

MONTANA UNIVERSITY SYSTEM

2011 BIENNIUM BUDGET PLANNING – NEW PROPOSALS (JANUARY 2008)

UNIT/CAMPUS: MONTANA AGRICULTURAL EXPERIMENT STATION (MAES)	UNIT PRIORITY: ONE OF THREE
NEW PROPOSAL NAME: AGRICULTURAL FIELD EQUIPMENT	
BOARD OF REGENT STRATEGIC GOAL: <u> </u> ACCESS <u> </u> X ECON DEV <u> </u> X EFFICIENCY <u> </u> X RECRUIT/RETAIN	
TOTAL BIENNIAL COST: \$ 2,000,000	FUNDING SOURCES: Montana General Fund
FY 10 TOTAL COST: \$ 1,000,000	FY 11 TOTAL COST: \$ 1,000,000
FY 10 BASE FUNDING REQUESTED: N/A	FY 11 BASE FUNDING REQUESTED: N/A
FY 10 OTO FUNDING REQUESTED: \$ 1,000,000	FY 11 OTO FUNDING REQUESTED: \$ 1,000,000
ADDITIONAL STAFF IN FY10 (FTE): N/A	ADDITIONAL STAFF IN FY11 (FTE): N/A

DESCRIPTION OF NEW PROPOSAL: The Montana Agricultural Experiment Station (MAES) conducts agricultural and natural resources research and outreach throughout Montana on any of the eight geographically dispersed research centers. We routinely implement research projects on private and public lands. In order to conduct this field-based research, a routine complement of equipment infrastructure is necessary. This equipment is not necessarily high tech, nor luxurious. Competitive grant programs do not permit their purchase, as their expectation is that the unit (MAES) submitting a proposal, have the necessary technologies such as a truck, tractor, equipment and livestock trailer, baler, conservation seeders and other field/range implements. On average, many of our vehicles are over 20 years old, require expensive maintenance, pose safety hazards and are energy inefficient. The lifespan of routine field equipment is longer and can be retrofitted in a variety of ways. In reality, the majority of our field equipment is close to scrap metal and should be retired.

HOW SUCCESS IS MEASURED: We will retire existing state vehicles per state disposal processes. We will retire existing field equipment per state disposal processes. All derived revenues will be deposited into ag research center repair and maintenance designated accounts and used as needed for equipment work. Research programs will be more efficient through an increase in research program outputs, decreased fuel consumption, increased employee safety and decreased workers compensation claims and we will be more competitive securing external funds given the new or slightly used equipment infrastructure. Faculty and staff will have more time to conduct field research programs and the programs will not be in a long-term position of overtime or comp time due to severe inefficiencies.

MAES currently has a large commitment to matching monies for LRBP projects, OCHE equipment proposal and existing grower check-off (Montana Wheat and Barley Committee) commitments that prevent a matching fund proposal for the next several years. We are currently replacing equipment when a crisis is present or when a unique grant opportunity arises. Most equipment repair is ad hoc and reactive. An infusion of OTO targeted funds would significantly help the current statewide backlog of modern equipment needs. Wherever possible, we would purchase nearly new equipment to maximize this transformational equipment proposal. Since MAES does not receive tuition, monies from the 6-mil tax or surcharges, we currently have a large prioritized list and no significant mechanism to implement a partial transformation.

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UNIT/CAMPUS: MONTANA AGRICULTURAL EXPERIMENT STATION (MAES)	UNIT PRIORITY: TWO OF THREE
NEW PROPOSAL NAME: RESEARCH SUPPORT PERSONNEL	
BOARD OF REGENT STRATEGIC GOAL: ___ ACCESS <u>X</u> ECON DEV <u>X</u> EFFICIENCY <u>X</u> RECRUIT/RETAIN	
TOTAL BIENNIAL COST: \$ 320,000	FUNDING SOURCES: Montana General Fund
FY 10 TOTAL COST: \$ 160,000	FY 11 TOTAL COST: \$ 160,000
FY 10 BASE FUNDING REQUESTED: \$160,000	FY 11 BASE FUNDING REQUESTED: \$160,000
FY 10 OTO FUNDING REQUESTED: N/A	FY 11 OTO FUNDING REQUESTED: N/A
ADDITIONAL STAFF IN FY10 (FTE): 4	ADDITIONAL STAFF IN FY11 (FTE): 4

DESCRIPTION OF NEW PROPOSAL: The Montana Agricultural Experiment Station (MAES) conducts agricultural and natural resources research and outreach throughout Montana on any of the eight geographically dispersed research centers. In addition, we routinely implement research projects on private and public lands. Faculty-led research and outreach activities encompassing crop and livestock management practices are the foundation of our high impact research. Base funds for faculty remains a key component to our priority program foci, which are significantly leveraged through external sponsored programs. Over time through a combination of budget shortfalls, retention counteroffers, and market and equity factors, the pool of research support staff that conduct routine operations at our field facilities has decreased in the MAES system. This insufficient support staff necessitates that faculty members devote large, unreasonable portions of their time to non-research activities such as livestock management (e.g. feeding, calving), grain and forage production and facilities maintenance. Restoring research support personnel in strategic locations throughout the research center system will allow faculty to devote a much greater portion of their time to research, increasing faculty productivity, retention and faculty and staff safety.

This proposal requests increasing research support personnel by 4 FTE in FY2010 and an additional 4 FTE in FY2011 through a base adjustment. Each research support personnel would require a budget of \$40,000 for salary and benefits.

HOW SUCCESS IS MEASURED: MAES is continually being asked to keep doing the present suite of research programs, while adding new facets of research with oilseeds for energy production, alternative cropping systems (e.g. organic transition and organic), livestock grazing practice changes through breeding and so on. Through the addition of research support staff, existing faculty-driven programs will be in a better position to do more by adding lower salaried personnel. Our research programs in general would expand and we could be more responsive to problem issues when or, ideally, before they arise to a significant level. Faculty will devote more of their time to research activities that will lead to program growth and greater adaption of new technologies, increased efficiencies and economic development.

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UNIT/CAMPUS: MONTANA AGRICULTURAL EXPERIMENT STATION (MAES)	UNIT PRIORITY: THREE OF THREE
NEW PROPOSAL NAME: RESEARCH FACULTY TO MEET EMERGING DEMANDS	
BOARD OF REGENT STRATEGIC GOAL: <u> </u> ACCESS <u> </u> X ECON DEV <u> </u> X EFFICIENCY <u> </u> X RECRUIT/RETAIN	
TOTAL BIENNIAL COST: \$ 400,000	FUNDING SOURCES: General Fund
FY 10 TOTAL COST: \$ 200,000	FY 11 TOTAL COST: \$ 200,000
FY 10 BASE FUNDING REQUESTED: \$200,000	FY 11 BASE FUNDING REQUESTED: \$200,000
FY 10 OTO FUNDING REQUESTED: N/A	FY 11 OTO FUNDING REQUESTED: N/A
ADDITIONAL STAFF IN FY10 (FTE): 2	ADDITIONAL STAFF IN FY11 (FTE): 2

DESCRIPTION OF NEW PROPOSAL: The Montana Agricultural Experiment Station (MAES) conducts agricultural and natural resources research and outreach throughout Montana on any of the eight geographically dispersed research centers. We routinely implement research projects on private and public lands. Faculty-led research and outreach activities encompassing crop and livestock management practices are the foundation of our high impact research. Base funds for faculty in key emerging areas are high priorities for Montana agriculture.

This proposal requests four research positions with two each year of the biennium with operational support for each position. Key areas of research to be added through this base adjustment initiative include: (a) bioenergy/biomass geneticist, (b) beef livestock functional genomics, (c) natural resource economics and policy, and (d) rangeland management. A. Oilseeds (camelina, canola) are becoming very important as renewable resources for biodiesel and industrial applications and show promise for adaptation to Montana. A geneticist would adapt crops to grow in Montana and provide a local energy source. B. Understanding the genetic mechanisms relating to genotype (genetics) and phenotype (traits) using new research tools and approaches will enhance beef production management. Research on digestion, metabolism and disease resistance via functional genomics research will catalyze innovation in the world-renown Montana seed stock industry. C. The economics and policy ramifications of natural resource issues/conflicts demand sound analysis and viable economic options if we are to thoughtfully deal with energy development, livestock-wildlife interactions, land use change/conflicts, environmental impacts of development and a myriad of other issues. Through applications of the results of this analysis, sound management could be implemented to the benefit of federal, state, public and private partners with state and federal agencies. D. A range management scientist is needed to integrate with the animal nutrition program and quality facilities at the Northern Ag Research Center in Havre. Grazing and riparian management are key to utilizing and protecting rangeland resources. Integration with animal genetics and nutrition programs will create economic opportunities for efficiencies and environmental stewardship practices.

HOW SUCCESS IS MEASURED: Increase in the adoption of new crops through expanded acreage, improvements in the seed stock industry through employment and improved genetics, expanded economic and natural resource policy options and improved rangeland management practices will be outcomes. In addition, the additional positions will provide increased funding through securing extramural funds and increasing the number of research collaborations with scientists and industry throughout the Northern Great Plains.