

# ***BIODYNAMICS***

## ***Renewing Human and Natural Systems Through Agriculture***

***Eighth Annual On-Farm Workshop***

***June 17-18<sup>th</sup> (16<sup>th</sup> & 19<sup>th</sup>), 2011***

**S&S Homestead Farm, Lopez Island, Washington**

### ***Session Descriptions***

#### ***Presentations, Demonstrations & Practice:***

***Soil fertility, composts, cover crops, BD preparations*** (Henning). This presentation will demonstrate the practices by which a biodynamic farm achieves and maintains soil fertility without purchased inputs. The role of humus in supporting soil micro-organic life, water and air retention capacity will be examined, and how humus can be built using sheet and other forms of composting and green manures, and how to stimulate soil metabolism through the application of BD preparations to composts and directly to the soil (3 hours).

***On-farm slaughter of beef and lamb*** (Island Grown Farmers' Coop butcher and crew). Motivated by the desire for humane treatment of farm animals, S&S Homestead Farm spearheaded the development of the first federally inspected mobile slaughter unit in the United States. Animals that are butchered where they were born and raised are healthier, and the meat superior in nutritional quality, tenderness and flavor, than animals that are factory-farmed and processed. The solemnity of the slaughter and butchering process exemplifies the love and respect with which these animals have been treated all their lives (5 hours).

***Composting of slaughter offal*** (Henning). Slaughter offal can pose pollution and health hazards on an industrial scale. On the small-scale, biodynamic farm, properly processed offal provides an important and health-promoting resource for fertility (1 hour).

***Harvesting animal sheaths*** (Barry & Henning). The horns, hooves, mesentery, intestines and skull of a lactating cow are some of the vessels which Rudolf Steiner indicated for fermenting biodynamic preparations. We will demonstrate how to identify and harvest these animal parts and process them for making the preparations (1 hour).

***Making and Applying Biodynamic Preparations on the Farm*** (Barry & Henning). Participants will gain hands-on experience in making the Koepf/Goldstein Compound Preparation, an improved "barrel compost" with nettles in the mixture. We will make the various preparations and the equisetum spray. We will also demonstrate a farm-built spraying rig (6 hours).

***The BD preparations: for what are we preparing?*** (Barry) It is often considered that it is the biodynamic preparations that distinguish biodynamics from organics. It has even been said that, without the BD preparations, biodynamics is merely non-input substitution organic agriculture—the current frontier in organics. But using the BD preparations calls upon far more from us than simply implementing additional, unique practices in what is otherwise organic farming. We will consider Rudolf Steiner's indications, as well as scientific, Goethean, and other approaches to a deeper understanding of the BD preparations. We will explore the ways in which coming to such a broader perspective prepares us for the challenges of our times. (1 hour).

***Biodynamic Nutrition*** (Elizabeth and Roy). The biodynamic farm integrating plant and animal production offers unique opportunities to implement a complete and healthy diet: high-quality animal proteins from grass-fed beef and lamb, and from pigs and poultry raised on non-GMO grains, vegetables, fruits, and dairy products; saturated animal fats, organ meats, bone broths, and eggs, all of them rich in vitamins and minerals; fresh and fermented dairy products, as well as fermented grains, nuts, legumes, fruits and vegetables. The discussion will touch upon Rudolf Steiner's concept of plant, animal and human nutrition (ref. *Agriculture Course, Lecture IV*), as well as time-honored diets in traditional cultures (ref. the research of Dr. Weston Price and his students, notably Sally Fallon, *Nourishing Traditions*), and the discrediting of the so-called lipid theory in modern biochemistry. The session will end with a discussion of how people who do not produce their own food still can secure a wholesome diet to protect themselves against obesity, diabetes, autism, cardiovascular disease, cystic fibrosis, and other consequences of the industrialized food system (3 hours).

***Celebrating Farm-Produced Food.*** (Elizabeth, Brendan, Garrett, & Ellie) Breakfast, lunch and dinner will be prepared from farm-produced ingredients. Participants will experience the broader context of real food on the farm. Feel free to bring biodynamic wines you would like to share. (8 hours).

***Goethe's Color Theory on the Farm.*** (Henning). Ever wondered why the sky is red in the morning and evening but blue at noon? Goethe's color theory based on phenomenological observation explains it better than any other. Much of biodynamic farming is rooted in the scientific approach exemplified in Goethe's practice of observation. This lecture/demonstration will give workshop participants an opportunity to experience the phenomena of light and color directly instead of reading about it in textbooks (3 hours).

***Goethe's Theory of Plant Morphology: How to become better acquainted with the plant life on your farm.*** (Barry). Jochen Bockemühl's study of the sequence of leaves that unfold as the plant grows makes us better acquainted with the "morphic body" guiding the plant, and better able to understand the dynamics of biodynamic work. Successively sown garden cress plants will demonstrate such a developmental sequence for instruction. Participants will also observe and collect plants on the farm for their own hands-on, phenomenological leaf sequence study, being able to apply the morphic principles of Goethe's theory of plant metamorphosis (2 hours).

***How to Form a Healthy Farm Organism*** (Henning). This capstone farm walk and discussion explores the biodynamic concept of the farm as an individualized organism in interaction with the ecological, social, economic and spiritual whole of which it is a part. Specific practices highlighted include water catchment, energy generation, rotational grazing for sheep and cattle, pigs, chickens, vegetable, fruit, small grains, hay and forage production in the context of farm self-sufficiency and local markets (2 hours).

### ***Presenters:***

Henning Sehmsdorf, PhD, S&S Homestead Farm, Director, S&S Center for Sustainable Agriculture; Adjunct Faculty, WSU Center for Sustaining Agriculture and Natural Resources, and WWU Huxley College for the Environment. Member, Committee on Sustainable Agriculture, National Academies of Science, 2009-11.

Elizabeth Simpson, PhD, S&S Homestead Farm; Co-Director, S&S Center for Sustainable Agriculture; Ecological Food Production Educator, Lopez Island School District.

Barry Lia, PhD, Educator, S&S Center for Sustainable Agriculture; Regional Coordinator for the North American Biodynamic Apprenticeship Program and Washington Biodynamic Group; Biodynamic Research Working Group member; Adjunct Faculty, Bastyr University, Lia BD Consulting.

Roy Ozanne, MD, HMD practices homeopathy on Whidbey. In 2007, he started Whole Health Programs on S&S Homestead Farm, and began participating in health-related workshops at S&S Center for Sustainable Agriculture.

Brendan Lind, student researcher, Washington University (St Louis, Mo.) and S&S Homestead Farm.

Garrett Franz, intern, Moon Dance Farm, Acme, WA.

Ellie Sherman, intern, Whidbey Island Institute, Clinton, WA.