Introduction: Sustainable Gardening in Alaska

A whole system approach to gardening

Gardening in Alaska can be both a joy and challenge. The midnight sun and cool nights grow bigger, sweeter vegetables and brighter flowers. Cold winters reduce the number of pests, allowing gardeners to use less pesticide. But, cold soils, 24-hour sunlight and a short growing season can cause frustration. Lower 48 gardening techniques need to be adapted for success in Alaska.

Gardeners need additional information to capitalize on the good and overcome the challenges of growing vegetables and flowers in the “Far North.” Also needed is an understanding of plant growth and development in Alaska settings. That is what this manual is about. It also focuses on sustainable gardening practices – a holistic method for growing plants.

Gardening in the past century focused on producing the largest possible pest free crop, sometimes disregarding soil health and vegetable quality. Conventional methods may have produced good results, but they were not the best for long-term management. Gardeners and crop managers are moving towards sustainable gardening methods as science has learned more about the environment and the consequences of practices.

Sustainable gardening is a whole system approach that is good for the environment, good for families and good for the community. It takes minimal input of labor, water, fertilizer and pesticides while building the soil into a healthy living system. A thoughtful balance is made between the resources used and the results gained.

There are several sustainable techniques. Mulching adds nutrients and reduces weeds and water loss. Crops
can be selected that feed the soil as well as the farmer. Composting garden waste and adding it back to the system reduces the need for fertilizer and keeps the soil microorganisms fed. Flowers in and around the garden can help attract beneficial insects that eat pests. Grass clippings added back to the lawn with a mulching mower results in a healthier lawn with reduced labor, water and fertilizer. Some pests in the garden can be left to allow parasitic insects numbers to grow. Soil warming techniques allow gardeners to grow warm season crops.

It is important to select crop varieties that are adapted to Alaska. These are crops that tolerate cold soils and mature in the short growing season. Biennial crops such as radish, beets and spinach can be select for delayed bolting. There are crop varieties such as O-S Cross Cabbage that utilize the midnight sun and grow to record size.

Heirloom seeds can be selected for collecting and seed saving. Heirlooms are plants that have been saved and replanted for a minimum of 50 years. Their characteristics and/or genetic materials have stabilized. Hybrid seeds have many production benefits such as early maturity, improved vigor and larger size. However, these seeds cannot be saved because the next generation will not look like the parents.

Many sustainable gardening methods are not new; some of the methods you may already be using. What is different is the holistic approach that brings all the methods together into a living system. In order to make decisions on what combination of methods to use you need an understanding of soil science, plant growth and pests. This manual will cover the necessary topics to help you be a holistic manager of the garden system. Happy reading.