

Forest Gardening Communities in Cascadia: Then and Now

Gardening Lessons from the Past

Laura Donohue

IF WE HOPE TO SPREAD PERMACULTURE throughout our contemporary landscape, and to incorporate into it related techniques observed and adapted from other cultures, regions, and times, then “gardening” people and communities will be as important as our husbandry of the Earth. A network of communities in the Pacific Northwest is promulgating permaculture ethics and principles on a broadening scale as it adopts and adapts indigenous cultural practices.

Learning from precolonial polycultures

Forest gardening as practiced in “home gardens” in tropical and population dense regions such as Kerala, India, and the island of Java is very different from the food gathering practices of the Native Americans of our continent. However, there have been examples of perennial polyculture in temperate regions for millennia. Historical accounts of indigenous intensification methods (enhancing the productivity of native food harvests), burning practices, and more familiar forms of cultivation in pre- and post-colonial North America are just joining the academic mainstream.

Using our area as an example, the historic and present climax ecosystem for much of Cascadia (the bioregional name for the Pacific Northwest of North America) is a dense temperate rainforest. Nearly any small patch or large plot of land left unattended will be colonized by forest. Though most of this bioregion receives average amounts of rainfall, we experience a seasonal summer drought. Because water is necessary to photosynthesis, deciduous trees have a tough time competing with coniferous trees which are able to photosynthesize during the winter when nearly everything else is dormant, light is

modestly available, and moisture is plentiful. With most open areas predisposed to succeed to forest, and with most of the new growth (i.e. food for somebody) and light to be found in the canopy, it is open spaces, access to light, low-growing edible parts, and heat which are lacking in our bioregion.

In response to these ecological lacks and surpluses, many tribes of our area burned favored food-producing landscapes every one-to-four years following harvest in the weeks before the fall rains began. This kept the forest at bay on the glacial-outwash “prairies” and sub-alpine meadows that yielded nutritionally

valuable starchy roots and berries, and attracted herbivores to the new growth. The scraps of hunting and fishing were used to fertilize prized patches of salal berries, camas bulbs, and other foods. These techniques, which were used in both broad landscapes and more intensively monitored patches, served to increase the size, quality, ease of harvest, and reproductive success of the species of interest. The stewardship responsibilities and first harvesting rights to these patches were passed down through families, but others were allowed to harvest, and surpluses were often redistributed to the wider community



Getting friends and neighbors involved is the first step to “forest gardening” community.

through potlatches.

It may not seem at first glance that these ways are applicable to our modern lives. For example, the deliberate burning of landscapes is an alarming concept to most communities. Semi-nomadic harvesting regimes are problematic due to land-use regulations, the loss of traditional harvesting knowledge and sustainable technologies, decreased diversity, declining plant and animal populations, and even extinctions. The cultural presumption of ownership and the enforcement of private property laws affect where and how we garden, steward,

wildcraft, and hunt. Human and wind-powered water transport and the coastal and riverine trading systems dependent on it have been displaced by petroleum-fueled commerce. But I believe that valuable insights remain to be gathered. Many permaculture practices and communal living techniques mimic these indigenous activities and serve to re-wild our bodies, souls, and communities.

Political, communal, and physical changes

In investigating traditional cultural practices, we must recognize that the indigenous peoples of North America have been and continue to be ruthlessly suppressed and their rights, practices, and worldviews persecuted. Their land has been usurped and their traditional knowledge ignored or derided. However, the timing, patterns, techniques, and ecological intuitiveness of the “perennial polyculture” practiced by the first peoples of this continent have not been entirely lost, though both ecological conditions and the rules for cultural survival have greatly changed.

Indigenous species and technologies

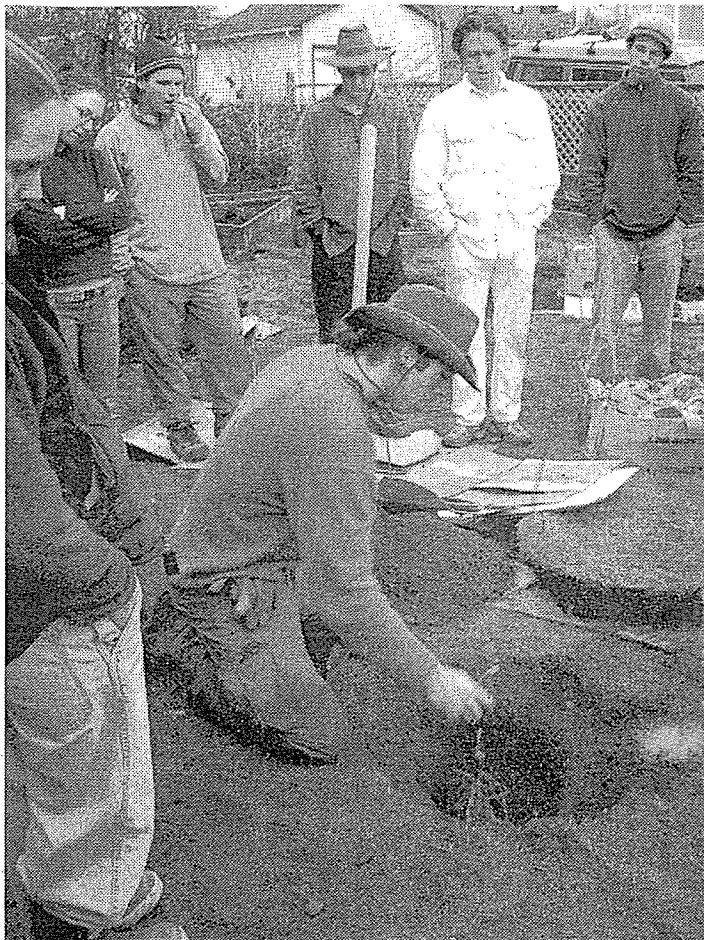
Over the generations, as native peoples refined their harvesting techniques and cultural structures, the health of crop patches and other wild food resources was (for the most part) maintained sustainably throughout Cascadia. The lessons we can take from this for contemporary permaculture would affect our management of zones 3-5—the land we cultivate or resources we tend or harvest away from the immediate environs of the dwelling. Indigenous peoples in this region intensified harvesting of, or in some cases actually cultivated native plants or analog species (those ecologically similar to the native species). Using indigenous cultivation techniques can enhance the potential of native harvests that we might otherwise overlook in the design of an edible forest garden. In this way, our household economies could be more fully harmonized with the bioregions in which we live.

Yet with erosion of the practices and the loss of relationships of intensification, it is my belief that these once-tended plants have lost some of their human-added value. Absent the familial tending of patches, fruits may now be smaller and less predictable in distribution. Less useful plants may have come to populate areas that had once been intensified for favored plants (e.g., conifer trees invading camas prairie).

There is little published literature on adapting these native practices, where they are even documented at all (see the end of this article for some suggested readings). But read what is available, learn the history of your area, and ask elders who may have knowledge. And remember to offer help or gifts to those who give share knowledge with you, for cultural technologies are very valuable! By making use of native species and practices we may be able to offer the coming generations an invaluable legacy; it's the job of our time to build bridges between pre- and post-industrial cultures.

If you extend your view of cultivation technologies to include

the redistribution of surplus, then we may learn something from Wayne Suttles' description of the coast peoples' potlatch system of festive wealth redistribution in *Affinal Ties, Subsistence, and Prestige among the Coast Salish*:



Dave Sansone teaches people the right way to plant a bare root tree.

“Since wealth is indirectly or directly obtainable through food, then inequalities in food production will be translated into inequalities in wealth. If one community over a period of several years were to produce more food than its neighbors, it might come to have a greater part of the society's wealth. Under such circumstances the less productive communities might become unable to give wealth back in exchange for further gifts of food from the more productive one. If amassing wealth were an end in itself the process of sharing surplus food might thus break down. But wealth, in the Native view, is only a means to high status achieved through the giving of it... The potlatchers have converted their surplus wealth into high status. High status in turn enables the potlatchers to establish wider ties, make better marriages with more distant villages, and thus extend the process further.”

In restoring functional ecosystems, we should not try to re-create landscapes that have existed in earlier times, worldviews, or ecologies. The greatest potential for “forest gardening” lies in using analogs that help us mimic the natural forest, in more

senses than ecosystem composition and plant selection. Not only should we consider all kinds of useful plants from comparable ecosystems, but we should also consider analogous production practices. We should look at what indigenous peoples of our bioregion have done, and also those of similar bioregions. We should consider what ecological, philosophical, and jurisdictional changes have occurred since people lived primarily off the land

The model that Pat and Michael used was just standard grassroots organizing adapted to the current conditions of urban and suburban Olympia

in that area, and look at technologies—ancient, traditional, and modern—which address the difference in conditions between then and now.

We should look at cultivation practices from more populated areas: thus the “home garden” template from tropical agriculture has been transposed for temperate cultivation. We can also learn a lot from old European cultivation processes: coppicing, productive hedgerows, perennial vegetable production, and grazed orchards. The key is to expand our horizons and look at similar societal survival techniques.

Local urban and suburban examples

Envisioning all of the potential that is to be found in the suburban wilderness, local activists in the Skagit Valley and in Olympia, Washington have been working to spread forest gardening as a practice throughout our area using grassroots organizing and community building techniques. In particular, they have paid attention to the cultural climate and the characteristics of the community-as-ecosystem. We can learn from their example.

David Sansone, a long-time environmental activist from Bellingham, had spent several years studying permaculture, forest gardening practices, and the cultivation of rare perennial edibles in the Skagit. He was involved (with others) in studying how to reestablish perennial edibles—rare and not—in the wild. The research design was simple: minimize inputs of material and effort, and note which species and varieties survived and thrived. He amassed the results of this research, creating plant lists of

perennial vegetables suitable for and accessible in our bioregion. He presented slideshows picturing the species, and set out his research principles in many lectures and workshops all over Washington. Pat Rasmussen (another long-time environmental activist and elder) and Olympia community organizer Michael Kelly were inspired by Dave’s work. Everywhere they went, they began to see yards and lawns not as dysfunctional but as pure potential for the healing of little plots of Earth.

These ornamental, grass-filled suburban yards just needed to be converted into young forest gardens with fruit and nut trees, berry bushes, vines, ground cover fruits and perennial vegetables: walnut, chestnut, hazelnut, apple, pear, peach, plum, elderberry, kiwi, serviceberry, currant, blueberry, raspberry, rugosa rose, strawberry, Jerusalem artichoke, Good King Henry, and others.

Pat and Michael used a standard grassroots organizing model adapted to the current conditions of urban and suburban Olympia to propagate the forest gardening meme. They reinvigorated a local non-profit, Terra Commons, that had been inactive for several years. Then, in order to help people climb the steep learning curve of a new and complex idea, they began hosting various permaculture teachers to educate the community. With each event, they collected names for their e-mail list, and began to network. Contacting 32 neighborhood associations, they proposed that each group poll its residents seeking potential sites for community forest garden workshops.

When I became involved with Terra Commons, its efforts had already focused on sites owned by rooted residents, most of whom were not already avid gardeners, but who had needs for an edible landscape. We had learned that the best possible sites were houses with large sections of lawn that could be easily sheet mulched—preferably with an East, South, or West exposure, high visibility, and accessibility to the neighborhood. The plantings were seen as part of a process of cultural succession. The forest gardens would establish themselves in open (disturbed) ground just like weeds. And like weeds, which are often medicinal, they would spread the meme among the people as they healed both land and community.

In advance of each installation workshop, we would send out announcements to the neighborhood using community lists, blogs, and other means. Those who couldn’t come for the whole day were encouraged to drop in when they could, and those who couldn’t volunteer with the actual work were nevertheless invited to watch and ask questions.

The day of the installation is always a busy one. The mulching and planting process is announced at the beginning, with more explanations offered whenever others arrive or as questions are asked. During the event contact information is collected, and networking connections are made. Trees and shrubs are planted first, and a group of volunteers is set to stripping cardboard of staples and tape. At least three, better four, layers of overlapping cardboard are put down around the new plantings to suppress the grass. Anything less is not worth the time and effort.

A portion of the sheet mulch is usually inoculated with mushroom spawn to promote soil healing, enhance nutrient and water cycling, and to provide yet another edible or medicinal crop. Most often oyster mushrooms are used because they are

very adaptable and edible. In Olympia, we used Fungi Perfecti (www.fungi.com), a local company, as our source for mushroom kits, but other companies sell similar products. Mycelia quickly spread through and along the corrugation of the cardboard in the sheet-mulched area. The microscopic pattern of the wood fibers of cardboard is similar in form and believed also to be encouraging to mycelial expansion.

After the cardboard is prepared, laid, and inoculated, we apply

The timing patterns, techniques, and ecological intuitiveness of the “perennial polyculture” practiced by the first peoples of this continent have not entirely been lost.

wood chips or sometimes straw over the top. We have found wood chips to be better all around because they look neater, hold down the cardboard better, stay put, and provide long-term food for mushrooms, the soil, and surrounding plants, with the caution that strongly antimicrobial wood (such as Western red cedar, *Thuja plicata*, in our region) shouldn't be a dominant ingredient in the mixture. Straw rots faster, but generally people are more accustomed to seeing wood chips. The transition from lawn to trees and shrubs with wood chips is not a tragic one.

One year into the process, some of our older sites are ready to plant with perennial vegetables, as the sheet mulch has rotted sufficiently, and the soils have improved. Good King Henry (*Chenopodium bonus-henricus*), a perennial spinach, and the self-seeding annual corn salad (*Valerianella locusta*) have proven to be very useful plants for this purpose, and the author is working at the time of writing to research and propagate perennial vegetables of these and other species.

Through this strategy of accessible demonstrations, the interest in forest gardening has spread exponentially, and there are now forest gardens all over the city of Olympia, many of the owners of which have opened them to the community. Terra Commons plans to issue a self-guided tour map this spring.

Becoming native to our places

Many specific Native American intensification techniques, such as burning, remain impractical to implement at our

installations, as we are just beginning the process of land and cultural healing and transformation. Permaculture has been creating a template for the renewal of healthy cultures and ecosystems within the industrial world, but the work is still in its infancy. Nevertheless, the principles of permaculture comprise our most accessible re-indigenizing practices thus far. Right now we are fostering economies of gift and trade, potlucks and community building, intergenerational education, place-based rootedness, and shared-tending responsibilities. We are creating common wealth. But as these projects mature within their communities, we can hope to explore more bioregionally-specific intensification techniques, and technological analogs of other traditional practices.

Design from your community's cultural ecology

Just as species form indicates niche, so can aspects of our community influence the viability of projects and technological analogs. Begin to consider these features. Is the area in question primarily urban, suburban, rural, or very remote? What are the dominant features of transportation and commerce? How would political leanings, funding, and regulation affect your project? You might also want to consider the worldview and political climate that surround each potentially analogous practice *in situ* as you evaluate whether the practice in question might be successfully transferred. How would land ownership affect intended projects, and how do people relate to ownership? Do people already cooperate across property lines? Many older European communities held land in common, a tradition well known to the native communities of North America. However, the land management practices they once used might not work here and now unless community ties are first forged across fences.

Community rootedness

Is the community composed mainly of settled old-timers, or is it a transient college town? How accepting of change are the residents? What length of project and management intensity are likely to be successful given the demographic of interested and affected parties? How might community gardens benefit and create stronger social ties and cultural bridges amongst and between the marginal communities?

Olympia is a college town, a state capitol, a port, and is near an army base. A lot of political and scientific debate and development occur here. Ideas that we present here find a lot of fertile cultural ground, varying by neighborhood. Most of our installations have occurred in older neighborhoods with more tolerant attitudes toward yard aesthetics and a higher likelihood of neighborly interaction. Starting in places with a higher potential for success allows us to seed the idea around town. Eventually we will reach all the newer suburban developments as well. Our workshops teach and rely on the volunteer efforts of scores of students and local young adults who most often don't own property in the area, but who may plant or tend perennial

gardens at rental locations or with their families in the near or distant future. Our workshops are always open to children with adult mentors present, and are valuable learning experiences for the generations who will inherit the earth after us.

Permaculture: one step at a time

What are the needs of the human members of the community, and what steps can they take to meet those needs? Encouraging neighborhoods to think of their yards as part of a large orchard with many different useful trees is a powerful idea, even if permaculture approaches to gardening are not yet well understood. When the residents share surpluses and grow food, the community is making huge steps in the right direction, whatever their gardening practices. When Terra Commons visits neighborhood associations and proposes a community forest garden installation, it also asks that the neighborhood identify the resources each house may have, and evaluate all possible sites, in order to encourage local food production, volunteerism, and sharing. Agreements can be made between owners of neglected orchard trees and those who could use, trade for, or help maintain these valuable local resources.

Leading and spreading by example

What forms of leading by example might be heartening to the community? When we engage the community in a group effort to install even one garden, word gets around, and afterwards there remains a physical example of the learning opportunity. Those who volunteer at the workshops, often residents of the same neighborhood, learn the techniques used on the day of the workshop. Ties are made between neighbors, and those who were initially unavailable or not interested can gain benefit by seeing the forest gardens as they grow and develop.

Respecting neighborhood aesthetic values

What are the aesthetic values of the area you intend to affect? An example is the use of straw to sheet mulch in more manicured neighborhoods. Some neighbors just might not be willing to look at a scene that looks like a barn exploded next to them. Forcing aesthetics upon others in the neighborhood is not likely to be beneficial to community ties in the long run. Encourage those within more conservative communities to keep this in mind as they redefine what is acceptable, beneficial, and aesthetically pleasing.

Power within the community

What grassroots entities can be used to organize and empower the community? Terra Commons was greatly assisted by several small grants from the Community Sustaining Fund to help it get off the ground and running. Though modest, this funding, fed by community collection efforts, was given at just the right times to help the organization move its program along. What existing community structures (such as a grange or church) could be

improved (i.e. with an inviting community garden with picnic tables and collection and maintenance parties) for even stronger organizing and producing capabilities. We have done installations at one church and school, and other churches and schools are looking to the outcome of these first projects as we propose more. Hundreds of people pass by these places. The positive power of thoughtful placement is immense.

Though Terra Commons has much work to do, we are only a year and a half into the forest gardening project, and have already made significant impact within the community. We hope that neighbors spread these ideas to neighbors, that church potlucks share freshly grown raspberries, that school kids grow up learning how to plant and care for trees, that people will teach each other what they have learned: that if only in a small way, our seed, like corn salad, will wander around and beyond the garden farther than where our shadow walks and long after our influence has passed. Δ

Laura Donohue has been an intern for Terra Commons and is a Senior attending The Evergreen State College.

For more information about Terra Commons and other efforts in Cascadia see www.terracommons.us.

For more information on Native American land management and intensification regimes within and beyond Cascadia, see the following books:

Anderson, M. Kat. *Tending the Wild: Native American Knowledge and the Management of California's Natural Resources*. New York. University of California Press. 2006.

Boyd, Robert. *Indians, Fire, and the Land in the Pacific Northwest*. Corvallis. University of Oregon Press. 1999.

Deur, Douglas, and Nancy J. Turner, eds. *Keeping It Living : Traditions of Plant Use and Cultivation on the Northwest Coast of North America*. New York. University of Washington Press. 2006.