

**The Seven “Pillars” of a Demeter-Certified Farm are based on the best practice of biodynamic agriculture, according to the work of Rudolf Steiner.**

They are:

### **Biological Diversity**

A Demeter certified farm must have a minimum of 10% of its total effective land base—clearly documented in a calculated acreage figure—set aside as a biodiversity reserve. This preserves wildlife diversity, endangered species habitat, and provides an overall reserve of diverse life forms to inoculate and inhabit the farm organism.

Environmentally beneficial grazing and low impact wild harvest can take place but each situation will be handled on a case-by-case basis. In situations where there is no potential biodiversity reserve occurring naturally, areas will need to be created....Other conservation areas of high ecological value must also be protected.

Tillable acreage cannot be planted only to a monoculture. Botanical species diversity needs to be maintained via the crop rotation strategies utilized. In annual crop rotations a given harvested commodity cannot be planted in the same field for more than two years in succession. Close attention needs to be paid to the nutrient export associated with each harvested commodity. The crop should not return to a given field until there has been adequate time to return exported nutrients to the soil in a manner consistent with these standards.

Bare tillage year round is prohibited. Land base needs to maintain adequate green cover. Soil must be protected from soil erosion and soil structure degradation during periods of the year when it is vulnerable. Adequate crop residue and, at a minimum, volunteer vegetative cover must protect any and all fields of cultivation during these periods (for example winter months, rainy seasons, etc.).

### **Generating fertility**

The foundation of the fertility system needs to be based on strategies that emphasize generating fertility from within the life of the farm. When applicable, the following techniques need to be demonstrably utilized to their maximum potential in order for a farm to import allowed fertility materials. There are also limitations on the amount of fertility that can be imported and applied.

- Livestock integration
- Green manure
- Legumes/nutrient catch crops
- Biodynamic preparations
- Crop rotation

### **Disease, insect and weed control**

The foundation of disease and insect control needs to be based on strategies that emphasize prevention located within the life of the farm itself. When applicable, the following

techniques need to be demonstrably utilized to their maximum potential in order for a farm to import pest control materials.

- Botanical species diversity
- Predator habitat
- Balanced crop nutrition
- Attention to light penetration and airflow
- Biodynamic preparations
- Crop rotation
- Timing of planting/Understanding of pest species life cycle

The foundation of weed control needs to be based on strategies that emphasize prevention located within the life of the farm itself. When applicable, the following techniques need to be demonstrably utilized to their maximum potential in order for a farm to import weed control materials (including petroleum to run tractors).

- Timing of planting/ Understanding of weed species life-cycle
- Shade/crop canopy
- Mulching
- Crop rotation
- Identifying and avoiding the spread of invasive weed species
- Grazing
- Irrigation strategies

### **Use of the Biodynamic preparations**

The full complement of the Biodynamic preparations 500- 507 must be used.

### **Water and waterway conservation**

Irrigation needs are required to be met based on strategies that emphasize water conservation. The following water conservation measures need to be demonstrably utilized to their maximum potential.

- Development of soil organic matter
- Mulching, in instances where mulching can be practically applied
- Efficient irrigation delivery systems where such systems can be practically applied
- Alternative pumping methods, such as solar pumps, nose pumps or wind pumps are considered
- The performance of irrigation system equipment is routinely monitored to verify motors, pumps and delivery systems are performing well and according to specifications.
  - Irrigation scheduling takes into consideration crop requirements, daily rainfall amounts, soil

types and evapotranspiration rates for the area.

- Soil moisture is monitored to improve irrigation efficiency in order to avoid excessive water application.

### **Livestock integration**

The integration and maintenance of livestock is a valuable tool of Biodynamic farm management. Within the context of the farm individuality and ecology, the grower should strive to have a mixed livestock population to help establish and sustain a self-sufficient system of fertility. In situations where the presence of only a small number of livestock is possible it is recommended that a cow be present in order to provide the manure for making Preparation 500 on the farm.

Wherever possible the Demeter Association supports the principle of integrating livestock back into agronomic systems verses separating livestock from the land in large industrial feed lots. Their contribution to the fertility dynamics, crop rotation and vitality of a farm is significant...It is recognized that many folks who sincerely want to integrate livestock into their farming system do not have the land base and other resources available to meet a Demeter standard for certified livestock products. For this reason, Demeter will allow exemptions not requiring livestock on Demeter farms to be certified to a Demeter standard. The land base on which the animals reside is NOT exempt from the requirements of Demeter standards.

When imported animals are introduced to the farm care must be taken to ensure that they have not recently been treated with any prohibited materials to ensure that their manure does not contaminate the farm.

Not having livestock on the farm and having livestock on the farm that are not managed fully to a Demeter standard requires approved exemptions.

### **Gentle post-harvest handling**

Agricultural production is minimally manipulated after it has been harvested.

*(Adapted from the Demeter-USA National Organic Program (NOP) Farm Standard)*