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Crop Rental Rates

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Market Report	Yr Ago	4 Wks Ago	3/10/06
Livestock and Products, Weekly Average			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight	$93.15	$88.34	$85.43
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb	129.23	139.47	131.67
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb	108.33	112.86	106.16
Choice Boxed Beef, 600-750 lb. Carcass	157.07	145.92	148.22
Western Corn Belt Base Hog Price Carcass, Negotiated	69.42	58.75	57.86
Feeder Pigs, National Direct 45 lbs, FOB	67.22	54.26	56.44
Pork Carcass Cutout, 185 lb. Carcass, 51-52% Lean	70.18	57.80	65.70
Slaughter Lambs, Ch. & Pr., 90-160 lbs., Shorn, Midwest	109.00	79.00	79.00
National Carcass Lamb Cutout, FOB	268.05	219.71	215.73
Crops, Daily Spot Prices			
Wheat, No. 1, H.W. Imperial, bu	3.67	3.95	4.08
Corn, No. 2, Yellow Omaha, bu	1.97	1.91	1.93
Soybeans, No. 1, Yellow Omaha, bu	6.26	5.41	5.42
Grain Sorghum, No. 2, Yellow Columbus, cwt	2.82	2.79	2.86
Oats, No. 2, Heavy Minneapolis, MN , bu	1.86	2.05	1.99
Hay			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton	115.00	130.00	130.00
Alfalfa, Large Rounds, Good Platte Valley, ton	62.50	65.00	65.00
Grass Hay, Large Rounds, Good Northeast Nebraska, ton	57.50	52.50	55.00

* No market.

One of the most frequently asked questions by landlords and tenants is, "Should we be adjusting our rental arrangement in response to the recent changes in costs (or returns)?" A related question is, "What are others in the area doing?" An implication of some of the questions asked is, "We should be doing something similar to our neighbors," or at least, "what others are doing will provide guidance on what we should be doing."

Typical rental rates and shares are reported elsewhere and updated periodically. Preliminary results from a recent cash rental rate survey will be reported in the next issue of this newsletter. On share arrangements see NebGuide G1355, "Crop Share Leasing Patterns for Typical Crop Share Arrangements." These survey results are helpful in identifying trends and gross differences by area and provide some indication of differences for specific field characteristics, for example, dryland vs. pivot irrigated vs. gravity irrigated. However, it is suggested below that these survey results provide only guidelines and some penciling is required to evaluate your farm and tailor a rental arrangement to fit your situation.

A starting point for arriving at a rental rate (or crop share) for a specific parcel is to recognize that the rent should reflect the productivity of the farm. This observation may seem obvious for cash rent, however, perhaps it is not so clear for a crop share. Unfortunately, rental surveys typically do not attempt to reflect the relationship between the rental arrangement and productivity.

Also, it is perhaps obvious the rent should reflect what the landlord is providing, for example, is the landlord providing both the pivot and the power unit? A related question often asked is, "What should the landlord be expected to provide under a particular rental arrangement?" The approach here is to instead focus on what the landlord and tenant would like to provide and then decide what the

rent (shares) should be. In some cases common sense provides a guide to what the landlord might furnish, e.g. the landlord would typically own an electric motor on a pump, but the tenant might own a diesel engine (making repair and replacement decisions easier and providing a built-in incentive for the tenant to take good care of the engine). On the other hand, a landlord may want to retain ownership of a diesel engine and irrigation pipe upon retirement so that the land will be more attractive to a young tenant who may not find it so easy to make those investments. The suggestion here is that the arrangement should be fit to the parties involved and need not be "typical," in fact it should not be typical, for example, if the land is more or less productive than is typical.

To illustrate penciling a rental arrangement for a specific farm, consider a 10-year yield history of 180 bushels of corn with prices and farm program payments as follows (an irrigated continuous corn example):

Table 1. Budgeted Revenue Per Acre

Corn Sales 180 bu x $2.24/bu = $403.20						
Program Payments (corn base only)						
	% Base		**Yield**	**$/Bu**		
DP	75	x	120	x 0.28	x 85% =	21.42
CCP	75	x	135	x 0.20	x 85% =	17.21
						$441.83

A 10-year yield history is often available from crop insurance records. A 10-year average harvest price adjusted for the loan rate was used here to arrive at the $2.24 per bushel. The direct payment (DP) and counter cyclical payment (CCP) rates are averages for the last ten years calculated from the 10-year price history. The 75 percent base is for this example. Many farms will have base for other program crops as well. As illustrated in Table 1, program payments are 85 percent of the base x payment yield x payment per bushel.

Continuing with our example, Table 2 illustrates a 50-50 crop share where the tenant owns the irrigation system power unit and the landlord pays for 50 percent of the irrigation fuel and 50 percent of all materials and services. At first glance, the share arrangement in Table 2 may appear appropriate for a 50-50 share. In particular, the tenant's 50.6 percent cost share is nearly equal to the 50 percent revenue share (this difference is less than the precision in our budgeting). However, the total costs of $490.02 exceeds the budgeted revenue of $441.83. The land will not be generating sufficient revenue to pay the resources at the rate budgeted. In effect, some of the costs are budgeted too high. Which costs? The major candidates are labor and management and return to investment including the return to land. Since land is the only fixed resource (all other inputs could be employed elsewhere), land is viewed in economic theory as the residual claimant. In other words, after paying all the resources what they could realize elsewhere, land would be credited with the remainder. If we adjusted the payment to land to bring our budgeted costs in line with our budgeted revenue, the payment to land would be reduced from $95.00 per acre to $46.81 per acre, and the tenant's breakeven cost share would be 62.8 percent as illustrated in Table 3 (63 percent of revenue is $278.35, nearly equal to the tenant's $277.61 cost share).

The adjustment made to return to land in Table 3 could instead have been made in the management return to the tenant or some combination of land and management returns (we use land and management as proxies for the costs that the landlord and tenant, respectively, can control). If all of the adjustment to equate budgeted costs and returns had been made in management, the breakeven crop share would be 40-60 with a 40 percent tenant share (budget not shown). However, the net to the landlord of $127.64 shown in the last column of Table 2 is much closer to the cash rent reported on irrigated land than is the $79.45 shown in Table 3, suggesting cash rented land is providing the tenant with a much lower return to management (as for example budgeted in Table 3) than we budgeted in Table 2. The Landlord Net in Tables 2 and 3 is the payment budgeted for the land and irrigation components provided by the landlord, i.e. the rent the landlord is receiving.

Note that the input costs budgeted here are based on 2006 estimates and may not prevail in the longer term (fuel and fertilizer prices may, for example, back off from the $2 diesel and 24 cent nitrogen used here) or if input prices remain at current levels cash rents may drop off. Also note that using a 200 bushel yield in Table 1 would generate sufficient revenue to cover the costs budgeted in Table 2. In other words both the yield and the assumed cost of inputs can dramatically affect the appropriate crop share and cash rent.

In summary, it is suggested in evaluating a rental arrangement to:

1. Start by estimating the revenue that the parcel is expected to generate including the farm program payments the farm is eligible to receive.
2. Next, allocate the revenue from Step 1 to the various cost categories based on the cost of purchased inputs, and assign a value to management and capital that reflects the maximum return they can realize from this parcel, i.e. the total cost should equal total revenue.
3. Consider how the pie might be divided differently, for example, what is a minimum acceptable return to land and management.

4. Determine what the landlord and tenant will provide. Total the tenant's cost share to arrive at the tenant's crop share or determine the Landlord Net to arrive at the cash rent equivalent.

5. Consider the effect of yield and input and output prices upon the result in Step 4.

Table 2. Example Budgeted Crop Shares

	Cost/Acre	Tenant % Share	Tenant % Share	Landlord Net*
Machinery & Irrigation System Fuel, Repairs and Depreciation Cost				
Machinery	$40.16	100	$40.16	
Irrigation Fuel	39.09	50	19.55	
Irrigation Repairs	5.86	52	3.03	$2.83
Irrigation Depreciation	17.73	25	4.52	13.21
Materials and Services	190.00	50	95.00	
Labor and Management, Overheads	61.45	100	61.45	
Operating Interest	10.55	55	5.85	4.70
Return on Investment				
Machinery	16.18	100	16.18	
Irrigation System	14.00	15	2.10	11.90
Land Only	95.00	0	0.00	95.00
Total Costs	$490.02	50.6	$247.83	$127.64
Total Revenue	441.83	50	$220.92	

* Landlord Net is the payment budgeted for the land and irrigation components provided by the landlord, i.e. the rent the landlord is receiving for those inputs.

Table 3. Example Budgeted Crop Shares Revised

	Cost/Acre	Tenant % Share	Tenant % Share	Landlord Net
Machinery and Irrigation System Fuel, Repairs and Depreciation Cost				
Machinery	$40.16	100	$40.16	
Irrigation Fuel	$39.09	63	$24.63	
Irrigation Repairs	$5.86	52	$3.03	$2.83
Irrigation Depreciation	$17.73	25	$4.52	$13.21
Materials and Services	$190.00	63	$119.70	
Labor and Management, Overheads	$61.45	100	$61.45	
Operating Interest	$10.55	55	$5.85	$4.70
Return on Investment				
Machinery	$16.18	100	$16.18	
Irrigation System	$14.00	15	$2.10	$11.90
Land Only	$46.81	0	$0.00	$46.81
Total Costs	$441.83	62.8	$277.61	$79.45
Total Revenue	$441.83	63	$278.35	

* Landlord Net is the payment budgeted for the land and irrigation components provided by the landlord, i.e. the rent the landlord is receiving for those inputs.

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