

## CASE STUDY II – INSTALLATION OF PIVOTS

A producer operates 1,114-acre cow – calf operation. After installing pivots and several years of operation to judge the results, the operator has been able to identify and quantify some of the advantages and disadvantages of the installation of pivots to his operation.

Besides wintering 350 cow/calf pairs, he winters dude ranch horses. He also buys 100 to 150 cows to run for three to four months, then sells them before they calve. This is to use up any excess feed available.

The producer grows oats intermixed with peas and grass pasture. He cuts and windrows the grass, then turns the cows into it, to save the costs associated with baling, stacking, and hauling. He has six pivots; the average acreage under the pivots is 120 acre (670 acres under pivot).

### Advantages:

- Yields have doubled to tripled since installing the sprinklers
- Fewer weed problems and it is easier to get at them with the ditches gone
- Appearance of cows indicates better health and body condition scores
- Increased income from improved cows

### Disadvantages:

- Machinery costs have increased for growing, harvesting, and processing higher volume of grass
- Pumping cost of \$13 per acre
- Use of pesticide has increased
- Maintenance costs on diesel pumps

ADDED COSTS (per acre)		ADDED RETURNS (per acre)	
Pump maintenance	\$1.50	Increased yield	\$114.71
Pumping costs	\$13.00	Increased cow profit	\$37.31
Ownership cost of pivot	\$25.98		
O&M (pivot)	\$9.59		
Total	\$50.07	Total	\$152.02

Increased return to operation = \$152 - \$50 = \$102 per acre

Breakeven period (payback timeframe) = 3 ½ to 4 years

(Calculations based on a 110 ac pivot)