

FY06 Hatch Integrated Summaries-OAES

Project No.	Acc. No.	Principal Investigator	Title	Approach
ORE00035A	193212	Peterson, C. J.	DEVELOPMENT OF WHEAT VARIETIES ADAPTED TO OREGON WITH IMPROVED DISEASE RESISTANCE, STRESS TOLERANCE, AND SUPERIOR END-USE PROPERTIES	This project will develop and release new wheat varieties with superior disease and insect resistance and enhanced stress tolerances that minimize production risks, increase economic returns to growers, promote adoption of sustainable farming practices, and increase demand and marketability of PNW wheat.
ORE00049A	195277	Myers, J. R.	BREEDING AND TESTING VEGETABLE CROPS FOR PROCESSING, FRESH MARKET, AND HOME GARDEN	Oregon has a unique growing environment for vegetable production. Many vegetable varieties developed elsewhere are not adapted to the climate or the pests and diseases that may be a problem in Oregon, but nowhere else in the U.S. For adapted and productive varieties, breeding must be done in the environment for which the vegetable varieties are intended. Through trials and breeding, we intend to identify or develop vegetable varieties that are adapted and productive in Oregon.
ORE00106	178740	DelCurto, T.	RANGE BEEF PRODUCTION STRATEGIES TO ENHANCE ECOLOGICAL AND ECONOMICAL INTEGRITY	A. Beef cattle producers in the Pacific Northwest and Intermountain region have high winter feeding costs. A. Inproper management of grazing leads to riparian degradation and can impact water quality and fisheries habitat. A. This project examines winter management strategies and alternatives to traditional winter management that may decrease beef production costs for beef cattle producers. B. This project examines the impact of cattle on mountain riparian areas and systematically evaluates strategies that may be effective in reducing the overutilization of riparian resources.
ORE00120	194641	Giannico, G.	THE ROLE OF HABITAT IN MAINTAINING FISH ABUNDANCE AND LIFE HISTORY DIVERSITY	Certain land use practices contribute to the problem of fish habitat degradation, fragmentation and loss. This project examines how fish, salmonids in particular, utilize freshwater and estuarine habitats and what factors affect their distributions. Based on this information it determines how changes in habitats affect fish survival and abundance, and makes recommendations on how to restore habitats.
ORE00124	92989	Krueger, W. C.	ECOLOGY AND MANAGEMENT OF FOOTHILL RANGELANDS...WITH EMPHASIS ON WATER AND LAND RELATIONSHIPS ACROSS OREGON'S ECOLOGICAL PROVINCES	Incomplete understanding of both the physical and managerial systems associated with ecological and land use features promote illogical regulation of each. The objective of this project is to determine the most effective land use practices that will result in economic and environmental sustainability of Oregon's ranch lands.
ORE00126	195365	Tanaka, J. A.	ECONOMIC AND POLICY ANALYSIS OF RANGELAND MANAGEMENT OPTIONS	Rangelands are being impacted by a variety of uses and users. This project examines the economic impacts of alternative management and policy options.
ORE00131	178770	Meyer, H. H.	INCREASING SHEEP PRODUCTIVE EFFICIENCY	Potential lamb production of prolific ewes is compromised by both high prenatal loss of embryos and lack of adequate milk to rear multiple lambs. This project examines factors contributing to embryonic loss and the effect of East Friesian genes on increasing milk production.
ORE00147	199876	Kennedy, P. L.	ECOLOGICAL ANALYSIS OF RURAL LAND USE PRACTICES	There is strong evidence to suggest the decline in agroecosystem biodiversity is related to changing agricultural practices, and these changes have caused declines in a wide variety of plants and animals. I am developing a research program that will increase our understanding of the effects of rural land use practices on biodiversity in western rangelands. The results of my research program will be used to develop sustainable rural land use practices.
ORE00162	174902	Sullivan, D. M.	UTILIZATION OF MUNICIPAL AND INDUSTRIAL BYPRODUCTS IN AGRICULTURE	Byproducts from farms, industry, and cities have nutrient value for crop production, but careful management practices are needed to protect environmental quality. This project develops guidelines for appropriate utilization of byproducts to protect environmental quality and to provide economical alternatives to landfill disposal or incineration.
ORE00182A	202050	Sullivan, D.	CHEMISTRY, BIOAVAILABILITY, AND TOXICITY OF CONSTITUENTS IN RESIDUALS AND RESIDUAL-TREATED SOILS	Nitrogen (N) and phosphorus (P) limit aquatic plant growth in lakes and slow-moving surface water bodies. Elevated nitrate-nitrogen concentrations in groundwater are also a public health concern. The purpose of this project is to develop improved procedures for assessing environmental risk associated with agricultural soil and nutrient management practices. Project findings will assist land managers and public agencies in choosing effective management practices to protect surface water and groundwater resources.
ORE00183A	198144	Wysocki, D. J.	SUSTAINABLE SOIL, WATER AND CROP MANAGEMENT STRATEGIES FOR SEMIARID OREGON	Soil and water conservation are very important in sustaining dryland farming in semiarid Oregon. Adopting direct seed farming and producing high end use quality wheats are important aspects that will keep farms in Oregon profitable. This project examines direct seed farming practices and nutrient management strategies. The purpose of this project is to test and develop conservation farming practices that protect soil health and water quality and improve wheat end use quality and maintain or enhance current wheat markets.
ORE00242A	194956	Ball, D. A.	INTEGRATED WEED MANAGEMENT SYSTEMS FOR EASTERN OREGON DRYLAND CROPS	Winter annual grass weeds are the most troublesome weeds in dryland winter wheat cropping systems. This project develops management practices to control winter annual grass weeds in wheat and minimize problems with herbicide resistant weeds.
ORE00245A	194111	Christensen, N. W.	MANAGING PLANT NUTRIENTS FOR CROP PRODUCTION AND ENVIRONMENTAL PROTECTION	The sustainability of Oregon's agricultural production systems depends on the ability of growers to increase production efficiency and meet crop quality standards while protecting soil and water resources. Field and laboratory research will be conducted to develop tools and practices that farmers can use in managing fertilizers applied to cereal grains and specialty crops.
ORE00249A	198681	Parke, J.	MANAGING PLANT MICROBE INTERACTIONS IN SOIL TO PROMOTE SUSTAINABLE AGRICULTURE	The ability of plant pathogens to survive in soil can be affected by the other soil microorganisms. Organic amendments added to the soil or potting mix can also affect their survival. This project investigates the ability of a certain plant pathogen to survive in soil and transmit disease.
ORE00259A	181605	Ingham, R. E.	DESIGNING NEMATODE MANAGEMENT STRATEGIES FOR THE FUTURE OF OREGON POTATO PRODUCTION	A large proportion of potato production acreage in the Pacific Northwest is at risk from quality defects caused by nematode diseases that cause potato crops to be rejected. Current practices use large amounts of expensive soil fumigants. This project will investigate chemical control strategies to achieve acceptable quality with less and/or more economical pesticide inputs. It will develop cultural strategies that suppress nematodes before potato is planted so that further-reduced levels or no nematicide additions are necessary.
ORE00267	203745	Jepson, P.	ECOLOGICAL RISKS TO AQUATIC AND TERRESTRIAL ARTHROPODS EXPOSED TO IPM PRACTICES	Pest management practices including cultivation practices and agricultural chemical use engender risks to beneficial invertebrates, including pollinators and the predators and parasites of crop pests. Reductions in the density and diversity of these invertebrates has measurable ecological and economic impacts, including increases in economically damaging pest attacks and reduced crop yield that results from lower pollination efficiency. These risks and their consequences have proven difficult to predict, and there is a need to establish a better understanding of the mechanisms that underlie the negative impacts of pest management practices on non-target invertebrates to develop alternative practices and mitigation procedures. The purpose of this study is to develop quantitative procedures that improve our ability to assess the risks that pest management practices pose to beneficial invertebrates. It will review and propose improvements to current risk assessment procedures and develop new approaches to risk assessment that scale up to incorporate population processes in agricultural landscapes over multiple years.

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ORE00268	177941	Smiley, R. W.	GENETIC RESISTANCE TO CEREAL ROOT DISEASES: FUSARIUM, PRATYLENCHUS AND HETERODERA	Fungi and nematodes that invade root systems reduce production efficiency for wheat and barley. Chemicals, genetic resistance and economical crop management practices are not available for reducing economic damage. This project will examine a broad range of wheat and barley germplasm to identify sources for genetic resistance to Fusarium crown rot, root-lesion nematode and cereal cyst nematode.
ORE00274	194320	VanBuskirk, P. D.	INTEGRATED PEST MANAGEMENT (IPM) OF ARTHROPODS OF PEAR IN SOUTHERN OREGON	Managing pests in a cost-effective and environmentally friendly manner is an important component of a profitable and sustainable tree fruit industry in Oregon. The goal of this research is to develop and implement an integrated pest management program in tree fruit, which minimizes the use of disruptive, broad-spectrum pesticides and maximizes the benefits of naturally occurring biological control agents through the use of selective pest management techniques.
ORE00276A	195644	Buckhouse, J. C.	WATERSHED RESEARCH ON OREGON'S RANGELANDS	Livestock and agricultural practices are often seen by the public and some governmental agencies as potential water quality hazards. The purpose of this research is to evaluate the relationships between land uses and water quality with an eye toward finding workable compatibilities and fostering them.
ORE00278	165275	Crowe, F. J.	CONTROL OF WHITE ROT DISEASE ON ALLIUM CROPS	White rot disease, a fungus which permanently infests field soil, threatens to eliminate both garlic seed and onion seed production within this region within 10 years as it becomes more widespread in the region. This situation is repeated in other areas of Oregon, the Western U.S. and the world. The purpose of this project is to learn how to control and/or eliminate white rot disease on Allium crops, such that infested fields may be replanted to Allium crops without fear of uneconomical losses.
ORE00284A	206020	Jenkins, J.	AGROCHEMICAL IMPACTS ON HUMAN AND ENVIRONMENTAL HEALTH: MECHANISMS AND MITIGATION	The growing demand for food and fiber will place greater strain on agricultural production and environmental stewardship. Agrochemicals will remain fundamental as integrated pest management tools to assure an abundant food supply. Inevitably, a significant portion of applied agrochemicals may be lost to the surrounding environment, where they can adversely affect human and environmental health. The use of conventional and emerging crop protection chemistries in agricultural and urban pest management will require research on the fate and effects of agrochemicals, along with mitigation strategies, to minimize risks to humans and the environment. Replacement of the W-45 multistate research project will enable multistate collaborations to more effectively advance and transfer science to agricultural and regulatory stakeholders, who require solutions to complex human and environmental health concerns that are beyond the scope any individual State Agricultural Experiment Station or ARS.
ORE00291	193961	Crowe, F. J.	REDUCTION OF BACTERIAL BLIGHT ON CARROT SEED CROPS AND CARROT SEED PRODUCED IN CENTRAL OREGON.	The carrot seed crop and harvested seed from central Oregon is abundantly contaminated by the bacterial blight pathogen; such seed-borne bacteria are a potential source of epidemics of bacterial blight in commercial fields. To have a better understanding, control and management of several diseases which threaten both carrot seed quality and continued carrot seed production, one of the top valued crops in central Oregon, and which also have regional or even national and international implications.
ORE00304	81625	Shock, C. C.	DEVELOPMENT OF CROPPING PRACTICES FOR PROFITABILITY AND MINIMUM ENVIRONMENTAL IMPACT	Intensive agriculture in Malheur County, Oregon depends on the selection of highly productive crop varieties, competitive marketing, practical levels of water and fertilizer inputs, the solution of environmental issues to assure sustainability, and favorable governmental policies. Continued efficient agricultural production requires solutions to these varied and complex problems.
ORE00306	97054	Forsberg, N. E.	ROLE OF UBIQUITINATION IN CONTROL OF MUSCLE PROTEIN DEGRADATION	This project is studying two proteins which may play a significant role in skeletal muscle growth control.
ORE00314	172488	Bohle, M. G.	FORAGE MANAGEMENT AND IMPROVEMENT IN CENTRAL OREGON	The problem is in keeping the forage products economically sustainable in central Oregon. The purpose of this project will be to provide producers and local, and regional seed company representatives with the latest unbiased production data for the forage species, varieties and cultural practices such as fertility, weed control, diseases, planting dates, seeding rates, and harvest timings.
ORE00315	168893	Strik, B. C.	TESTING AND EVALUATION OF BERRY CROPS FOR COMMERCIAL PRODUCTION IN THE PACIFIC NORTHWEST	With the exception of blueberries, where about 42% of the crop is marketed fresh, over 90% of Oregon's berry crops are processed. In 1994, the value of berry crops added by handling or processing was estimated at \$178 million; in 2004 this would be estimated at \$220 million. Oregon ranks among the top four states in production of strawberries, red and black raspberries, and blackberries. Oregon berry crops are noted for their high quality, including color, flavor, and texture. The processed value of berry crops and grapes between 1985 and 1993 increased 78%. To remain competitive, especially in a global market, Oregon berry growers must continue to produce a high quality product. Industry goals, to develop cultivars that are relatively pest resistant and produce good yields of a high quality fruit for processing and/or fresh market match the goals of this project. Development of new cultivars that maintain or improve on industry standards for yield and quality is a key goal. Understanding what factors control yield and quality and how they might be manipulated through production systems or breeding is also a goal.
ORE00316	168950	Strik, B. C.	PRODUCTION SYSTEM RESEARCH AND PHYSIOLOGY OF BERRY CROPS	Oregon's competitiveness in the national and world berry market will depend on maintaining high fruit quality and increasing consistency of yield and profitability per unit land area. Production of trailing blackberries has fluctuated through the years (as much as a 70% crop loss) due to winter injury. Berry crops are intensively grown and have a high labor requirement. Most of the present hardy kiwifruit production is being marketed fresh; quality concerns are inconsistent fruit size, blemishes, and uneven ripening that affects post-harvest fruit quality. An understanding of crop nutrient accumulation, partitioning, and remobilization are critical to the development of appropriate fertilization strategies for such crops. Very little information has been reported on these processes in berry crops. This project studies potential production systems that improve or maintain quality and help growers produce a consistently high yield economically. Systems that reduce the susceptibility of trailing blackberry to cold injury are being researched. We will modify cultural practices, where possible, to further increase machine harvest efficiency. The impact of harvest date and post-harvest practices on shelf-life and quality of hardy kiwifruit will be studied.
ORE00317	172491	Butler, M. D.	ENHANCE MANAGEMENT STRATEGIES FOR BLUEGRASS SEED PRODUCTION SYSTEMS	Effective management strategies require continual refinement for control of diseases, weeds, insects, and the use of plant growth regulators for economically sustainable bluegrass seed production in central Oregon. The purpose of this project is to enhance management strategies for Kentucky and rough bluegrass seed production in central Oregon.
ORE00318A	195790	Baham, J. E.	BIOGEOCHEMISTRY AND WATER QUALITY OF SEASONALLY REDUCED SOILS; AND NUTRIENT MANAGEMENT IN WESTERN OREGON ACID VINEYARD SOILS	Below-ground biological and chemical processes in poorly drained/riparian zone soils control many aspects of nutrients, trace metal, and organic chemical (water quality) flow into surrounding stream and aquifers. This project addresses the role of Fe and Mn minerals which play a key role in water quality issues. The formation of drainage impeding Fe-cemented layers will also be examined.
ORE00324	131870	Hannaway, D. B.	DEVELOPING FORAGE SPECIES MAPPING AND DECISION SUPPORT SYSTEMS WITH GLOBAL PARTNERS	Plants utilized in the most productive and least damaging manner is prudent. Land managers want to wisely select plants. Currently, putting the right plant into the right place is difficult. An abundance of knowledge is available and better selection can be aided with better selection tools. This project will develop web-based information and Decision Support Systems (DSS) that will aid farmers in improving agricultural productivity, managing natural resources, protecting from disasters, and improving the environment to ensure sustainable development.
ORE00329	193123	Stone, A. G.	INTEGRATED CROP MANAGEMENT IN OREGON VEGETABLE PRODUCTION SYSTEMS	This project will investigate the use of a variety of IPM strategies for pest management in vegetable production systems in Oregon. Strategies include cover crops and raw and composted manure for management of snap bean and sweet corn root rots and snap bean white mold; and monitoring, sanitation, novel chemistries, and region-wide spatial management for control of cabbage root fly.
ORE00334A	206200	Gamroth, M. J.	WHOLE FARM DAIRY AND BEEF SYSTEMS FOR ENVIRONMENTAL QUALITY	Feed is the largest cost of producing livestock. Feeds produced on or near the livestock operation can use manure nutrients produced by animals for forage growth without harm to the environment. This project will help growers produce locally grown proteins for livestock rations. Improved farm forage production will improve manure nutrient use.

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ORE00337	205714	Froman, D. P.	INTEGRATIVE FUNCTIONAL AND PHYSIOLOGICAL GENOMICS OF POULTRY	Sperm cell function ultimately depends upon the quality and copy number of proteins found in the cell. In the post-genomics era research will be done to identify key proteins affecting critical cellular processes or functions. The identification of these proteins will necessarily identify specific genes in the case of species whose genomes have been sequenced. The identification of critical genes will afford primary breeders a knowledge base that addresses animal performance at the cellular level.
ORE00343A	195256	Hruby, D. E.	ORTHOPOXVIRUS METALLOPROTEINASE INHIBITORS	Smallpox is considered one of the most significant threats for use as an agent of bioterrorism. Smallpox has been eradicated, however the last 30 years have produced a population that is highly susceptible to infection. The purpose of this project is to design and develop anti-poxvirus drugs. These drugs will target a protein that has an essential function for virus proliferation.
ORE00354	195339	Savage, T. F.	GENETICS SELECTION FOR INCREASED HATCHABILITY OF JAPANESE QUAIL EMBRYOS WHEN INCUBATED AT 102F	Propagation of avian species can only occur through successful biological changes in a fertilized egg. This project attempts to identify genes present within the avian embryo that may influence the length of the incubation process and determined if selective breeding can shorten the incubation period without adverse biological consequences.
ORE00357A	198296	Young, W. C.	SEED PRODUCTION MANAGEMENT	Cool-season grass seed production systems changed dramatically in recent years as residue management by open field burning was restricted. Alternative systems vary depending on the kinds of crops grown, soil type and slope and farm size. Defining management practices for seed growers that are economically viable and environmentally sound is the goal of this research project.
ORE00362A	194513	Bolte, J. P.	DECISION SUPPORT SYSTEMS FOR AGRICULTURE AND RESOURCE MANAGEMENT	This project will assist resource managers and stakeholders in understanding processes in a range of ecological systems, and allow incorporation of scientific understanding into management and stakeholder decision-making.
ORE00366	172490	Arp, D. J.	MOLECULAR INVESTIGATIONS OF THE AMMONIA METABOLISM OF NITROSOMAS EUROPAEA	Certain agricultural practices contribute to the problem of nitrate in water. This project examines the basic underpinnings of the microbial processes involved in nitrate production.
ORE00380A	205269	Johnson, K.	EPIDEMIOLOGY AND CONTROL OF DISEASES OF FRUIT CROPS IN WESTERN OREGON	Fire blight is a serious disease of pear and apple that impacts productivity of orchards, and prohibits export of these fruits to countries that do not have the disease. Our first purpose is to improve control of fire blight of pear and apple. Our second purpose is to evaluate the risk of movement of the fire blight pathogen in association with pear fruit.
ORE00389	193843	James, S. R.	DEVELOPING AND MANAGING NEW POTATO VARIETIES	Develop agronomically efficient, high-yielding potato varieties with resistance to diseases, viruses, insects and environmental stresses for frozen processing, fresh market and chipping uses. Screen exotic and domestic germplasm for resistance to powdery scab and evaluate chemical compounds for efficacy in controlling root and tuber field infections or powdery scab caused by <i>Spongospora subterranea</i> .
ORE00405	80957	Nunez-Elisea, R.	ROOTSTOCK AND INTERSTEM EFFECTS ON POME AND STONE FRUIT TREES	To increase grower efficiency by reducing inputs of pesticides, water, nutrients, and labor, while increasing the percentage of the production of high quality fruit in the size range demanded by retail markets. To develop rootstocks which result in smaller trees which are easier to prune, train, harvest, control insects and diseases, and produce large, high-quality fruit.
ORE00410	195220	Zhao, Y.	ENHANCEMENT OF QUALITY AND NUTRITIONAL VALUES OF OREGON SMALL FRUITS	Extension of shelf-life, enhancement of storability, and development of value-added small fruit products are on the top list of regional agricultural industry needs. The knowledge of physicochemical properties is essential for the design and development of value-added products. The purpose of this project is to improve the keeping quality and develop value-added Oregon small fruit products by using advanced food processing technologies.
ORE00418	199909	Goddik, L.	OPTIMIZING THE VALUE OF OREGON WHEY POWDER	Oregon whey powder is a low price commodity product even though it is well-documented that it is made from high quality milk. This project defines the unique properties of Oregon whey powder and evaluates potential competitive advantages. The effect of variability in processing parameters will be investigated to optimize the whey powder.
ORE00419	168111	Azarenko, A.	MULTI-DISCIPLINARY EVALUATION OF NEW APPLE CULTIVARS	Small local farmers are in need of apple varieties suitable for fresh market production. The purpose of this project will be to identify apple varieties that meet the criteria for small farmers in Oregon.
ORE00434A	193171	Sugar, D.	CONTROL OF POSTHARVEST DECAY OF WINTER PEARS IN SOUTHERN OREGON	Postharvest fungal decay causes serious losses in the winter pear industry of the Pacific Northwest, especially in the Bosc cultivar. This project will seek to develop methods of reducing losses to postharvest decay in winter pears, to facilitate successful long-term storage and marketing.
ORE00435A	201904	Shock, C.	REDUCING BARRIERS TO ADOPTION OF MICROIRRIGATION	Irrigated agriculture is facing increasing public pressure and the threat of increased regulation. Municipal, industrial, and environmental groups are increasingly concerned with the fact that nearly 80% of the annual water supply in United States is being used for irrigated agriculture. In some instances poor irrigation practices have resulted in environmental degradation due to the transport of nutrients, pesticides, salt, and trace elements to surface and ground waters. These negative effects of irrigation can be overcome by microirrigation; drip and micro sprinkler irrigation. The purpose of this project is to promote drip and micro sprinkler irrigation by overcoming barriers to their adoption.
ORE00445A	206308	Bai, J.	POSTHARVEST QUALITY AND SAFETY IN FRESH-CUT VEGETABLES AND FRUITS	Pear texture is similar to apple (firm and crispy), however, at a crispy stage, pears lack aroma, and have a flat taste. The objective for this project is to develop appropriate pre- and post-harvest practices to produce a tasty pear salad.
ORE00463	137124	Hellickson, M. L.	POSTHARVEST PRESERVATION, STORAGE, HANDLING AND TRANSPORTATION OF FRESH FRUITS AND VEGETABLES	Improved storage systems and practices are important aspects of the grower to consumer effort necessary to keep U. S. fruit industry competitive. Documenting bin placement patterns that will improve air flow distribution uniformity throughout the storeroom will reduce fruit quality losses and save energy, thereby increasing profits.
ORE00484A	195070	Morrissey, M. T.	RESEARCH IN THE DEVELOPMENT OF VALUE-ADDED SEAFOOD PRODUCTS	To meet the challenges ahead, small to mid-size companies in rural areas that depend on natural resources must rely on innovation. To achieve this innovation, especially in the area of value-added products, individuals and firms must have access to information, research, and technology. This project will show the feasibility of developing a portfolio of value-added products from fish and shellfish. Several of these products will use High Pressure Processing as a means of extending the shelf-life of the product.
ORE00498A	181607	Park, J. W.	VALUE-ADDED PROCESSING FOR FISH AND FISHERY BY-PRODUCTS	Conventional protein recovery system yields 20-25%, resulting in a significant amount of proteinous materials unused. Surimi processing also leaves 33,000 mt of refiner discharge in the U.S. each year. Dark muscle fish such as sardine has not been utilized as human food yet. This project will investigate a new protein recovery system for the functional proteins from Pacific whiting and sardine. In addition, consumer-friendly gelatin will be developed.
ORE00504	191029	French, P. D.	FACTORS AFFECTING FEED INTAKE OF PREGNANT NONLACTATING HOLSTEIN AND JERSEY COWS	Jersey cattle will be used as a model to determine factors that control feed intake prior to parturition. Identification of these unknown factors will lead to development of feeding strategies to minimize the depression in feed intake of Holstein cattle commonly observed near parturition. The benefit to the dairy industry will be improved animal health and productivity in the subsequent lactation.
ORE00505	197903	Perry, G. M.	ISSUES IN USE AND PROTECTION OF FARM ASSETS IN OREGON	Policymakers, researchers, farmers and individuals in the agribusiness sector often lack a complete understanding of market processes for farm assets. This project examines markets for durable assets in detail to understand the factors that influence asset values.

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ORE00554	193147	Durham, C. A.	MARKETING AND TRADE OF FOOD AND AGRICULTURAL PRODUCTS	The purpose of this research is to improve the marketing strategies of US food producers and processors.
ORE00555A	201692	Perry, G.	INTERFACING TECHNOLOGICAL, ECONOMIC, AND INSTITUTIONAL PRINCIPLES FOR MANAGING INTER-SECTOR MOBILIZATION OF WATER	Irrigation water is becoming an increasingly scarce resources as non-ag uses increase in importance, in particular in-stream uses to restore aquatic ecosystems. In this project we will seek ways to profitably reduce on farm irrigation use using deficit irrigation.
ORE00569	14885	Azarenko, A. N.	ORCHARD FLOOR MANAGEMENT PRACTICES FOR IMPROVING SOIL QUALITY AND OPTIMIZING NITROGEN UPTAKE	In general, this research program seeks to find management practices that would reduce over-application of nitrogen, improve nutrient cycling, control erosion, and reduce weed pressure in orchard systems. Specifically, this proposal evaluates soil quality/biology and N uptake, utilization, and distribution in a range of alternative orchard floor management systems (AOFMS).
ORE00685A	194580	Lev, L. S.	SUSTAINING LOCAL FOOD SYSTEMS IN A GLOBALIZING ENVIRONMENT: FORCES, RESPONSES, IMPACTS	The globalization of food supply presents significant economic, social, and environmental challenges to Oregon agriculture. As the agriculture and food system becomes more concentrated, it also becomes more vulnerable to disruptions and prone to accidents. This project will result in increased knowledge and understanding about the forces that motivate and shape the formation of local food systems. It will make policy recommendations for improving food system sustainability.
ORE00708	195914	Daeschel, M. A.	ENSURING THE SAFETY OF FRESH AND PROCESSED BERRY FRUITS	Contamination of fresh fruits with potentially life-threatening pathogens is a major food safety problem. Currently, there is an urgent need for determining the modes of contamination, developing intervention strategies to destroy pathogens in fresh and processed fruits, and delivering relevant information to farmers and processors. The long-term goal of this project is to enhance and ensure the safety of Northwest fresh berries and their products including juice and puree. In addition we will implement training and education programs for berry farmers and juice processors.
ORE00708	195914	Daeschel, M. A.	ENSURING THE SAFETY OF FRESH AND PROCESSED BERRY FRUITS	Contamination of fresh fruits with potentially life-threatening pathogens is a major food safety problem. Currently, there is an urgent need for determining the modes of contamination, developing intervention strategies to destroy pathogens in fresh and processed fruits, and delivering relevant information to farmers and processors. The long-term goal of this project is to enhance and ensure the safety of Northwest fresh berries and their products including juice and puree. In addition we will implement training and education programs for berry farmers and juice processors.
ORE00725	188203	Anderson, K. A.	FOOD SAFETY AND ENVIRONMENTAL STEWARDSHIP PROGRA	The Food Safety and Environmental Stewardship Program at Oregon State University is a research laboratory committed to providing the highest quality analytical laboratory research support for: 1) Food Quality Assurance; 2) Environmental Monitoring; 3) Enhancement of Agricultural Production; 3) Recognition and Dissemination of New Knowledge. Creation of Food Safety and Environmental Stewardship Program: technical resources to assist in a systems approach to Oregon food safety, environmental monitoring and agricultural quality.
ORE00817	177045	Weber, B. A.	RURAL COMMUNITIES, RURAL LABOR MARKETS AND PUBLIC POLICY	Rural people want to understand how to improve labor market outcomes and to prepare for changes in demographic trends affecting rural America. They also want to understand how to revitalize economies and to decide what investments are most effective in improving rural economic well-being. The project will provide a strengthened national network of policy analysts to examine specific policies affecting rural areas and information for policy makers on strategies to improve income for low-income workers and on investments to improve community economic well-being.
ORE00908	195964	Fanno, W. L.	ASSESSING ACCESS, INTEREST, AND USAGE OF AGRICULTURALLY RELATED DISTANCE EDUCATION IN THE PACIFIC NORTHWEST	Many agricultural groups lack the information needed for their occupational situation due to time and/or location constraints. The project will evaluate the access, interest, and usage of agriculturally related distance education in the Pacific Northwest.
ORE00912	198306	Johnson, A. J.	STRATEGIES FOR THE NEW FOOD BUSINESS ENTREPRENEUR	New entrants to the processed food industry can provide market alternatives for small to medium sized farms. However, more often than not, these new entrants are faced with the Herculean task of being successful with limited knowledge, employees and capital. This project will identify management processes and activities that will help new entrants to the processed-food industry.
ORE00914	169048	Mate, B. R.	DETERMINING THE CRITICAL HABITATS OF LARGE ENDANGERED WHALES WITH SATELLITE-MONITORED RADIO TAGS	Our planet's large whale species are still endangered despite the current moratorium on whaling. Anthropogenic issues such as ship strikes, fishing entanglement and pollution continue to threaten their recovery. It is vital to protect the habitats most important to their recovery, yet for many species, these critical habitats are not known. The purpose of our project is to determine and characterize the critical habitats of endangered whales in order to enable wise management decisions and assist in the survival and recovery of depleted populations.
ORE00932	188172	Bohnert, D. W.	NUTRITIONAL MANAGEMENT STRATEGIES TO IMPROVE SUSTAINABILITY OF BEEF PRODUCTION IN THE INTERMOUNTIAN WEST	We will conduct experiments designed to provide beef producers with alternatives to traditional beef management that are economically and environmentally sustainable. Experiments will pertain to protein supplementation frequency, energy supplementation of heifers, early weaning, use of irrigated pasture, and early season grazing of native flood meadows.
ORE00942	174508	Tanaka, J. A.	RURAL COMMUNITIES AND PUBLIC LANDS IN THE WEST: IMPACTS AND ALTERNATIVES	Management of public lands deeply divides rural communities. This project examines the economic and social impacts of public land management changes.