

Connie Kuramoto. April 4, 2018

PREPARING YOUR GARDEN FOR CLIMATE CHANGE

Connie has worked in horticulture for over 30 years. She is an instructor and consultant, organic grower. She taught for Vancouver Island University's Horticulture department for 20 years. She has contracts with Gaia College in the Organic Land Care diploma program and North Island College in the Horticulture Apprenticeship program.

Connie presented very graphic picture of changing pattern of floods, droughts, rising levels of carbon dioxide and what we can do on our level of small acreages and city gardens.

What is happening?

- Increasingly frequent extreme weather events create problems for all of us.
- More extreme rain and drought events.
- Soil surfaces dry rapidly.
- Most life in the soil occurs within the first two or three inches of the soil. If this area becomes dry, the micro-organisms in the soil can be severely compromised.

WHAT WE CAN DO:

- ✓ No tillage practice
- ✓ Improved nutrient and water management
- ✓ Mulch. Organic mulches provide nutrients for plants as they break down organic matter. They protect water reserve during excessive heat spells.

It shades soil, prevents overheating of soil and roots. Prevents evaporation of water, protects, feeds, and insures moisture for soil microbes.

EXTREME RAIN EVENTS

Once the rate of falling rain is faster than infiltration, runoff takes place. Runoff creates erosion which carries off soil, and nutrients. The way to combat extreme rain events is by mulching and building up soil. Good soil is like a sponge. Microbes hold water, and help bind loosely soil particles together. Microspores hold air.

Adding compost and organic matter always helps balance moisture levels.

Effective way of mulching is building Hugelkultur or sheet mulching existing landscapes.