

**Workshop Title: Working with Perennials: Food, Fuel, & Medicine**

**Speaker(s) & their title(s): Estelle Drisdelle**

**Executive Summary:**

Estelle lives on a 400 acre homestead that consists of mixed woodland, and marsh. Choosing to use materials provided in her natural surroundings, she has been able to live off the grid, producing an abundance of food, fuel and medicine. Drisdelle's presentation outlines several perennials she would recommend utilizing, as well as recommendations for creating and maintaining a productive food paradise.

**Detailed Notes:**

To get the most from your land there are several factors to consider. What does your land have to offer? What physical attributes should you observe on your land? How can you improve the land for future use? How can you use the materials which are available to you?

**What is available?**

- Water- rain collection/catchment for personal use, plants etc.
- Sun- power to run electronics or heat water, essential for plants/photosynthesis
- Wood- for fuel to heat your home, and water
- **Perennials**- for food, medicine, fuel, infrastructure, shade, compost teas, mulch, ecosystem services or water/ air filtration.

**Which perennials have you observed or planted on your property? What perennials can you grow in your area?**

- Native perennials such as chokecherry, elderberry, or rose can provide high nutrient and vitamin C content.
- Nuts such as chestnut, hazelnut, heartnut and buartnut can be grown in the Maritimes, providing high sources of protein.
- Perennial vegetables such as asparagus, rhubarb, horseradish, and Jerusalem artichoke will provide food sources each year without replanting.
- Herbs can be used for culinary or medicinal purposes. Perennial herbs include sage, oregano, lovage, and winter savory
- Hardwood is used for fuel and Softwood is used for building materials.

**What features should also be considered when studying your land?**

(Take time to observe, and understand your site.)

Wet or dry

Hot or cold

Shady or open

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Windbreaks

Cold air drainage /low ground/water pooling

Soil pH

Natural ecosystems

Site scale

**How can you improve the land for future use?**

Design a **food forest** that functions with little maintenance.

(Great for creating a backyard food paradise, but not for large scale production)

- Put your design on paper first. Consider the size/height of plants, shade or sun requirements, pollination requirements, and potential disease or pathogen spread.
- Plant tallest trees to the north, then shorter trees or shrubs
- Place lower growing perennials in southernmost area.
- Fill empty spaces with vegetables until perennial plants have become established
- Food forests will adapt, and plants will move into spaces where they are happiest.
- Consider planting more fruit or nut trees than you want. There is a potential for loss during establishment through blights etc. Furthermore certain trees such as hazelnut must be planted in multiples for pollination to occur.
- Diversity is key!! Both Genetic & Structural -consider structure above ground and below i.e.) canopy levels, and root zones

**Examples of compatible food forest perennials:**

Nut tree guild- buartnut trees, hazelnut, currant, yarrow, daffodil, hostas (likes shade- plant on north side of large trees, and coneflower (sun loving- plant on south side of trees)

Fruit tree guild- apple trees, sage, herbs

**Propagating perennials:**

Collecting seeds:

Native perennial plant seeds such as elderberry will need stratification. Start perennial plants from seed for free food.

Cuttings:

Take cuttings from hardwood or softwood shrubs in early spring. All cuttings are genetically the same so take cuttings from several plants to improve genetic diversity. Rooting hormone is used to encourage root growth. Rooting hormone #1 is used for softwood, and #3 is used for hardwood.

Dividing roots:

Echinacea, oregano, sage, sorrel, chives

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**Layering:**

Bend a shrub shoot down to the ground and cover it with soil where it meets the ground. Potentially roots will grow where the shoot is buried, producing a new shrub to replant.

**Perennial Use:**

Food:

Wildcrafting is the art of using the natural resources available to suit your needs or wants. Some examples include:

- Highbush cranberry- can be used to make cordials
- Bluebead lily- leaves can be added to salads before the plant flowers. Leaves can be used to soften the skin. Do not eat the blueberries they produce.
- Maple- high natural sugar source.

Fuel / Firewood:

You will need a chainsaw, a tractor, and a trailer. Take a chainsaw safety course if you are not familiar with using a chainsaw. Use your own firewood to heat your home, and hot water. When living off the grid you are able to heat water in the winter with wood, or by utilizing solar energy in the summer.

Medicine:

Teas, tinctures, salves, syrups, candy, and coffee substitute (from wild roasted roots) can be made from wild and planted perennials.

- Plantain- medicine and food. Young leaves and seeds are edible. Leaves can be infused into salves, and used for skin.
- Dandelion- super food- flowers are edible, young leaves are edible, roots are used in coffee substitute, and bees depend on it in spring.
- St. John's wort- often used as an antidepressant, or to ease anxiety
- Echinacea- prefers a well drained, sunny site and can be used to make tinctures to fight colds and flu

**Maintenance:**

- Use mulch to suppress weeds in perennial systems. In natural ecosystems, leaves, sticks, etc. will provide mulch, and build soil. Mulches promote mycorrhizal growth.
- Water plants in well, and continue watering throughout first year to help perennials get established.
- Provide protection- from deer, mice, rabbits etc. Estelle recommends placing fencing around each tree. A 4-foot fence is ok, until the snow is 4 feet tall. An 8-foot tall fence is better. The first initial cost of fencing is worth it. If fences are attached with zip ties, they can be taken apart and reused.

Question: Do you plant anything specifically to use as mulch?

Answer: Anything with large leaves will work well, such as comfrey.

Choose a Russian variety that doesn't self-seed you should not till the plants, or they will spread.

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Question: How many years does it take for nut trees to begin producing?

Answer: It can take up to 7 years to establish a productive food forest, that is producing a suitable nut harvest. That is why it is important to begin planning and planting a food forest as soon as possible.