

2007 University of Alaska Combined Research and Extension Plan of Work

Invasive Weeds, Noxious Plants and Pest Management

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 212 5% Pathogens and Nematodes Affecting Plants
- 213 20% Weeds Affecting Plants
- 214 5% Vertebrates, Mollusks, and Other Pests Affecting Plants
- 216 70% Integrated Pest Management Systems

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

1. Situation and priorities

Biological overview: Alaska's agriculture, forestry and horticulture sectors cover a large geographic region over a large range of climatic conditions. All regions are characterized by a short growing season (May-Sept.), cold soils, long summer day length and seasonal greenhouse and nursery production. Throughout the state, Alaska's wild lands are primarily pristine, with few established, imported pests

Situational overview: Alaska imports about 95 percent of the food it consumes. Alaska has minimal agricultural infrastructure and virtually no processing capability. Alaska supports two major international air cargo and sea ports, and also hosts hundreds of thousands of out of state visitors annually. Alaska's borders offer limited pest control infrastructure outside of Anchorage. Exotic and imported pests may pose a serious threat to Alaska's natural resources. Efforts to prevent, monitor, identify, and provide control options for exotic species are part of an "early detection and rapid response" protocol, which is essential to Extension and its collaborative partners.

Consumer Horticulture: Retail sales of plant materials contaminated with a variety of pests continue to challenge the state, particularly the agricultural and horticultural industries. Last year's potato late blight infestation has been blamed on the importation of Pacific Northwest grown tomatoes, an alternate host of late blight. IPM Pest Scouts are often the first defense against these invasive plant pests.

Landscape: Trees, shrubs and other ornamentals introduced into Alaska have the potential to bring with them one or more pests. The industry relies upon Extension's pest management expertise to support their pest management efforts.

Subsistence Gardens: Home gardens and home food processing provide significant portions of many families' food needs in support of a subsistence lifestyle. There are few resources available to meet the pest management needs of this clientele outside Extension. The number of people practicing gardening is increasing annually statewide which is leading to increased demand for pest management information.

Agronomic Crops: Increasing invasive weed issues, sporadic grasshopper infestations and increasing foliar diseases on cereal and grass hay crops will generate future pest management needs.

Vegetable crops: Alaska's highest value vegetable crop is potatoes followed by carrots and lettuce. These and a few other major vegetable crops require the most agricultural pest management efforts. Recent potato late blight disease outbreaks have, for the first time, left Extension under-funded to support late blight pest scouting of potatoes in the Mat-Su Valley, Alaska's largest agricultural region.

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

1. Assumptions made for the Program

- A1. Extension's reliance on soft-funding (grants) to support its pest management activities can affect the stability of the program. Faculty and staff member' diligent efforts have been instrumental in acquiring sufficient funding to support the program and will continue to do so in the immediate future.
- A2. The demand for pest management information and education in Alaska will remain high.
- A3. Alaska will remain a major importer of food and other agricultural and horticultural commodities, including forest products.
- A4. Forest pest identification and monitoring will remain a high priority for UAF-Cooperative Extension Service (CES) and its State and Federal partners.
- A5. Exotic or introduced pests will continue to enter Alaska at current or enhanced rates.
- A6. The Alaska Pest Management Program will continue to be the first line of defense against exotic pest introductions.
- A7. Local and regional pest management information networks will remain premier statewide resources.
- A8. Pesticide education and certification will remain an important priority statewide.
- A9. Alaska economy will remain a stable market economy.

2. Ultimate goal(s) of this Program

The efforts of Extension, in partnership with other agencies working in the state, will prevent Alaska from experiencing the economic, environmental and social impacts from invasive weeds and noxious plants that the lower 48 contiguous states have experienced.

V(F). Planned Program (Activity)

1. Activity for the Program

Will conduct group and one-on-one educational activities with specific sectors of the pest management industry, the agricultural and horticultural industry and the general public to provide pest identification and management information. Will use mass media techniques to distribute information, particularly the Internet. Will monitor selected urban and rural communities for the presence of invasive weeds and noxious plants. Will work with partnering agencies to provide a coordinated response to invasive weeds, noxious plants and pest management.