Edible and Medicinal Natives for Home Landscapes

Karen Vail was born and raised in Steamboat Springs and her expertise is growing in the challenging ecosystems of NW Colorado. Mary O'Brien was raised in Denver and had growing experience there but for the last 25 years she has lived in Steamboat Springs. Our emphasis in our book and presentation today is on those ecosystems we are presently most familiar with. We do not attempt to cover low elevation growing environments. That said, many of the plants we talk about can be adapted to these conditions. We emphasize the natural environments in which they are found and the specific requirements of those ecosystems as a guide to adapting them to landscape microclimates that are similar. Propagation ideas are from our personal experience. We are sure there are many other options out there.

In this handout; "E" is for edible plant parts, "M" is for medicinal plant parts. We will cover only a few of the plants listed here in our talk today (those in bold type). For information on edible and medicinal plant uses and more growing information please see our resources at the end.

Only collect plants on private land with permission from the landowner. For more information on collecting native plants, please see: <u>conps.org/about-us/ethics-of-collecting</u>.

SAGEBRUSH SHRUBLANDS

Variable precipitation (most arriving in spring), cold temperatures in winter, moderately deep friable soils, well drained, highly diverse, full sun

- **Sulphur flower** (*Eriogonum umbellatum*) E: stem, seed. M: whole plant.
- **Subalpine buckwheat** (*Eriogonum subalpinum*) E: stem, seed. M: whole plant. Introduce into garden from digging very young plants in early spring or fall.
- Sagebrushes (*Artemisia* spp.) E: seed, leaf. M: leaf. Transplant only very young plants with native soil into gardens.
- Rabbitbrushes (*Chrysothamnus* and *Ericameria* spp.) E: sap. M: leaf, root. Young plants transplant very easily.

MOUNTAIN SHRUBLANDS

South-facing slope, good drainage, less than 15" of moisture, dense canopy

- **Serviceberry** (*Amelanchier alnifolia*) E: berry. M: berry, inner bark, stem.
- **Hawthorn** (*Crataegus erythropoda*) E: berry. M: flower, berry.
- **Chokecherry** (*Prunus virginiana* var. *demissa*) E: berry. M: berry, inner bark.
- Gamble oak (Quercus gambelii) E: acorn. M: leaf, bark, twig, gall.

All of these shrubs have been successfully transplanted as very young plants into landscapes.

HOT AND DRY; VARYING ELEVATIONS

These are the hottest and driest areas, best suited for xeric plants from foothills to alpine.

- Sedums (Sedum spp.) E: flower, young leaf. M: leaf, whole plant. These are easily transplanted.
- Hops (*Humulus* lupulus var. *neomexicanus*) E: hops, male flower, young shoot, seed. M: hops.
- Vervains (*Verbena* spp.) M: leaf, flower.
- Sticky geranium (*Geranium viscosissimum*) E: leaf, flower. M: leaf, flower, root. Dig young plants for transplanting almost any season.
- Evening primroses (*Oenothera* spp.) E: young seed pod, flower, young root. M: leaf, stem, root, seed. Nursery trade plants are most successful. If transplanting, native soil must accompany the plant.

ASPEN FORESTS

Highly organic soils, more than 25" precipitation, multi-layered canopies, longer growing season, cooler temperatures

- Aspen (Populus tremuloides) E: Inner bark, leaf bud, catkin. M: inner bark, leaf bud, leaf, catkin.
 Aspen are fairly successful when transplanted correctly (which takes a year), but buying them in pots is most successful.
- **Thimbleberry** (*Rubus parviflorus*) E: flower, young shoot, berry. M: leaf, root, berry.
- Mountain ash (Sorbus scopulina) E: berry. M: leaf, bud, berry, inner bark.
- **Sweet Anise** (*Osmorhiza occidentalis*) E: flower, leaf, seed, root. M: leaf, root. Dig the root and separate out the young outer section to transplant.
- False Solomon seals (*Maianthemum* spp.) E: young shoot, berry. M: berry, root. To transplant, find the terminal end of the rhizome and dig up a 6" section of the young rhizome with a viable bud.
- **Stinging nettle** (*Urtica dioica*) E: young leaf, root. M: young leaf, seed, root. Dig a shoot with a viable bud to transplant.
- Richardson's geranium (Geranium richardsonii) E: leaf, flower. M: leaf, root.
- Goldenglow (*Rudbeckia laciniata* var. *ampla*) M: flower, root. Easily transplanted by digging young plants when dormant.

MOUNTAIN MEADOWS

Can be moist or dry, wide variety of herbaceous plants, cold temperatures, low precipitation, relatively fine textured soils

- Yampah (*Perideridia gairdneri*) E: leaf, flower, root. M: root. These are easily brought to your garden by seed collected when fully ripe, or roots dug in the spring or fall.
- **Flax** (*Linum* lewisii var. *lewisii*) E: seed. M: whole plant, root, seed. Collect fully ripe seed for your garden.
- Bee balm (Monarda fistulosa) E: leaf, flower. M: leaf, flower. It's a mint! Need we say more?

PINE FORESTS

Acidic soils, dense canopy cover, shady understory, reduced species diversity, can be fire dependent

• **Huckleberry** (*Vaccinium* spp.) E: berry. M: leaf, berry.

- Lodgepole pine (Pinus contorta var. latifolia) E: bark, needle. M: sap, needle, bud.
- **Ponderosa pine** (*Pinus ponderosa*) E: bark, needle. M: sap, needle, bud.
- Kinnikinnick (Archtostaphylos uva-ursi) E: berry. M: leaf.

We have had luck with very young pine transplants, but the other selections would be best through a nursery.

RIPARIAN AREAS

Transition between aquatic and terrestrial ecosystems, banks and borders of bodies of water, permanent wet feet

- **Willows** (*Salix* spp.) E: young shoots, leaves, buds, inner bark. M: young shoot, leaf, bud, inner bark. Cut dormant young shoots, and place bottom end down in riparian area.
- River hawthorn (*Crataegus rivularis*) E: berry. M: flower, berry, inner bark.
- Field mint (Mentha arvesne) E: leaf, stem. M: leaf, stem. A mint! Dig and plant!
- Cattail (*Typha latifolia*) E: young shoot, green flower spike, pollen, seed, rhizome. M: rootstalk, young flower head, pollen, seed. Have standing water?? You will have cattails!
- Self-heal (Prunella vulgaris) E: stems, leaves, flowers. M: whole plant above ground. Another mint to transplant to wet areas!
- Yellow pond lily (*Nuphar polysepala*) E: seed, rootstalk. M: rootstalk. Transplant by digging up rhizomes from mud.

GENERALISTS:

These are plants that we find tend to be happy almost anywhere they are planted. Most are adaptable to varying sun and water conditions unless noted here. The majority can be considered xeric.

- **Wild rose** (*Rosa woodsii*) E: flower petal, leaf, hip. M: flower petal, bud, leaf, hip. Dig up a shoot with a viable bud, throw it in the garden and viola! Instant roses everywhere!
- Glacier lily (Erythronium gradiflorum) E: flower, leaf. M: leaf. Collect fully mature seed and scatter.
- **Oregon grape** (Mahonia repens) E: berry. M: berry, root. Dig young plants in the spring to transplant.
- **Strawberry** (*Fragaria* spp.) E: flower, leaf, berry. M: flower, leaf, berry, root. Gather the young plants at the end of the stolons to plant.
- **Violets** (*Viola* spp.) E: leaf, flower, stem. M: leaf, flower. Any violet can be transplanted in the spring. *V. canadensis* var. *rugulosa* is very specific to deep shade and rich soils. Other violets tend to be more adaptable.
- Raspberry (*Rubus idaeus*) E: berry . M: leaf, berry, root. Dig a shoot with a viable bud and plant in your garden.
- Juniper (Juniperus communis var. montana) E: berry, leaf. M: berry, leaf. Nursery trade plants are most successful.
- Yarrow (Achillea millefoliium) E: leaf. M: leaf, flower. Very easily transplanted to anywhere!

- Goldenrods (*Solidago* spp.) E: leaf, flower, young greens. M: leaves, flowers. Easily transplanted and very aggressive.
- Mariposa lily (Calochortus gunnisonii) E: bulb, leaf, seed, flower. M: whole above ground plant
- Currants and gooseberries (Ribes spp.) E: berry. M: berry, inner bark, root.

OTHER FAVORITES:

- Wild onions (Allium spp.) E: whole plant. M: whole plant
- Showy milkweed (Asclepias speciosa) E: immature seed pod, young shoot, young leaf, flower bud.
 M: sap, root

LOW ELEVATION MEADOWS

Limited water storage capacity, subject to drought recurring at all times of the year, bunch grass dominated, xeric plant adaptations

We do not have experience with low elevation meadow plants. Denver Botanic Gardens has good examples as seen in this slide.

Resources

Colorado Native Plant Society has lots of information on ethical harvesting of native plants, native plants for sale and much more. http://www.conps.org

Some of Our Favorite Books on Identifying, Growing and Using Edible and Medicinal Plants

Ackerfield, Jennifer. Flora of Colorado. BRIT Press, 2015

Benedict, Audrey DeLella. Naturalist's Guide to the Southern Rockies. Fulcrum Publishing, 2008.

Blair, Katrina. Local Wild Life. Turtle Publications, 2009.

Carter, Jack L. Trees and Shrubs of Colorado. 2nd ed. Mimbres Publishing, 2006.

Darrow Warren, Kathy. Wild About Wildflowers, Extreme Botanizing in Crested Butte, Wildflower Capital of Colorado. Fort Collins: Wildkat Publishing Co., 2006.

DeLella Benedict, Audrey. The Naturalist's Guide to the Southern Rockies. Fulcrum, 2008

Elpel, Thomas J. *Botany in a Day: Thomas J. Elpel's Herbal Field Guide to Plant Families*, 4th Ed. Hops Press, 2000.

Gladstar, Rosemary. Rosemary Gladstar's Medicinal Herbs: A Beginner's Guide: 33 Healing Herbs to Know, Grow, and Use. Storey, Publishing, 2012.

Hartung, Tammi._Homegrown Herbs: A Complete Guide to Growing, Using, and Enjoying More than 100 Herbs. Storey Publishing, 2011 and Growing 101 Herbs That Heal. Storey Publishing, 2000.

Kershaw, Linda, Andy MacKinnon and Jim Pojar. *Plants of the Rocky Mountains*. Lone Pine Publishing, 1998.

Kershaw, Linda. Edible and Medicinal Plants of the Rockies. Lone Pine Publishing, 2000.

Krumm, Bob. The Rocky Mountain Berry Book. Falcon Press, 1991.

Marrone, Teresa. *Cooking with Wild Berries and Fruits of the Rocky Mountain States*. Adventure Publications Inc. 2012.

Marrone, Teresa. *Wild Berries and Fruits Field Guide; Rocky Mountain States*. Adventure Publications Inc., 2012.

Moore, Michael. Medicinal Plants o of the Mountain West. Museum of New Mexico Press, 2003.

O'Brien, Mary and Vail, Karen. *Edible and Medicinal Plants of the Southern Rockies*. Leaning Tree Tales, 2015.

Pesman, M. Walker. *Meet the Natives; A Field Guide to Rocky Mountain Wildflowers,* Trees and Shrubs. Johnson Books, 2012

Thayer, Samuel. *Nature's Garden: A Guide to Identifying, Harvesting, and Preparing Edible Wild Plants*. Forager's Harvest Press, 2010.

Tilford, Gregory L. Edible and Medicinal Plants of the West. Mountain Press Publishing Co., 1997.

Weber, William A. and Ronald C. Wittman. *Colorado Flora; Western Slope* and *Colorado Flora, Eastern Slope*, 4thed. University Press of Colorado, 2012.

Williamson, Darcy. *The Rocky Mountain Wild Foods Cookbook*. The Caxton Press, 1995 and *Healing Plants of the Rocky Mountains*. From the Forest, 2002.

.