

2007 University of Alaska Combined Research and Extension Plan of Work

Agriculture and Horticulture

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 102 10% Soil, Plant, Water, Nutrient Relationships
- 205 40% Plant Management Systems
- 213 5% Weeds Affecting Plants
- 216 5% Integrated Pest Management Systems
- 302 15% Nutrient Utilization in Animals
- 307 10% Animal Management Systems
- 308 10% Improved Animal Products (Before Harvest)
- 601 5% Economics of Agricultural Production and Farm Management

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Situational overview: Alaska imports about 95% of the food it consumes. Alaska has minimal agricultural infrastructure and virtually no processing capability.

Biological overview: Alaska agriculture covers a large geographic region and a large range of climatic conditions. All regions are characterized by a short growing season (May-Sept.), cold soils, and long summer day length.

Animal industries: Alaska's animal industry is small. Predominant livestock include beef cattle and reindeer with small numbers of dairy cattle, bison, elk, goat, sheep, yak and musk ox. There are numerous farms with a few head of livestock or poultry for home food production. Horse numbers are large in areas along the road system and constitute a major consumer of forage crops. The small dairy industry faces several challenges including loss of one major slaughter facility (owned by the State of Alaska), milk processing limitations (one major processor owned by the State of Alaska), and difficulty in getting new cows out of state. Transportation costs for inputs are significant. There is strong market acceptability for Alaska-grown meats and milk. High percentages of both meat and milk are imported.

Consumer horticulture: The strong demand for consumer horticulture (flowers, shrubs, trees, vegetable transplants) is satisfied through local greenhouse and nursery production and large chain outlets that primarily sell imported material. Most greenhouses do not operate year round due to reduced market demand and high energy costs. There is interest in hiring a more highly trained workforce.

Landscape: The larger cities have significant landscape and lawn care operations. There is growing interest in adding native plants to their plantings. These businesses primarily buy from local nurseries. Golf courses are beginning to be a factor, especially in areas receiving significant tourist numbers.

Subsistence gardens: Significant numbers of gardens and food processing techniques provide large portions of family food needs statewide. The high cost of transportation may provide significant market opportunities to high production gardeners statewide.

Agronomic crops: Grass hay predominates. Low pH soils, unaffordable lime prices, and climatic conditions inhibit legume establishment. A small amount of Barley is grown for livestock feed, but most barley acreage is currently in CRP. Past research on canola has focused on production but lack of processing and marketing infrastructure has restricted crop acceptance. Alaska's agronomic crops are hindered by high transportation costs for obtaining inputs and reaching viable markets.

Vegetable crops: Potatoes are the highest value vegetable crop followed by carrots and lettuce. The majority of vegetables are sold on the wholesale market for in-state consumption. The majority of growers use farmers markets, roadside stands, and subscription farms to sell their crops at premium prices. The tourist industry offers a significant marketing opportunity when crops are available; and inroads into supplying vegetables to this sector of the State's economy are currently being developed. There is a small but growing organic industry in the state.

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

A1. Limited financial and personnel resources will always be a weakness, however sufficient resources are found to ultimately provide needed services.

A2. Given the numerous categories within the animal segment of this program, an increase in staffing would be necessary to meet the varied needs of Alaskan animal owners.

A3. Commercial vegetable sales in Alaska are limited to farmer-marketed systems for sale in local markets.

A4. Given the numerous categories within the horticulture segment of this program, an increase in staffing would be necessary to meet the varied needs of Alaskan horticulturalists.

A5. Change in the status of CRP lands in Alaska within the next five years will precipitate assistance to landowners as decisions are made concerning change in land use.

A6. Focus on outreach to nursery and greenhouse owners has declined. Owners often receive training from outside sources.

A7. Alaska will remain a major importer of food and other agricultural and horticultural commodities.

A8. Alaska economy will remain a stable market economy.

2. Ultimate goal(s) of this Program

1. Decrease Alaska's dependence on imported food.
2. Increase production and economic viability of Alaskan crop and livestock farms.
3. Improve food production from community gardens, home gardens and small-scale livestock production.
4. Increase production and economic viability of greenhouses, nurseries, landscapers, garden centers, and other commercial horticulture enterprises.
5. Improve the quality, beauty and diversity of home gardens and landscapes.

V(F). Planned Program (Activity)

1. Activity for the Program

Group and one-on-one meetings concerning specific sectors of the industry as well as the entire agriculture and horticulture industry in Alaska. Methods in in-person and distance delivery.