

Creating Herbal Sanctuaries for Life: Refugia Gardening and Rewilding for the Future

Dana O'Driscoll, Pennsylvania School of Herbalism
www.paherbschool.com, danalynndriscoll@gmail.com

Key Concepts and Terms

- **Kinship:** Plants are living beings with spirits; our proper relationship is kinship, where we create reciprocal relationships, dialogue, and shared mutuality; Robin Wall Kimmerer in *Braiding Sweetgrass* calls this a “mutual covenant of reciprocity” that leads to the mutual flourishing and healing of both humans and nature
- **Reindigenizing:** A term described by Robin Wall Kimmerer in *Braiding Sweetgrass*, this refers to becoming “naturalized to place” and in developing authentic kinship relationships with the living earth in non-appropriative and unique ways
- **Reciprocity:** Recognizing that humans and nature are best when we work to heal, support, and enrich each other—the plants give us so much. What do we give back to nature?
- **Permaculture:** A whole-systems design approach to land management that is rooted in nature’s processes and wisdom. It encourages the use of ethics (earth care, people care, fair share) and principles working with nature for healing, regeneration, and growth.

Challenges in PA and the broader Mid-Atlantic Region:

PA has 763 species listed as rare or endangered; 75% of these are plant species and medicinal. The United Plant Savers lists 46 species on the “Species at Risk” list; half of these are native to our region and threatened by logging, over-harvesting, deforestation, pollution, etc.

Herbal Refugia

Creating herb gardens, medicinal forests, fields, and more that focus on developing pockets of intense biodiversity surviving amidst inhospitable conditions in the broader region. An herbal refugia is a lovingly and intentionally created medicinal cornucopia that provides habitat, medicine, and seeds. A refugia garden is intentionally and intensely cultivated to support and preserve important plant species and spread those plants outward through scattering seeds and sharing plants.

Designing Your refugia:

1. Design for 10, 20 or 50 years – consider the long-term + climate projections
2. Set goals for your refugia (food, medicine, habitat, protecting rare species, producing seeds, teaching/demonstration site, sacred place, sharing plants, etc.)
3. Emphasize perennials and soil web building; use **hügelkultur** or **sheet mulch techniques** to build soil; use **cover crops or mulch** to avoid bare soil
 - A healthy soil web = holds more water and nutrients, creates stronger plants that are more resistant to drought, disease, **mimic forest floor in soil tending and bed creation!**
 - Top 3” of soil is teeming with life: billions of nematodes, fungi, protozoa, bacteria
 - Minimize disruption: no tilling, create paths for humans, let leaves lay, layer resources
4. Permaculture principles:
 - *Stack functions:* how can we have one plant meeting many different needs?
 - *Observe and interact:* observe light, rain, wind, soil, and changing conditions
 - *Use and value diversity & integrate rather than segregate:* create an ecosystem
 - *Use and value renewable resources, produce no waste:* how can you build and design using existing resources without commercial inputs?

Refugia outcomes:

- For humans: medicine, food, sacred places to rest, exercise, connection
- For life: habitat (food, shelter, nectar), safe spaces, being honored and welcomed

- For plants: creating abundance to share seeds, scatter them outward and replant and heal other places; you are essentially creating a “seed ark” garden that can then be spread and shared!

Rewilding & Replanting

Restoring areas of land to their pre-colonial state, re-seeding and replanting the lands around you; rewilding your own body and mind to be free and less restricted! A primary tool for rewilding and replanting practices can come from your refugia: seed balls and seeds

- Seed balls can spread at-risk plants to new areas or those that have been recently logged, damaged, etc.
- Seed balls can also support people in low food insecurity areas by filling them full of vegetable and herb seeds
- Seed balls can be tossed to abandoned places to increase the biodiversity and spread medicine!

Seed ball recipe: 50% local clay (screened, rocks removed), 50% compost, enough seeds that there are at least 10 seeds per ball! Make with children and give them to others.

Two Refugia Examples from the Druid’s Garden Gnomestead Full Sun Medicinal Garden Refugia

- Arnica (*Arnica* spp.) UPS
- Echinacea (*echinacea angustifolia*, *echinacea pallida*, *echinacea purpurea*), UPS at risk
- Common milkweed (*asclepias syriaca*), Pollinator and butterfly support, 4 edible harvests
- Asters: New England aster (*symphyotrichum novae-angliae*), New York Aster (*symphyotrichum novi-belgii*); White Heath Aster (*symphyotrichum eriocoides*); PA Threatened
- Swamp milkweed (*asclepias incarnata*), UPS at risk list
- Butterfly weed (*Asclepias tuberosa*), PA Threatened
- Pleurisy root (*asclepias tuberosa*), UPS at risk list

In addition to these, we have planted a wide range of medicinal plants with long-range of bloom times for insect life, including during the summer nectar dearth.

Woodland Refugia: Wetland, Full/Part Shade

We continue to add new plants each year and scatter seeds from existing plants to build a healthy and rich ecosystem. Overstory (regrowing): Northern Red Oak, Hickory, Maple, Black Cherry (UPS in review)

- American Ginseng (*panax quinquefolius*), *UPS at risk list
- Blight-resistant American Chestnut - *Castanea dentata* - (35% of PA was once chestnut!)
- Black Cohosh (*actaea racemosa*), *UPS at risk list
- Bloodroot (*sanguinaria canadensis*), *UPS at risk list
- Blue Cohosh (*caulophyllum thalictroides*), *UPS at risk list
- Ghost Pipe (*monotropa uniflora*) *UPS in review list
- Highbush-cranberry (*Viburnum trilobum*) *PA Threatened
- Lobelia (*lobelia inflata*), *UPS at risk list
- Mayapple (*podophyllum peltatum*), *UPS at risk list
- Nannyberry (*Viburnum cassinoides*) – DCNR PA Endangered
- American Holly (*Ilex Opaca*) –PA Threatened
- Partridge berry (*mitchella repens*) *UPS at risk list
- Ramps (*allium tricoccum*), *UPS at risk list
- Serviceberry (*Amelanchier canadensis*) – PA Threatened
- Slippery Elm - *Ulmus rubra*, UPS
- Solomon’s seal (*polygonatum spp.*) *UPS in review list
- Spotted Joe Pye Weed (*Eutrochium maculatum*) *PA Threatened
- Sweet Flag (*Acorus calamus*) UPS, *PA Endangered
- Trillium (*trillium grandiflorum*, *trillium luteum*, *Trillium erectum*) *UPS critical list
- Wild Cherry (*prunus serotina*) *UPS in review list
- Wild Yam (*dioscorea villosa*) *UPS in review list