# Forage Focus - Equipment- March 2010

## **Joint Machinery Ownership**

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Many producers have reduced their machinery costs by owning equipment jointly – this helps smaller operators utilize machinery more efficiently while still enjoying the convenience of owning a full line. Joint ownership arrangements also help younger operators get started with less capital spent on machinery.

The key to successful joint ownership is to agree on when and how to use each piece of equipment. Depending on weather and crop conditions, decisions may have to be made on a day-to-day basis. The objective is to complete field work for all partners in a timely manner while minimizing time spent transporting machinery.

#### SHARING COSTS

Costs of jointly owned machinery should be shared equitably. Many owners prefer to own machinery on a 50-50 basis and provide fuel and labor for their own acres. If each owner uses the machinery over approximately the same number of acres, this arrangement works well. Repair costs, financing payments, cash boot to trade, and income tax deductions can also be divided equally.

What if the partners use the machine in a proportion different from their ownership share? One method is for both owners to contribute to a special machinery account (Example 1). The amount contributed can be equal to a typical custom rate multiplied by each person's acres. If labor and fuel are furnished by each operator, use a rate ~70-80% of the custom rate. All machinery related expenses (e.g., fuel, repairs, depreciation) are paid from this account. Depreciation and interest should be paid to each owner in proportion to their original investment. Financing payments for the purchase of the machinery can be paid directly from the fund. At year's end, any excess or deficit is carried over to the following year or refunded in proportion to each owner's actual use.

Another common procedure is for the partner with the most acres to reimburse the other owner for the extra use. To calculate the amount of compensation, multiply the custom rate by the number of acres by which one owner's use exceeds the total acres multiplied by their share of ownership. In Example 2, Al pays Chris \$18/ac (75% of a \$24 custom rate) for each acre on which he uses the chopper in excess of half the total. In this example, half of the 900 total acres is 450. Al's acres exceed this by 150, so the total payment from Al to Chris would be \$18 x 150 acs, or \$2,700.

If the jointly owned implement is not self-propelled and is pulled behind each operator's tractor, the

#### Example 1.

1. Al and Chris jointly purchase a forage chopper for \$60,000, each paying half the initial cost. They agree to each contribute \$24/ ac to a special account:

Al:	\$24/ac X 600 acs =	\$14,400
Chris:	\$24/ac X 300 acs =	\$7,200
		\$21,600

2. The following expenses are paid from the account:

Fuel and lubrication	\$ 1,600	(paid to supplier)
Repairs and maintenance	\$3,300	(paid to supplier)
Labor (180 hrs @ \$10)		(paid to Al)
Labor (90 hrs @ \$10)	\$900	(paid to Chris)
Depreciation, interest, insurance	\$6,000	(paid to Al)
Housing (20% of value of chopper)	\$ <u>6,000</u>	(paid to Chris)
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\$19,600

3. The excess funds can be carried over to the following year, or refunded in proportion to each partner's use of the chopper.

Income	\$21,600
Costs	\$19,600
Excess	\$ 2,000

#### Example 2.

Al and Chris purchase a used forage chopper jointly, each paying half of the purchase cost of \$60,000. The chopper is used on 900 acres, 600 by Al and 300 by Chris. Both furnish their own fuel and labor, and repair costs are divided equally.

1. Assume that the remaining costs, including fuel and labor, are equal to 75% of the custom rate of \$24/ac.

 $24/ac \times 75\% = 18/ac$ 

2. Half the total acres is 450. Al uses the chopper on 150 extra acres, beyond this.

600 acs - 450 acs = 150 acs

3. Al pays Chris \$18 for each extra acre. \$18/ac x 150 acs = \$2.700.

rental value of the tractor also should be subtracted from the custom rate. Average custom rates and tractor rental rate charges are available from many state Extension Services.

### FARM MACHINERY JOINT VENTURES

Some operators prefer to have a formal ownership arrangement, especially when an entire line of machinery is shared. Such organizations increase the need for good record keeping and cooperation, but can reduce overall costs significantly as well as increase labor flexibility.

A cooperative agreement can be set up, with ownership vested in a separate entity such as a limited liability company or partnership. Potential savings exist in several areas:

- Greater annual use of large ticket machines
- More efficient use of labor during peak fieldwork times
- Fewer weather delays because fields are more spread out
- Opportunities to do custom work for other operators or landowners
- Greater use of individual operator skills and specialized labor
- Efficient use of repair and maintenance tools and facilities
- Volume discounts on purchases of inputs and supplies

More information as well as detailed examples of machinery sharing agreements and joint ventures can be found in a new "Farm Machinery and Labor Sharing Manual" available from the Midwest Plan Service at www.mwps.org. Click on "Farm Business," then click on "General."