

MINUTES OF THE MEETING
JOINT SUBCOMMITTEE
ON EDUCATION APPROPRIATIONS
MONTANA STATE
HOUSE OF REPRESENTATIVES

January 30, 1985

Tape 33 Side A

The meeting of the Education Subcommittee was called to order by Chairman Gene Donaldson at 8:05 A.M. on Wednesday, January 30, 1985, in Room 104 of the State Capitol.

All members were present.

The purpose of the meeting was EXECUTIVE ACTION on the Budget of the Agricultural Experiment Station.

Bill Sykes (33:A:045) of the Legislative Fiscal Analyst's office gave a review of the Experiment Station's budget. He said he met with personnel from the agency and worked out details on issues in the budget. He said he made a mistake in the calculation of health benefits. LFA current level for personal services should be \$6,305,649 for each year. Mr. Sykes said that if the faculty and graduate research assistants are excluded from 4 percent vacancy savings, an additional \$141,022 would be added to each fiscal year, bringing the LFA personal services total to \$6,446,671 for each year.

At this point, Chairman Donaldson asked Mr. Sykes if the budgets of the Bureau of Mines and other agencies were handled in this same way as far as faculty vacancy savings are concerned. Mr. Sykes said the faculties of the other agencies which had appeared before the Subcommittee were excluded from vacancy savings.

Mr. Sykes said that in the personal services area the issue which still should be considered is the adding back of the dairy FTE at \$62,353 for each year. Also, the Subcommittee needs to consider the issue of higher salaries for part-time employees. He said that on the earmarked revenue, the Agricultural Experiment Station will not generate the amounts of revenue projected by the LFA. He said the projected amount should be \$520,000 for each fiscal year. The General Fund total would change as a result of adding in the changes made in the personal services area, and subtracting the lower amounts projected for earmarked revenue. The new General Fund totals are \$5,720,052 for FY 86 and \$5,681,650 for FY 87, Mr. Sykes said.

A general discussion and question and answer session followed between Mr. Sykes, Sib Clack, Office of the Budget and Program

Education Subcommittee
Minutes
January 30, 1985

Planning, Dr. Welsh, Director, Agricultural Experiment Station, Dr. Tietz, President, Montana State University,
and members of the Subcommittee (33:A:145).

Regarding the equipment budget, Chairman Donaldson said that when large equipment items are requested, it becomes necessary to approach them on an item-by-item basis. He said the best possible advice available relative to equipment needs in a station comes from members of the advisory committees.

Mr. Sykes distributed a revised list of equipment from the Experiment Station (EXHIBIT 1). Mr. Sykes explained that Dr. Welsh re-sorted the list to show items that are to be replaced, requested new items and upgrades.

Discussion of the personal services area of the budget followed (33:A:308).

Representative Moore (33:A:384) moved adoption of LFA current level personal services at \$6,446,671 for each year. The motion passed unanimously.

A discussion of the dairy research project followed between the Subcommittee members, Dr. Welsh and Dr. Tietz (33:A:441).

Dr. Welsh explained that the dairy herd and its maintenance have been discontinued. However, the research project work in the area of animal nutrition still deals with questions that apply to the dairy industry. Therefore, even though the dairy itself is closed, the people will be reassigned to other segments of animal nutrition work.

Dr. Tietz explained that only those FTE dependent upon the income from the dairy have been eliminated; the positions that were funded by the state have been transferred over to the new nutrition program.

Senator Hammond asked what adjustments caused the discontinuance of the off-station plots. Dr. Welsh said the issue that resulted in the reduction of off-station testing is associated with the vacancy rate problem. Senator Hammond asked if, with the adjustment of the vacancy rate, off-station testing would resume. Dr. Welsh said if the personal services budget that was just approved holds, then the agency will be able to resume the off-station work. Senator Hammond said this is probably the most effective work being done in agriculture in northern and northeastern Montana.

Senator Haffey (33:A:561) made a motion that \$62,353 for dairy research be approved for each year, and that it be included in current level, and added to the \$6,446,671 for personal services. There was a roll call vote, and the motion passed 6 - 1 with Representative Peck dissenting.

Education Subcommittee
Minutes
January 30, 1985

Tape 33 Side B

A discussion of part-time employees' salaries followed. Jack Noble, Office of the Commissioner of Higher Education, said that when the operating budget instructions for the University System is released, in order to have the FTE compiled for part-time people in a uniform rate, a value is assigned. In 1984 the value for non-physical plant and part-time employees was arrived at by dividing the budget category by \$15,400. This is done for all institutions so that there is a uniform FTE calculation, Mr. Noble said.

Further discussion of the issue followed between Mr. Noble, Ms. Sutton, Fiscal Officer, Agricultural Experiment Station, and Mr. Sykes (33:B:090).

Chairman Donaldson suggested that the issue be passed over until the next day, pending clarification.

Senator Haffey (33:B:125) moved acceptance of the inflation figures for operating expenses in the amounts of \$44,950 for FY 86 and \$53,217 for FY 87. The motion passed unanimously.

Discussion followed between the Subcommittee members, Dr. Welsh, Dr. Tietz, Ms. Sutton and Mr. Sykes regarding supplies and materials expenses (33:B:220).

Representative Moore suggested that on this issue, the Experiment Station and LFA's office start at zero and clarify exactly what funding is needed, and that any decision be delayed until the next day. Chairman Donaldson concurred with the suggestion.

Representative Moore (33:B:368) moved adoption of LFA current level for equipment in the amounts of \$100,516 for FY 86 and \$107,110 for FY 87. The motion passed unanimously.

A discussion of equipment followed between Dr. Welsh, Larry Johnson, a member of the Advisory Council, and the Subcommittee members (33:B:400).

Tape 34 Side A

Senator Haffey asked Chairman Donaldson if he wanted to go through the revised equipment list item-by-item. Chairman Donaldson said he didn't think that was necessary and said that the Advisory Council had been very careful when putting the list together. Larry Johnson said the equipment list contains all top priority items, no "pork barrel."

Education Subcommittee

Minutes

January 30, 1985

Senator Haffey said that either the entire amount of equipment should be included in the modified column, or some part of the \$592,227 and \$519,372 should be identified as current level. Chairman Donaldson said the problem with driving off of current level is that if the base is in error, which could possibly be the case, then the problem gets worse as you go along.

Senator Haffey said a different definition of current level is: "necessary to serve the needs of the particular agency and to fulfill its defined goals." Representative Hand noted that his concern is that if the necessary equipment is not funded, but the people are there, they will have nothing to do.

Dr. Welsh said it is not correct to say that there has been no concern about capital equipment on the part of the Legislature. The problem has been, however, the level that has been made available relative to the level of need.

Representative Moore (34:A:250) moved adoption of the modified equipment request of the Agricultural Experiment Station in the amounts of \$592,227 for FY 86 and \$519,312 for FY 87.

There was discussion of the motion.

Representative Moore said that somewhere within the Experiment Station's budget, money would have to be found to pay for the equipment. Senator Haffey suggested that the motion be amended so that the amounts are subject to submission to the Subcommittee of numbers that reflect consistency within the last four years.

Senator Haffey suggested that the issue be reconsidered at the next meeting of the Subcommittee, and that part of the \$592,227 and \$519,312 be included in current level, and that the \$100,000 be increased accordingly, leaving the remainder as a modified. Representative Peck said that, on that basis, a list of equipment that would substantiate the base is necessary. Senator Hammond said that needs change, and such a list shouldn't be required.

Following further discussion of the equipment issue, Representative Moore withdrew the motion.

The meeting adjourned at 9:55 A.M.



Gene Donaldson, Chairman

DAILY ROLL CALL

EDUCATION SUB COMMITTEE

49th LEGISLATIVE SESSION -- 1985

January 30, 1985

Date

VISITORS' REGISTER

Education Sub COMMITTEE

BILL NO. _____

DATE

Jan. 30, 1985

SPONSOR

IF YOU CARE TO WRITE COMMENTS, ASK SECRETARY FOR WITNESS STATEMENT FORM.

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

ROLL CALL VOTE
HOUSE COMMITTEE EDUCATION SUBCOMMITTEE

DATE January 30, 1985 BILL NO. TIME

Joyce Beckes

Gene Donaldson

Secretary Joyce Beckes

Chairman Gene Donaldson

Motion: Senator Haffey moved that \$62,353 for dairy research

be approved for the Agricultural Experiment Station for each year, and that it be included in current level and added to the \$6,446,671 for personal services.

EXPLANATION OF MAES EQUIPMENT LIST

The MAES equipment list is broken into two lists; one for 1986 and one for 1987 (Headings in green). Each list is subtotalled on Category Of Need (Headings and subtotals in pink). Within each Category Of Need is a subsubtotal on each type of equipment (Headings and subsubtotal in yellow).

There are five types of Categories Of Need (marked in pink):

1. NEW EQUIP. Items that were not on the inventory list before.
2. OBLIGATIONS. Items which have purchase costs obligated in previous years.
3. REPLACEMENTS. Items which are replacements for items on the inventory list.
4. SIDNEY/USDA Items which were jointly used at Eastern in Sidney with USDA and lost when USDA relocated.
5. UPGRADES Items which represent an upgrading of one piece of equipment or a replacement of equipment which had been borrowed.

Each of the above five Categories Of Need are broken down into subsubtotals (marked in yellow) such as Farm Machinery, Tractors, Laboratory & Scientific etc.

Below are described what type of data can be found in each of the columns:

1. Iaq. A unique code for each item.
2. Description. Describes the old or new item.
3. Hr/Miles. Lists the number of hours or miles on each item.
4. Cost. Gives the replacement cost of the item.
5. Justification-For-Item. Gives an explanation of the need.
6. Location. Gives the name of the department and its location.

MAES Equipment Needs For Departments in (1986)
(sorted by category of need and then classification)

Tag	Description	Hr/Miles Yr	Cost Justification-For-Item	Location
** Category Of Need: NEW EQUIP.				
* Equipment : Farm Machinery				
NEW70 BALER	0	3738 ESSENTIAL TO LIVESTOCK RESEARCH.		Animal & Range Bozeman
NEW17 SWATHER	0	10530 ESSENTIAL TO LIVESTOCK RESEARCH.		Animal & Range Bozeman
NEW22 WASHER HIGH PRESSURE	0	2001 ESSENTIAL TO RESEARCH IN VET. SCIENCE.		Veterinary Sci. Bozeman
NEW21 MOWER ROTARY	0	8634 WILL BE USED FOR RESEARCH PLOTS. EXPENSIVE TO MAINTAIN		Plant & Soil Sci. Bozeman
* Subsubtotal *		24903		
* Equipment : Laboratory & Scientific	0			
NEW44 HPLC EQUIPMENT	0	8100 THIS LAB ANALYTICAL INSTRUMENT IS USED IN BASIC WEEDS AND PLANT & SOIL SCI.		Genetics Research. IT IS SHARED BY SEVERAL FACULTY. THE Bozeman
NEW45 NIR LAB EQUIPMENT	0	3000 REST OF THE 22000 WILL BE COVERED SOFT MONEY.		REVIEW OF THE 22000 WILL BE COVERED SOFT MONEY.
NEW49 ULTRA/FILTRA EQUIP	0	4000 KENAL QUALITY IN CEREAL CROPS. \$ 9000 WILL BE COVERED BY GRANTS.		THIS INSTRUMENT IS USED TO DETERMINE SEVERAL ASPECTS OF PLANT & SOIL SCI.
NEW30 CHROMATOGRAPH LIQUID	0	4000 ULTRA/FILTRA EQUIP MATCHING FUND FOR \$13,000 LAB UNIT IN SOIL FERT RESEARCH AT BOZEMAN AND HUNTLER FOR MEASURING CHEMICAL ELEMENTS IN SOILS.		THESE GRANTS.
NEW18 COUNTER SCINTILLATIO	0	24000 THIS ITEM WILL GREATLY ENHANCE THE NUTRITION RESEARCH.		THIS ITEM WILL GREATLY ENHANCE THE NUTRITION RESEARCH.
NEW19 SOLVENT DELIVERY SYS	0	35000 CUSTOM ANALYSIS PROVIDED BY THIS MACHINE IS AVAILABLE AT \$17 PER SAMPLE MAKING IT COST EFFECTIVE TO BUY.		CUSTOM ANALYSIS PROVIDED BY THIS MACHINE IS AVAILABLE AT BOZEMAN.
NEW8 MICROSCOPE WILD DISE	0	8000 THIS ITEM IS ESSENTIAL FOR CHEMICAL ANALYSIS WORK DONE ON ALL AG. RESEARCH PROJECTS.		THIS ITEM IS ESSENTIAL FOR CHEMICAL ANALYSIS WORK DONE ON ALL AG. RESEARCH PROJECTS.
NEW32 PHOTOMICROSCOPE	0	4200 WE HAVE NO MICROSCOPE IN THE DEPARTMENT AVAILABLE TO CONDUCT AND PHOTOGRAPH RESEARCH WITH VECTOR-PATHOGEN RELATIONSHIPS.		WE HAVE NO MICROSCOPE IN THE DEPARTMENT AVAILABLE TO CONDUCT AND PHOTOGRAPH RESEARCH WITH VECTOR-PATHOGEN RELATIONSHIPS.
NEW39 HOOD, CLEAN AIR	0	9000 THIS MICROSCOPE WILL BE USED BY MANY SCIENTISTS IN PHYSIOLOGY, NUTRITION, RANGE SCIENCE AND MEATS FOR MICROPHOTOGRAPHIC OBSERVATIONS.		THIS MICROSCOPE WILL BE USED BY MANY SCIENTISTS IN PHYSIOLOGY, NUTRITION, RANGE SCIENCE AND MEATS FOR MICROPHOTOGRAPHIC OBSERVATIONS.
NEW41 HOOD LAMINAR FLOW	0	5000 ESSENTIAL FOR BIOMOLECULAR MATERIALS.		ESSENTIAL FOR BIOMOLECULAR MATERIALS.
* Subsubtotal *		10000 TO PREVENT CONTAMINATION OF BOTH RESEARCH MATERIALS AND INVESTIGATORS DURING STUDIES ON EMBRYO TRANSPLANTS. THESE STUDIES CANNOT BE DONE WITHOUT THIS FACILITY.		TO PREVENT CONTAMINATION OF BOTH RESEARCH MATERIALS AND INVESTIGATORS DURING STUDIES ON EMBRYO TRANSPLANTS. THESE STUDIES CANNOT BE DONE WITHOUT THIS FACILITY.
* Equipment : Processing Data		110300		
NEW65 AD CONVERSION BOARD	0	4360 THIS BOARD WILL ALLOW EXPERIMENTATION WITH HARDINESS IN CHERRY BUDS AND OTHER PLANTS, AND INSECT HARDNESS FOR SELECTING POTENTIAL BIOLOGICAL WEED CONTROLS.		THIS BOARD WILL ALLOW EXPERIMENTATION WITH HARDINESS IN CHERRY BUDS AND OTHER PLANTS, AND INSECT HARDNESS FOR SELECTING POTENTIAL BIOLOGICAL WEED CONTROLS.
NEW66 IBM PC COMPUTER	0	2700 FOR ANALYSIS OF DATA OF BIOLOGICAL CONTROL OF WEEDS. THIS COMPUTER WILL INCREASE OUR PRODUCTIVITY AND REDUCE THE TIME NEEDED TO PUBLISH RESULTS.		FOR ANALYSIS OF DATA OF BIOLOGICAL CONTROL OF WEEDS. THIS COMPUTER WILL INCREASE OUR PRODUCTIVITY AND REDUCE THE TIME NEEDED TO PUBLISH RESULTS.

(sorted by category of need and then classification)

Tag	Description	Hr/Miles	Yr	Cost	Justification-For-Item	Location
NEW60	IBM PC COMPUTER	0		3500	SUPPLEMENT PRESENT PC XT FOR WORD PROCESSING AND ADDITIONAL CAPACITY FOR SUMMERIZATION AND RETRIEVAL OF DATA.	Northwestern at Creston
NEW48	COMPUTER	0		4000	THE BASIC COMPUTER UNIT ALONG WITH SEVERAL OTHER GROUPS WILL BE USED FOR 1 ACCOUNTING AND 2 SECTARIAN CLERICAL POSITIONS.	Plant & Soil Sci. Bozeman
NEW7	IBM-XT+COMPONENTS	0		6100	THIS COMPUTER IS ESSENTIAL FOR OFFICE OPERATION AND RESEARCH ANALYSIS IN OUR DEPARTMENT.	Entomology Bozeman
NEW33	COMPUTER KPRO M0010	0		3000	THIS COMPUTER WILL BE USED FOR DATA ANALYSIS, RESEARCH IMPLEMENTATION, CHEMICAL INVENTORY, AND BUDGET ANALYSIS	Microbiology Bozeman
NEW10	COMPUTERS 5 MICROS	0		27000	MICROS PROVIDE CHEAPER, MORE RAPID ACCESS THAN THE MAINFRAME. THESE COMPUTERS ARE ESSENTIAL IN ANALYZING ECONOMICS RELATED DATA.	Aq. Economics Bozeman
NEW34	COMPUTER WORKSTATION	0		3714	THIS WORKSTATION WILL PROVIDE A BETTER INFORMATION SERVICE FOR MONTANA FARMERS. IT WILL PROVIDE A FASTER, TIMELY ANALYSIS WITH A LOWER COST THAN OUR EARLIER PUB	Publications & News Bozeman
* Subsubtotal *				54374		
* Equipment : Vehicles				10000	ESSENTIAL TO RESEARCH ON BIOLOGICAL CONTROL OF WEEDS.	Entomology Bozeman
NEW40	TRUCK 1 1/2 T	0		10000		
* Subsubtotal *				10000		
** Subtotal **				199577		

MAES Equipment Needs For Departments in 1986
(sorted by category of need and then classification)

Tag Description Hr/Miles Yr Cost Justification-For-Item

** Category Of Need: OBLIGATIONS

* Equipment : Improvements
0B646 IRRIGATION SYSTEM
* Subsubtotal *

** Subtotal **

6000 THIS IS THE FINAL PHASE OF AN IRRIGATION SYSTEM ON THE
AGRONOMY FARM. IT IS USED FOR CONTROLLED RESEARCH PLOTS
AND FARM MANAGEMENT OF ROTATION FIELDS.

6000

6000

Plant & Soil Sci.
Bozeman

(sorted by category of need and then classification)

Tag	Description	Hr/Miles Yr	Cost Justification-for-Item	Location
** Category Of Need: REPLACEMENT				
* Equipment : Farm Machinery 048628 DRILL - IH 15' MDL #1	3200 74		6000 DRILL-IHC 150 MDL#1. NEEDED FOR PRODUCTION OF GRAIN. TOTAL COST IS \$12,000. FOUNDATION SEED WILL PAY 50 PERCENT.	Central at Moccasin
04247B WINDROWER-IHC 210	0 74		25000 THE PRESENT WINDROWER WAS SECURED IN '70. LEASED & PURCHASED IN '74. RECENT TECH. IMPROVEMENTS WILL PERMIT MORE VERSITILE USE FOR GRAIN, HAY, PEA, ETC.	Northwestern at Creston
018682 DISC TANDEM 12-FT IH	0 65		5600 DISC, TANDEM 12FT IH #37-1965.PARTS NOT AVAILABLE AND MUST BE MADE IN THE SHOP.	Southern at Huntley
020336 LEVELER LAND EVERSMAN	0 67		12000 LEVELER LAND, EVERSMAN-1967.PARTS ARE NOT AVAILABLE AND MUST BE MADE IN THE SHOP.	Southern at Huntley
083386 PLOW SPINNER IHC #31	0 80		6300 PLOW, SPINNER IHC #31-4-AGE UNKNOWN.PARTS ARE NOT AVAILABLE AND MUST BE MADE IN THE SHOP.	Southern at Huntley
011466 FARM WAGON GEAR, 4 1	0 64		4000 GOSENECK TRAILER. FROM OUR MAIN FARM TO DRYLND FARM AND SCD FARM. EARC DOES NOT HAVE A TRAILER.	Eastern at Sidney
* Subsubtotal *				
		58900		
* Equipment : Laboratory & Scientific				
RPL50 FAKINGRAPH EQUIP	0		5000 REPLACE UNIT IN CEREAL TESTING LAB/25 YRS OLD. USED TO EVALUATE FLOUR SAMPLES.	Plant & Soil Sci.
RPLAAH ANALYZER CHEMICAL	0		10000 THE CHEMISTRY ANALYSER WAS PURCHASED SEVEN YEARS AGO. IT IS FREQUENTLY IN A STATE OF DISREPAIR.	Bozeman Veterinary Sci.
RPLAAK DRYER CRITICAL PT.	0		5000 THE CRITICAL POINT DRYER IS DEFECTIVE AND PRODUCES SPECIMENS WITH EXTENSIVE AMOUNTS OF ARTIFACTS. THESE INTERFERE WITH EVALUATION OF SCOPE PLATES.	Bozeman Veterinary Sci.
0000056 STILL GLASS BARNSTEA	0 71		2500 DISTILLER IS NEEDED EVERY DAY FOR ALL PHASES OF RESEARCH.	Home Economics Bozeman Veterinary Sci.
002443 MICROSCOPE LEITZ WET	0 60		6000 THE PRESENT MICROSCOPE IS 25 YEARS OLD AND IS FREQUENTLY INOPERABLE. THIS UNIT IS ESSENTIAL TO THE OPERATION OF THE Bozeman DISEASE RESEARCH PROGRAM.	Bozeman Veterinary Sci.
022959 CENTRIFUGE	0		10000 THIS CENTRIFUGE IS 24 YEARS OLD AND HAS CORROSION AND DETERIORATION IN THE ELECTRONICS. THIS CENTRIFUGE IS NEEDED TO CONDUCT RESEARCH STUDIES IN VIROLOGY.	Bozeman Veterinary Sci.
082496 SPURTER COATER	0		6000 THE SPUTTER COATER IN THE ELECTRON MICROSCOPE LAB COATS SPECIMENS WITH UNEVEN THICKNESS WHICH INTERFERES WITH VISUALIZATION OF MARKERS UNDER THE SCOPE.	Bozeman Veterinary Sci.
* Subsubtotal *				
* Equipment : Office				
082219 COPIER SAVIN MODEL 7	0 79		10000 OUR COPIER IS REQUIRING MORE IN MAINTENANCE COSTS THAN IT IS WORTH. WITH THE AMOUNT OF RESEARCH REPORT PRODUCED IN OUR DEPT, WE CAN'T AFFORD TO DO WITHOUT ONE.	Plant Pathology
		44500		

MAFS Equipment Needs For Departments (in 1986
(sorted by category of need and then classification)

Req	Description	Hr/Miles Yr	Cost Justification-For-Item	Location
* Subsubtotal *		10000		
* Equipment : Shop				
005435 LAIHE CLAUSING PEU	0 55	11000 THE LAIHE DOES NOT PRODUCE A FINISHED PRODUCT WITH THE NECESSARY PRECISION DUE TO ITS AGE AND WORN CONDITION. IT IS USED BY MANY DIFFERENT PROJECTS.	Ag. Engin. Bozeman	
* Subsubtotal *		11000		
* Equipment : Tractors				
056961 TRACTOR JD 2020	1800 75	5000 THIS TRACTOR IS ESSENTIAL FOR RESEARCH. THE OLD TRACTOR IS UNRELIABLE AND EXPENSIVE TO REPAIR	Western at Corvallis	
082384 TRACTOR IHCS/4 DIESEL	2554 80	20000 USED FOR GENERAL FARM, LIVESTOCK FEEDING DAILY & SOILS & AGRONOMY RESEARCH.	Nothern at Havre	
* Subsubtotal *		25000		
* Equipment : Vehicles				
048048 CHEVROLET SEDAN	93000 73	10000 CONSIDERABLE RUSTING IN THE BODY AND CONTINUAL ENGINE PROBLEMS. MAKES ABOUT 1.3 MILES PER GALLON ON THE ROAD.	Northwestern at Creston	
038806 AUTO FORD VAN 1970	40000 70	13000 HALF TON VAN. NEEDED FOR TRANSPORTATION OF THE SUMMER WORK CREW TO THE ORLAND RESEARCH FARM. CURRENT VAN IS 14 YEARS OLD AND NEEDS REPLACEMENT.	Eastern at Sidney	
070068 AUTO JEEP 1678 CHEROKEE	59923 78	10000 ADMINISTRATION USE & STAFF. HIGH USE.	Nothern at Havre	
051222 AUTO PLY FURY 1976 4	88671 76	12000 PLYMOUTH FURY SEDAN. SEDAN SHOULD BE REPLACED WITH A SUBURBAN TYPE VEHICLE.	Southern at Huntley	
067636 AUTO JEEP WAGON 1967	91/65 67	16000 TRUCK REPAIRS ARE COSTING ALMOST AS MUCH AS REPLACEMENT	Animal & Range	
052417 AUTO HORNET AMI 76	81507 82	MT. THE PRESENT VEHICLE IS NOT ROAD-WORTHY ENOUGH TO VISIT Bozeman	Bozeman	
024938 AUTO DODGE VAN 1969	80000 69	10000 VAN IS TOTALLY WORN OUT. A VEHICLE IS NEEDED TO TAKE THE CREW TO AND FROM THE AGREN FARM AND FARM WORK.	Plant & Soil Sci.	
040467 FTRK FB 9x17 KEIL	40 /2	4500 TRAILER-FB 9x17-1972. WAS NOT DESIGNED FOR THE OVER THE ROAD USE. WE BLOW OUT AT LEAST 6-8 TIRES A YEAR.	Bozeman	
054566 FTRK FH. FANDEL 14055	52191 74	15000 1-TON DUMP TRUCK. AS PICTURED, NEEDED FOR TRANSPORTATION AND TO HAUL FRAGILE WITH SPECIAL EQUIPMENT.	Southern at Huntley	
REFRIG TRUCK GMC 4x4 78	92000 78	10000 THE PICKUP IS USED IN BIOLOGICAL WEED CONTROL AND IS GIVEN ALL OVER MINIANS. THE PICKUP IS UNRELIABLE AND CANNOT BE ECONOMICALLY REPAIRED.	Eastern at Sidney	
INDUSTRIAL TRUCK LINDE 10000F - 71 304	35857 71	10000 HE 71 INDUSTRIAL TRUCK IS HEAVILY USED. USEFUL FOR RID WORK AND SHOULD BE REPLACED WITH A SIMILAR TYPE FOR INDUSTRIAL OPERATION.	Northwestern at Creston	
INDUSTRIAL TRUCK Linde 10000F	35000 75	10000 VEHICLE IS USED FOR RID WORK AND SHOULD NOT BE USED FOR RID WORK. HAS BEEN OUT OF USE AND IS SHOWING SIGNS OF MAJOR FAILURES. IN NEED OF TRADE-IN.	Western at Sandpoint	
INDUSTRIAL TRUCK Linde 10000F	10000 74	10000 INDUSTRIAL TRUCKS ARE OUT OF USE AND ARE NOT USEFUL FOR RID WORK.	Corvallis	
INDUSTRIAL TRUCK Fuchs Fuchs 10000F	10000 72	10000 INDUSTRIAL TRUCKS ARE OUT OF USE AND ARE NOT USEFUL FOR RID WORK.	Bozeman	

MAES Equipment Needs For Departments in 1986
(sorted by category of need and then classification)

Tag	Description	Hr/Miles	Yr	Cost Justification-For-Item	Location
072582	TRUCK, DODGE 1/2 152107 70	10000	TRUCK REPAIRS ARE COSTING ALMOST AS MUCH AS REPLACEMENT.	Animal & Range	
* Subsubtotal *		160500		Bozeman	
** Subtotal **		309900			

MAES Equipment Needs For Departments in 1986
(sorted by category of need and then classification)

Tag	Description	Hr/Miles	Yr	Cost Justification-For-Item	Location
** Category Of Need: UPGRADES					
* Equipment : Farm Machinery UP642 RULLER HARRON 12FT	0	7200	TO REPLACE BORROWED EQUIPMENT NOT AVAILABLE WHEN NEEDED FOR RESEARCH ON FARM OPERATIONS.	Southern at Huntley	
UP63 TUB GRINDER	0	16000	ESSENTIAL TO THE ANIMAL NUTRITION PROGRAM. IT REPLACES BORROWED EQUIPMENT NOT AVAILABLE WHEN NEEDED FOR RESEARCH.	Southern at Huntley	
* Subsubtotal *		23200			
* Equipment : Irrigation System UP612 IRRIGATION SYSTEM	0	2500	THIS SYSTEM EXPANDS THE RESEARCH ON WATER REQUIREMENTS FOR CROPS. IT WILL ALLOW US TO DETERMINE THE MOST EFFICIENT IRRIGATION LEVEL FOR ECONOMIC CROP PRODUCTION	Aq. Engin. Bozeman	
		2500			
* Equipment : Laboratory & Scientific UP661 LAB EQUIPMENT	0	5000	UPGRADING SEED CLEANING AND SEED WEIGHING TECHNOLOGY	Northwestern at Creston	
UP657 BARLEY PEARLER	0	2050	THE ONE WE USE BELONGS TO ANIMAL AND RANGE SCIENCES UEP/ AND IT IS 100 SMALL.	Home Economics	
UP647 SEED GERMINATION CHM	0	3000	TO REPLACE AN OLD CHAMBER NO LONGER FUNCTIONAL. USED TO CONDUCT RESEARCH IN SEED DORMANCY AND VIGOR.	Plant & Soil Sci. Bozeman	
* Subsubtotal *		10050			
* Equipment : Processing Data UP627 COMPUTER FILE SERVER	0	10000	ALL HARD DISKS SATURATED BY THE INFORMATION WHICH WE ARE REQUIRED TO KEEP AND MAKE AVAILABLE TO GROUPS SUCH AS THE LFA. REPLACES NEED FOR EXTRA MANPOWER.	Dean & director LFA.	
* Subsubtotal *		10000			
* Equipment : Tractors UP643 TRACTOR JN 4040	0	21000	TO UPGRADE TRACTOR CAPACITY TO HANDLE EQUIPMENT.	Southern at Huntley	
* Subsubtotal *		21000			
* Equipment : Vehicles UP644F TRUCK	87833	10000	VEHICLE HAS 87,833 MILES. ENGINE AND TRANSMISSION IN POOR CONDITION AND UNABLE TO MAKE TRIPS AROUND THE STATE.	Plant & Soil Sci. Bozeman	
* Subsubtotal *		10000			
** Subtotal **		76750			
*** Total ***		592227			

MAES Equipment Needs For Departments in 1987
(sorted by category of need and then classification)

Tag	Description	Hr/Miles Yr	Cost	Justification-For-Item	Location
** Category Of Need: <u>NEW EQUIP.</u>					
* Equipment : Farm Machinery	NEW DRILL NO TILL MACHINERY	0	3000	MOST OF THE CROPPING SYSTEMS WORK IS OFF STATION. WE HAVE NO OTHER DRILL THAT IS SUITABLE UNDER THE CONDITIONS CONRAD IMPOSED ON OUR WORK.	Western Triangle at Conrad
* Subsubtotal *		3000			
* Equipment : Laboratory & Scientific	Liquid Scintill Count	0	10000	MATCHING FUNDS FOR \$30,000 LAB UNIT. USED TO MONITOR RADIOACTIVE MATERIAL IN PLANT TISSUE AND SOIL EXTRACTS.	Plant & Soil Sci. Bozeman
NEW53	THERMOGRADIENT GERM.	0	3000	REQUIRED FOR RESEARCH PROGRAMS DEALING WITH SEED GERMINATION AND SEEDLING DEVELOPMENT.	Plant & Soil Sci. Bozeman
NEW55	PYROMETER EQUIPMENT	0	2095	FOR CLIMATOLOGY RESEARCH TO COLLECT SOLAR RADIATION DATA AND DEVELOPMENT MODELS FOR RATE OF PLANT DEVELOPMENT.	Plant & Soil Sci. Bozeman
NEW56	NEAAC ENVIR. CHAMBER	0	6000	PERIODICAL 35LLVL ENVIRONMENTAL CHAMBER WITH OPTIONS CDEJ. ALLOWS INSECT AND PLANT DISEASE STUDIES TO BE CONDUCTED UNDER CONTROLLED CONDITIONS.	Eastern at Sidney
NEW31	AUTO-PIPETTING STATION	0	18000	THIS ITEM WILL GREATLY ENHANCE RESEARCH IN PHYSIOLOGY. THE MACHINE WILL GREATLY ENHANCE THE PRODUCTIVE OF THE LAB. IT WILL REMOVE ERROR AND TEDIOUS WORK.	Animal & Range Bozeman
NEW14	WEATHER STATION PORT	0	5000	THE STATION IS NEEDED TO AUTOMATICALLY LOG THE DATE SO IT CAN BE DOWNLOADED FOR COMPUTER ANALYSIS. IT IS NEEDED TO STUDY THE EFFECT OF CLIMATE ON IRRIGATION.	Aq. Engin. Bozeman
NEW20	SPECTROPHOTOMETER UV	0	25000	THIS ITEM WILL IMPROVE OUR ANALYTICAL CAPABILITIES WITH A CHEMISTRY STATION STATE-OF-THE-ART INSTRUMENT.	Bozeman
* Subsubtotal *		69095			
* Equipment : Processing Data					
NEW15	COMPUTER-COMPONENTS	0	6000	THIS ITEM IS NEEDED FOR DEVELOPING EXPERIMENTAL CONTROL AND DATA ACQUISITION SYSTEMS FOR RESEARCH EXPERIMENTS.	Aq. Engin. Bozeman
NEW35	COMPUTER WORKSTATION	0	3714	THIS WORKSTATION WILL PROVIDE A FASTER, TIMELY, AND CHEAPER INFORMATION SERVICE FOR MONTANA FARMERS. THIS IS A COMPLIMENTARY UNIT TO THE 1986 REQUEST.	Publications & News Bozeman
* Subsubtotal *		9714			
* Equipment : Vehicles	1/2TON FLATBED TRUCK	0	5000	TO HAUL BULKY CROP RESIDUE (STRAW AND HAY), PULLING TRAILERS, AND GENERAL FARM USE AT AGRONOMY FARM.	Plant & Soil Sci. Bozeman
* Subsubtotal *		5000			
** Subtotal **		86809			

Tag	Description	Hr/Miles Yr	Cost Justification-For-Item	Location
** Category Of Need: <u>OBLIGATIONS</u>				
* Equipment : Laboratory & Scientific				
08651 NIR EQUIP PAYMENT	0			
* Subsubtotal *				
** Subtotal **				
			3000 FINAL PAYMENT FOR UNIT ANNUAL PAYMENT UN \$18,000 LAB INSTRUMENT USED TO DETERMINE KERNEL QUALITY IN CEREAL CROPS. \$9,000 WAS COVERED BY GRANT FROM WHEAT COMM.	
			3000	
			3000	

MAES Equipment Needs For Departments in 1987
(sorted by category of need and then classification)

Tag	Description	Hr/Miles Yr	Cost Justification-For-Item	Location
** Category Of Need: <u>REPLACEMENT</u>				
* Equipment : Farm Machinery	070196 ROTAVATOR-HOWARD 50"	0 .77	2001 THE ROTAVATOR IS ESSENTIAL FOR RESEARCH TILLAGE. IT NEEDS \$2000 IN REPAIRS.	Western at Corvallis
011714 HARVESTER GEHL 08600	3500 .74	15000 CURRENT HARVESTER VERY WORN AND REPAIRS COSTLY. NECESSARY TO CHOP CORN AND GRASS SILAGE.	Nothern at Havre	
049581 PLOW INC ROLLOVER #3	0 .74	5000 CURRENT PLOW WORKOUT, NECESSARY TO PREPARE FIELDS FOR CROP PRODUCTION.	Nothern at Havre	
042483 HARVESTER-FORAGE PL0	0 .74	4000 IT IS NECESSARY TO KEEP RESRCH EQUIP CURRENT. THE UPDATE & RENEWAL OF EQUIP IS ESSENTIAL FOR OBTAINING HARVESTS AT OPPORTUNE TIMES.	Northwestern at Creston	
018678 SWATHER INC MOL#201	0 .65	25000 SWATHER INC MOL #201-1965. CANNOT GET PARTS FOR THIS 19 YEAR OLD SWATHER AND COSTLY PARTS MUST BE MADE IN THE SHOP.	Southern at Huntley	
* Subsubtotal *		51001		
* Equipment : Laboratory & Scientific	048629 LAB EQUIPMENT	0	20000 NEEDED TO EQUIP THE SOIL AND PLANT ANALYSIS RESEARCH LAB AFTER IT IS REMODELED.	Central at Moccasin
010308 HOOD FUME LAB	0 .68	4000 THE PRESENT HOOD IS DANGEROUS TO THE HEALTH OF THE PEOPLE SOUTHERN AT HUNTLEY IN THE LAB.		
017545 SCALE LIVESTOCK FAIR	0 .63	5000 SCALE-LIVESTOCK FAIR. RECEIVED EXTREMELY HEAVY USE AND NEEDS TO BE REPLACED RATHER THAN UNDERGO EXPENSIVE REPAIR.		
002440 CENTRIFUGE INT REFRI	0 .56	20000 THIS CENTRIFUGE IS WEARING OUT AND WE NEED ONE WITH A HIGH VETERINARY SCI. CENTRIFUGAL FORCE. IN ORDER TO COMPLETE QUALITY VIROLOGY STUDIES.	Bozeman	
069192 MIXER SOKVALL OMNIMI	0	2001 THE SOKVALL OMNIMIXER HAS HAD DAILY USE RESULTING IN EXCESSIVE WEAR TO THE CHUCK AND COUPLING ADAPTER. IT IS ESSENTIAL TO PARASITOLOGY RESEARCH.	Veterinary Sci. Bozeman	
002524 MICROOME ROTARY	0	10000 THE ROTARY MICROTOME IS OLD AND HAS TWO MAJOR REPAIRS IN THE PAST FEW YEARS. THIS INSTRUMENT IS CRITICAL TO THE PROCESSING OF TISSUE SPECIES.	Veterinary Sci. Bozeman	
082322 SHARPENER-KNIFE	0	6000 THE EXISTING KNIFE SHARPENER CANNOT SHARPEN TUNGSTEN CARBIDE KNIVES OR LARGER KNIVES FOR SECTION TISSUES. THIS UNIT IS CRITICAL TO HISTOPATHOLOGY LAB.	Veterinary Sci. Bozeman	
* Subsubtotal *		67001		
* Equipment : Office	018634 COPIER PHOTO DRY 3M	0 .66	7500 SHARP SF-850 COPIER, NEEDED FOR USE IN PREPARING ANNUAL REPORTS, BOOKLETS AND OTHER MATERIALS. EACH HAS A COPIER WITH A CAPACITY OF 1 COPY PER 2 MIN.	Eastern at Sidney
055193 COPIER AB DICK 955	0 .83	2500 NECESSARY FOR BILLING & REPORTS. HIGH USE ITEM.	Nothern at Havre	
* Subsubtotal *		10000		

MAES Equipment Needs For Departments in 1987
(sorted by category of need and then classification)

Tag	Description	Hr/Miles Yr	Cost	Justification-For-Item	Location
* Equipment : Processing Data				2001 NECESSARY FOR LETTER QUALITY AND REPORT PRINTING.	Nothern at Havre
* 040245 TERMINAL DECRYPTER I		0 82			
* Subsubtotal *					
* Equipment : Tractors					
054580 TRACTOR JOHN DEERE #	3000 74	26000	TRACTOR, DIESEL, ROW CROP TYPE, NEEDED FOR PLOWING, DISKING, SUMMER FALLOWING, PUMPING IRR. AND HARVESTING SUGARBEETS AT RESEARCH CENTER.	Eastern at Sidney	
049583 TRACTOR IHC F96 HYD	5575 74	25000	USED FOR FARMING, LIVESTOCK FEEDING & SOILS AND AGRONOMY RESEARCH	Nothern at Havre	
069900 TRACTOR J-D-2030	0 77	20000	ITEM IS IN CONSTANT NEED OF REPAIR AND ENGINE OVERHAUL. USED FOR GENERAL FARM WORK OF NONRESRCH FIELDS.	Plant & Soil Sci. Bozeman	
* Subsubtotal *		71000			
* Equipment : Vehicles					
RPL54 1 TON CLUB CAB TRUCK	0	18000	NEEDED TO REPLACE 1977 GMC PICKUP FOR PULLING TRAILER WITH HEAVY PILOT EQUIP. TO OFF-STATION SITES. MUST BE HEAVY DUTY.	Plant & Soil Sci. Bozeman	
041375 AUTO FORD ESCORT '82	800000 82	10000	THIS REPLACEMENT VEHICLE IS NEEDED TO TRAVEL TO RESEARCH PLOTS. THE ESCORT IS UNECONOMICAL TO REPAIR AND UNRELIABLE.	Ag. Enqin. Bozeman	
057396 AUTO CHEV VAN 1975	65000 75	15000	THIS VEHICLE IS NEARING THE TIME & MILEAGE WHEN IT IS NOT ROAD-WORTHY TO VISIT OFF-STATION RSRCH. IT NEEDS TO CARRY HARVEST MATERIAL AND RSRCH EQUIP TO OTHER STATION.	Plant Pathology	
060411 TRUCK GMC SUBR 1977	111140 77	12000	STAFF VEHICLE USED BY SOIL SCIENTIST. HIGH USE DUE TO STATION TRIALS.	Nothern at Havre	
070063 TRUCK GMC '77 1 1/2 TON	54521 77	12000	STAFF PICKUP TO USE DAILY IN LIVESTOCK RESEARCH PROGRAM.	Nothern at Havre	
049688 TRUCK GMC PU '74 1/2	113975 74	10000	THIS TRUCK SHOULD BE REPLACED WITH A NEWER USED UNIT.	Southern at Huntley	
001110 TRUCK CHEV STOCK '42	251915 56	24000	THE JUSTIFICATION FOR ALL TRUCKS BEING REPLACED IS FOR GEN. ON-GOING OPERATION OF THE LIVESTOCK FARM. REPAIRS ARE COSTING ALMOST THE SAME AS REPLACEMENT.	Animal & Range Bozeman	
011827 TRUCK DODGE '51 3/4	125073 62	14000	TRUCK REPAIR COSTS ARE COSTING ALMOST AS MUCH AS REPAIRMENT.	Animal & Range Bozeman	
024964 TRUCK DODGE '69 1/2	60000 69	10000	TRUCK REPAIRS ARE COSTING ALMOST AS MUCH AS REPAIRMENT.	Animal & Range Bozeman	
024973 TRUCK DODGE '69 1/2	75762 69	10000	TRUCK REPAIRS ARE COSTING ALMOST AS MUCH AS REPAIRMENT.	Animal & Range Bozeman	
069450 TRUCK GMC '77 1 1/2	67946 77	14000	TRUCK REPAIRS ARE COSTING ALMOST AS MUCH AS REPAIRMENT.	Animal & Range Bozeman	
072583 TRUCK, DODGE '64 1/2	75000 70	12000	TRUCK REPAIRS ARE COSTING ALMOST AS MUCH AS REPAIRMENT.	Animal & Range Bozeman	
KPLAAT TRUCK	167835	10000	PICKUP IS VERY OLD AND IN POOR CONDITION VEHICLE IS NEEDE FOR HORTI FARM RSRCH AND GREENHOUSE RSRCH.	Plant & Soil Sci. Bozeman	
* Subsubtotal *		171000			
** Subtotal **		372003			

MAES Equipment Needs For Departments in 1987
(sorted by category of need and then classification)

Req	Description	Hr/Miles	Yr	Cost Justification-For-Item	Location
** Category Of Need: SIDNEY/USDA					
* Equipment : Laboratory & Scientific	SIDAAB LAB MILL WILEY	0		3500 LABORATORY MILL. A PLANT TISSUE GRINDER IS NEEDED TO PREPARE STRAW, GRAIN, AND OTHER PLANT TISSUES FOR CHEMICAL ANALYSIS. EARC USES A USDA WILEY MILL FOR TRANSFER DRYING OVENS. NEEDED FOR OPEN DRYING FORAGE GRAIN AND SOIL SAMPLES. EARC HAS PROBLEMS GETTING TIMELY ACCESS TO USDA DRYING OVENS WHICH DISRUPTS RESEARCH.	Eastern at Sidney
SIDAAD DRYING OVENS		0			
* Subsubtotal *		23500			
** Subtotal **		23500			

MAES Equipment Needs For Departments in 1987
(sorted by category of need and then classification)

Tag	Description	Hr/Miles	Yr	Cost Justification-For-Item	Location
** Category Of Need: UPGRADES					
* Equipment : Farm Machinery	UPG2 BALER LARGE ROUND	0		14000 IT COSTS \$2000 PER YEAR TO RENT THIS ITEM. IT IS IMPOSSIBLE TO RENT WHEN IT IS NEEDED. THE RENTED MACHINES LOSE A LOT OF STRAW IN THE FIELD.	Southern at Huntley
* Subsubtotal *		14000			
* Equipment : Laboratory & Scientific	UPGAAE MICROTOME SLEDGE	0		20000 THE PRESENT SLEDGE MICROTOME IS ON LOAN AND THERE ARE SERIOUS LIMITATIONS ON THE SIZE OF SPECIES THAT IT CAN HANDLE. WE NEED ONE THAT HOLD LARGER SPECIES.	Veterinary Sci. Bozeman
* Subsubtotal *		20000			
** Subtotal **		34000			
*** Total ***		519312			