natural Plant Fibers; Harvest & Prepare Willow, Cattail, Hazelnut, Vine Maple & Stinging Nettles for Ropes, Sitting Mats, Baskets, Bows, Arrows & More Fiber plants • Harvest Willow** – you'll learn the best season to collect parts for different purposes (including a variety of interesting and helpful uses), then process bark into rope, and harvest materials to begin weaving a basket!

- **Collect Cattail** – you'll learn the gifts of the cattail as we gather leaves from our #1 survival food plant and dry them to craft useful items such as rope, a pot holder or even a window shade!

- **Harvest Stinging Nettle** – we'll carefully collect nettle stalks, our strongest natural plant fiber in this region, to make rope for all sorts of projects. And, we'll enjoy some healthy nettle tea while we spin.

- **And More Plants like Hazelnut & Vine Maple** – we'll also harvest and use vine maple, tall invasive grasses, tule rushes, hazelnut, rose, pine family trees, cedar and its bark, plus more in preparation to make bows, arrows, sleeping mats, and more!

#### **The Principles of Ethical Wildcrafting and Foraging**

By Amber Westfall, <http://unstuff.blogspot.ca/>

email: [wildfoodinthecity@gmail.com](mailto:wildfoodinthecity@gmail.com)

Please practice good stewardship and take care of the plants that take care of us!

## Extraneous:

### German New Medicine.

Standing up for the truth of [The Five Biological Laws](#) is a matter of **social responsibility** and about **care for humankind**. This does not require special permission! Attempts to monopolize the teaching of Dr. Hamer's discoveries are far beyond the true spirit of GNM and the movement that is flourishing across the globe.

<http://germannewmedicine.ca/>

### Demons

<http://groups.yahoo.com/group/MagicalAlmanac>

Chris Everard, in his documentary, Spiritworld, proclaims that the major part of humanity is 'possessed' or influenced by an attached entity.

<http://endofwesternciv.blogspot.com/2014/05/demonic-possession-ii-illuminati-plague.html>

### Lentils: Gems in the Treasure State

a new FREE resource about the production, processing, nutrition, and culinary uses of lentils:

<http://www.montana.edu/hhd/documents/facultyandstaff/publications/lentilbooklet.pdf>

Page 14 includes a list of some natural food stores in Montana.

From Plants for a Future website. One of the best plant websites and a data base. Very oriented towards forest farming, agroforestry and permaculture.

Some soap plants. Sapindus, soap tree,

The common names *Soap Plant*, *Soaproot* or *Amole* refer to the genus *Chlorogalum*. They are endemic to western North America, from Oregon to Baja

Snowberry

Bouncing bet, *Saponaria*

### Soap Plants

Commercially soaps are made by mixing an alkali (wood ashes or the ashes of other plants can be used) with an oil (usually palm oil) and then often adding substances such as herbal extracts or essential oils to give it a scent. Whilst this process can be done successfully on a small scale, we will look at another type of soap that can be produced much more easily.

Many plants contain substances called saponins - these are toxic glycosides and can be found, usually in low concentrations, in many of our foods, especially in beans and some leaves. Fortunately saponins are destroyed by prolonged heat and are also very poorly absorbed by the body, so most of what we ingest passes straight through us. These saponins, however, are not without their uses and one of their properties is to form a lather in water that is a gentle but effective cleaner. A number of plants contain quite high concentrations of saponins and have been used as an alternative soap. One of the best known examples of this, at least in Europe, is our native wild flower Soapwort (*Saponaria officinalis*). This is a perennial plant usually found in damper soils in woods, hedgerows, by streams, etc. It is still used nowadays particularly for cleaning delicate fabrics, including the Bayeux Tapestry! The saponins are extracted by boiling for a short time and then infusing the whole plant. It can also be used as a hair and body wash. Closely related to Soapwort are a number of other native plants that contain useful quantities of saponins, including Ragged Robin (*Lychnis flos-cuculi*) and many of the Campions (*Silene* spp).

Bracken  
(*Pteridium aquilinum*)  
is another native plant



that has a report of being rich in saponins, the rhizome is used. This is just one of a number of uses for this ubiquitous weed; a glue can be made from the rootstock, the fronds are used as a packing material - it is excellent for lining fruit baskets where it repels insects and helps prevent rotting, a compost made from the fronds is excellent for tree seedlings. The root and young fronds have been eaten but there is some evidence to suggest that they are carcinogenic.

The Horse Chestnut (*Aesculus hippocastanum*) is a native of S. Europe but has been grown in Britain for so long that you would be forgiven for thinking it was native. Its seeds are rich in saponins and will lather well in cold, preferably soft, water when rubbed between the hands like a bar of soap. A fairly effective cleanser though it does leave its smell behind! The seed is a good source of edible starch if the saponins are first removed by leeching in water and then by thorough cooking. Since this process also removes most of the vitamins and minerals (and the starch is less than exquisite), we'll leave this to more dedicated wild food enthusiasts. Other members of the genus have similar uses.

North America provides quite a number of 'soap plants'. One very interesting plant is the Soap Lily (*Chlorogalum pomeridianum*) - a bulbous plant from California where it grows on dry, open hills and plains and occasionally in woods. Although not often seen in Britain it grows quite well here if given a reasonably rich, well drained soil. The bulb, stripped of its outer covering, is very rich in saponins and can as be dried and grated up as required to be used as soap flakes. This bulb, if given a long slow baking, can be eaten and is said to be very nice - we've not tried it yet and have some reservations, particularly having read that a fibre from the bulb is used as a stuffing for mattresses and to make small brushes. The sap that exudes from a baking bulb can be used as a glue and the young spring growth can be eaten - it is said to be sweet when baked. Altogether a very useful plant.

*Ceanothus cuneatus* is another Californian growing on dry slopes. An evergreen shrub, it requires a sunny position in a light soil - it does not like chalk nor does it like being transplanted - so should be pot grown prior to being put in its final position. Probably not hardy away from southern Britain. The flowers are used and these impart a pleasant aroma. Indeed the N. American Indians often used them when bathing and a bride would traditionally use them on her wedding night. Most other members of the genus could be similarly used.

There are many species of *Yucca* growing in the more arid areas of southern N.

America and a surprising number of them are hardy in most areas of Britain if given a free draining soil and a sunny part of the local economy, providing food fibres for ropes etc, leaves for basketry root. This soap is said to be a particularly *Y. baccata*, *Y. filamentosa*, *Y. glauca*, *Y. Philadelphus lewisii* comes from western along water courses and on rocky cliffs loamy soil, and full sun or partial shade. The leaves and flowers lather well in cold water, an infusion of the bark can also be used.



position. These plants were a vital (fruits, flowers, and flowering stems), and as brooms, plus a soap from the good hair wash. Species to try include *gloriosa* and *Y. whipplei*.

N. America where it grows in gullies, and hillsides. In Britain it prefers a

#### Database

The database has more details on these plants: [Aesculus hippocastanum](#), [Ceanothus cuneatus](#), [Chlorogalum pomeridianum](#), [Lychnis flos-cuculi](#), [Philadelphus lewisii](#), [Pteridium aquilinum](#), [Saponaria officinalis](#), [Yucca gloriosa](#).  
<http://www.pfaf.org/user/cmspage.aspx?pageid=49>

It is interesting that there is an American species. *Sapindus drummondii* that is native to the southern Great Plains and Great Basin. It might be hardy in the warmest locations in Montana. Worth a trial. If successful it would have some economic uses.

<http://csanr.wsu.edu/wp-content/uploads/2013/08/130Murphy.pdf>

This is a report on the International Quinoa conference held at WSU in Pullman, WA in August 2013.