THE ENVIRONMENTAL EDUCATION OF A GARDENER

KEITH R MASTENBROOK
WESTLAND GARDENS INC.

Sol Duc River Valley, Olympic National Park
Permaculture: *permanent - culture*

Permaculture Ethics:

- EARTH CARE
- PEOPLE CARE
- FAIR SHARE

DAVID HOLMGREN’S PERMACULTURE PRINCIPLES
# 1 Observe and Interact

Impressions made in childhood are strongest

5-acre Guth Compound, c. 1916

*GutHaus c. 1948 – 40th Avenue & NE 70th Street Seattle*
Gardening Role Models

Louise Guth & Irving Donnergaard

Louise gave me back issues of Organic Gardening & Farming

Johanna Van Brederode-Hamilton

My Grandmother had a green thumb & green Dutch garden
Boy Scouts of America
Leave your campsite better than you found it.

50 Miler @ Anderson Pass

Anderson Glacier – Then & Now
Coming of Age in the 1970’s

Middle-class Seattle Suburbia

Assassinations/The Viet-Nam War/Women’s Liberation/
The Environmental Movement/Rock-n-Roll
The Evergreen State College

Human Ecology w/ David Milne & Rob Knapp, 1972
BROADER HORIZONS

White kid from Seattle isn’t much of a statement on a resume. At some point you want to try something new just to see how it plays.

In the Garden of Frida Kahlo & Diego Rivera, Mexico D.F. 1976
# 3 Obtain a Yield

I needed to experience the world first hand, to have an Adventure.

"The bus came by and I got on, that’s when it all began"  - the Dead

Summer in the Okanogan orchards

Gives way to the cold of winter
# 9 Use Small and Slow Solutions

Small is Beautiful

Five Acres & Independence

Back-to-the-Land Movement

Gravenstein in bloom, planted in 1927 by the Guth Family
“19 E, Armor Crewman, that’s what I want to be.”

The Recruiter asked why? Because I want some I’ll hate so much it’ll be easy to get out. Damn if that wasn’t true.
# 6 Produce No Waste

Matter can be neither created or destroyed.

RECYCLING is a Universal Condition

Terracing with URBANITE Walls

Studio in Lawrence Hall
Learning to Read the Landscape

A PATTERN LANGUAGE & THE TIMELESS WAY OF BUILDING

Essential resources in design, expanded by David Jacke for the Edible Forest Garden.
“I get my best ideas by listening to others.”

I asked Tom Kubota why he was so quiet in the meetings of the Kubota Garden Oversight Committee.

I agree completely with his response.

Don Brooks, Senior Gardener @ Kubota Garden
Garden Design was Ornamental

Is it CONTRIVED or DERIVED?

- Professor Ron Lovinger

Chateau de La Napoule, French Riviera

Great Dixter, England

Villandry, Ile de France
September 11th 2001 changed everything.

On grounds long used as a military barracks the OAXACA BOTANICAL GARDEN preserves important BIODIVERSITY including the towering Organ Pipe Cactus, Lemaireocereus marinates

Jardin Etnobotanico Oaxaca, Mexico
My PERMACULTURE Revolution

Permaculture Design Course
Transition Townes
Edible Forest Gardening
Hugelkultur
Bio-Char
Intentional Community
Rainwater Management

Port Townsend Co-Housing, NW Permaculture Convergence
In Fresno, to beat the heat, Baldasare Forestieri moved his garden underground. Over 40 years he worked & some plants are now 100 years old.
Traditional Environmental Knowledge is invaluable in returning to a resilient permaculture community.

Chaw’se Miwok Indian Grinding Rock
SUSTAINABLE NE SEATTLE

Our mission is to support the transition of our community to sustainability and resilience.

Bylaws and 501-C3

Planet Home Festival

Edible Hedge Project
TRANSITION TOWNES

ADDRESSING
Climate Chaos
Resource Depletion
Economic Instability

Transition Seattle Initiative
Integrate Rather than Segregate

Nathan Hale Urban Farm

Before

Conceptual Plan

2016 Achievement
LIMITS to GROWTH?

GREENING the EMERALD CITY

Obama Limo @ GutHaus: CAN WE NOW?
In Nature patterns are everywhere that have been tested over time. Learning to see merely takes practice.

Bullock’s Permaculture Homestead, Orcas Island WA
EDIBLE FOREST GARDENS

FOREST STRUCTURE
MIMICRY
- Trees
- Shrubs
- Herbs
- Perennials
- Ground Covers
- Roots
- Vines

Glen Hurley @ Beacon Food Forest
David Jacke @ Helena MT Design Charrette
# 2 Catch and Store Energy

Use appropriate technology

September 16, 2012
CARBON SEQUESTRATION

- Plant Trees
- Hugelkultur
- Compost On Site
- Arborist Chips!
- Humanure
- Green Cylinder
It is going to come down to people learning to work together, finding solutions that are local more than global.
# 5 Use & Value Resources & Services

Resources and Service that are not USED are not fully VALUED. Stewardship takes many forms on lands both public and private, urban and rural.
The ECOTONE where two ecosystems meet can present the greatest biological diversity.
ANTHROPOCENE: a new age of Earth history

CHANGE is unstoppable
RESILIENCE is paramount
TIME is an illusion
ASLA Sustainable SITES Initiative

A program much like LEED that establishes a method for evaluating the environmental impacts of development and provides guidance to make projects Greener.

GutHaus BOG GARDEN in flood after a heavy rain, built in 1988
RENAISSANCE to post-carbon economy

Creating RESILIANCE will necessitate taking a holistic, inter-disciplinary approach in not only how we design solutions, but also in how we study and prepare, and what questions we ask.
LIFE IS GOOD: maintain your perspective

We are all in this together and there isn’t an escape hatch on Spaceship Earth.

Detach yourself from expectations and commit to alleviating suffering.

REFORGER Exercises in West Germany, 1980

Return Forces Germany before the Wall came down