Dr. Richard Freeman

Spokane, Washington area

Professional Skills – Ecological horticulture, Permaculture & Forestry

Urban Ecological Horticulture Design & Management. Small-scale food and herb production; multiple-income streams; container-based horticulture; ecologically-intensive beds; season extension; water conservation; ecological and biological methods; plant/crop selection.

Permaculture Design. Residential sites in urban, suburban & exurban environments; gardens, home orchards, guilds, polycultures, patches & edible forest gardens; plant selection.

Horticulture Media Formulation & Production. Biological-based media made from recycled, renewable agricultural wastes (no peat/perlite); formulated for intensive-production of high-value crops or containerized perennial plants; formulations based on functional analysis; have developed flexible spread-sheet model for projecting nutrient levels through time.

Compost & Biochar Formulation & Production. Working with several types of compost, including thermophilic, worm, bokashi, and dry fermentation; producing biochar with low-tech field techniques from conventional forestry residues (slash) and arbor waste.

Integrated Pest Management & Ecological IPM. ROI/risk models for specific threats, w/ thresholds, monitoring, sanitation/prevention, threat/damage assessment, response/control decisions, cost/risk analysis (using dynamic spreadsheet utility w/ time-motion, infestation modeling, etc); knowledge-base on plant choice for pest-suppressor arthropods.

Project Management. Design implementation; on-the-ground operations; costing/budgeting; critical path analysis; monitoring; reporting.

Site Assessment & Selection. Assessing residential sites for permaculture design and ecological management (including retrofit); small- and large-scale, urban, suburban & exurban environments.

Forest Assessment, Planning & Management. Ecological restoration; wildfire fuel management; aesthetics; wildlife habitat; small- and large-scale, stand to landscape (wastershed); reporting and mapping (GIS); administration and management.

Professional Skills – Lecturing, Teaching and Tutoring

Lecturing and Lecture Planning. Experience in lecture planning and lecturing; well-organized, easy-to-track and on-point lectures; extensive experience in guiding discussion groups.

Course Planning and Administration. I write a well-integrated, pertinent, and engaging curriculum; I have valuable experience in creating reading lists; I write fair, relevant but challenging tests and assignments; I grade quickly and systematically and will always consider a sincere, well-argued challenge to a grade.

Inquiry Method of Tutoring. I am proficient with and experienced in tutoring and grading using the "inquiry method," a highly-effective way of helping students teach themselves to write effectively on a wide range of topics. The inquiry method is often used with a "writing across the curriculum" program.

Professional Skills - Writing & Media

Writing & Editing. Plan, write and edit a variety of professional documents; professional editing; extensive experience and training for teaching college-level and professional writing.

Dynamic Mapping. Geographical information systems; revisable/editable; data management for tracking/analyzing production, costs, *ad tedium*.

Designing Basic Web Documents. Plan, write and edit HTML/CSS documents; clean, well-organized, easy-to-review code; attractive, effective low-energy-use, static websites; WWW validation.

Dynamic Spreadsheet Modeling. Many-factor problem solving; transparency and tracking across multiple sheets for easy trouble-shooting; organized for directional flow.

Professional Skills – Community Development and Planning

Community Assessment & Analysis. Resource assessment; needs assessment; social and environmental indicators; conflict analysis; dynamic mapping (GIS).

Project Planning. Community goal programming (vision, mission, goals, goals-to-objectives); operations planning; data- and information-frameworks; budgeting; dynamic mapping.

Project Implementation & Administration. Budgeting; scheduling; logistics; volunteer coordination.

Transition Planning. Facilitating shift to sustainable communities and neighborhoods.

Professional Experience in Applied Ecology

2017-Current. Developing a business, **Designed Ecosystems**, to design ecological horticulture and permaculture development and lead presentations and workshops. Developing a suite of businesses under the umbrella **Permaculture Garden Supply**, instructing and supplying permaculture and ecological horticulture projects.

2016-2017. Grow Ecology, LLC. Longmont, CO. Single member/manager. Ecological horticulture for high-value cultivation. Farm plans, ecological ag. designs, soil-health, integrated pest management, container-media formulation & logistics.

2016-2017. Sunfox Farms. Farm volunteer assisting professional horticulturist with commercial CBD hemp cultivation.

2014-2016. Eco Paradigm. Spokane, Washington. Sole Proprietor and consulting partner. Ecological horticulture for high-value cultivation.

2011-2014. Lively Soils. Missoula, MT. Developed a template for ecological food production and site development in cold, temperate montane ecosystems; developed a system for making biologically-active composts and biochars for commercial sale.

2007-2014. Interface Forestry, LLC. Missoula, MT. Single member/manager. Ecological forestry in intermountain forest types; resident-owned wildland-urban interface management; forest inventory and timber-cruising. (2001-2007 operated as Comprehensive Forestry.)

Teaching Experience

2015-Present. Public speaking in several contexts on biochar and on ecological horticulture.

"Biochar and Compost in Landscape Operations." Course on Landscaping, Flatirons Community College, Ft. Collins, CO. November 2017.

"Biochar in Agriculture." Participated in a speaking tour in central Washington (grant by Washington Dept. Ecology). Spring 2015.

"Ecological Approaches to Cannabis Horticulture." Spoke at several Marijuana Business Association meetings in Spokane, WA, Seattle WA, and Denver CO. 2014-2016.

1994-1997. Teaching Assist. Prof. Alan McQuillan. School of Forestry, U. Montana, Missoula. Shared comprehensive duties under tutelage of professor (who conducted most lectures): "Forest Planning" and "Ethics of Public Land Management" (upper level undergrad courses).

1990-1992. Teaching Assist. Prof. Jim Lowe. School of Forestry, U.M., Missoula. Technical writing; shared comprehensive duties under tutelage of professor.

1987-1988. Professional Tutor. Writing Center, Montana State U., Bozeman. Worked with multiple colleges across campus as tutoring emissary in "writing across the curriculum" program; worked with clients on professional documents, theses and dissertations.

1983-1987. Student Tutor and T.A.. Writing Center, MSU. Conducted tutoring sessions and graded assignments for English writing program; provided similar services for colleges and departments across campus as part of the "writing across the curriculum" program.

Education & Training

Ph.D., Forest Management and Planning. 1998. School of Forestry, U. Montana, Missoula. Dissertation: The U.S. Forest Service and the Political Construction of Ecosystem Management.

M.S. Environmental Studies. 1992. College of Arts and Sciences, U. Montana. Professional paper: A Planning Model for Rural Community Development.

B.A. History. 1988. College of Letters and Science, Montana State U., Bozeman.

Wildfire Training. 2006. National Wildfire Coordinating Group S-130: Basic Firefighting; NWCG S-190: Introduction to Fire Behavior; NWCG S-290: Intermediate Fire Behavior NWCG S-215: Fire Operations in the Urban Interface.

Permaculture Courses. 2013. Permaculture Design Certificate, Permaculture Institute, (Geoff Lawton, Instructor); Edible Forest Gardens design charrette, David Jacke and Inside Edge Design Helena, MT.