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Pasture Leasing

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Pasture Leasing

Bruce Johnson

for

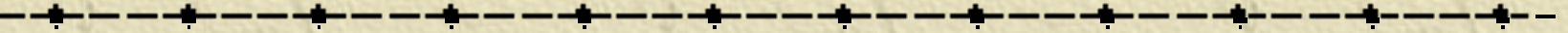
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April 5, 2006

Grand Island, NE

Department of Agricultural Economics
University of Nebraska-Lincoln

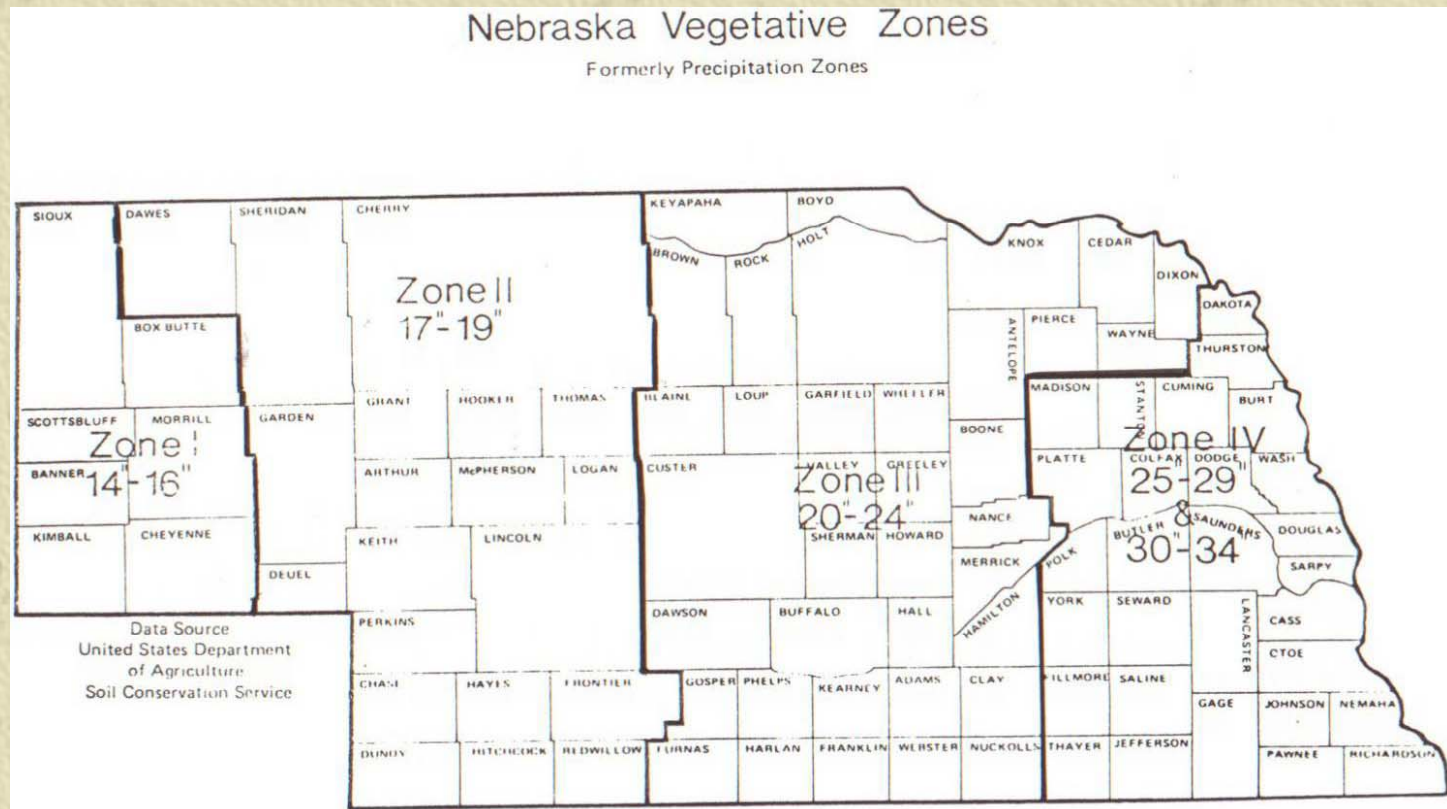
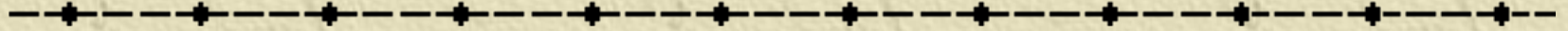
Introduction



Grazing land a major land asset in Nebraska

- ✦ 25 million acres of privately – owned range land and pasture
- ✦ Highly – variable in forage capacity

Nebraska Vegetative Zones



Grassland Table I

Nebraska Department of Revenue

Grassland Table 1

Nebraska Statewide Grassland Valuation Groups, Range Sites, Soil Productivity Forage Ratings, and the Approximate Animal Unit Months of Grazing Available Per Acre¹ by Nebraska Vegetative Zones

Range Site Name	Range Site Abbrevlation	AUM's Available by Nebraska Vegetative Zones ²											
		Zone I 14-16" Precipitation			Zone II 17-19" Precipitation			Zone III 20-24" Precipitation			Zone IV 25-34" Precipitation		
		Forage	AUM's	LVG	Forage	AUM's	LVG	Forage	AUM's	LVG	Forage	AUM's	LVG
Wet Subirrigated	WS	4500	1.0-1.7	2G1	5000	1.1-1.8	2G1	5500	1.2-1.9	1G	6000	1.3-2.0	1G1
Subirrigated	Sb	4200	.95-1.5	2G1	4800	1.0-1.6	2G1	5300	1.05-1.7	1G	5900	1.1-1.8	1G1
Wet Land	WL	4800	1.1-1.8	3G1 ⁴	5300	1.25-2.0	3G1 ⁴	5800	1.3-2.1	2G ⁴	6300	1.4-2.2	2G1 ⁴
Silty Overflow	SiO	2300	.5-.8	3G	2800	.55-.9	3G1	3300	.6-1.0	3G1	3800	.75-1.2	2G
Clayey Overflow	CyO	1400	.5-.8	4G1	2000	.55-.9	3G	3100	.6-1.0	3G1	3600	.75-1.2	2G
Silty Lowland	SiL	2400	.5-.8	3G	3300	.55-.9	3G1	4200	.6-1.0	2G1	4900	.75-1.2	1G
Sandy Lowland	SyL	2600	.5-.8	3G	2800	.55-.9	3G1	3200	.6-1.0	3G1	4000	.75-1.2	2G
Saline Subirrigated	SS	2900	.5-.8	3G1	3400	.55-.9	2G	3800	.6-1.0	2G	4300	.75-1.2	2G1
Saline Lowland	SL	2000	.5-.8	3G	2300	.55-.9	3G	2700	.6-1.0	3G1	3200	.75-1.2	3G1
Silty	Si	2000	.3-.5	3G	2900	.45-.7	3G1	3600	.55-.9	2G	4400	.6-1.0	2G1
Sandy	Sy	1900	.3-.5	4G1	2600	.45-.7	3G	3300	.55-.9	3G1	3700	.6-1.0	2G
Sands	Sa	1900	.3-.5	4G1	2600	.45-.7	3G	3200	.55-.9	3G1	3600	.6-1.0	2G
Clayey	Cy	1600	.3-.5	4G1	2500	.45-.7	3G	3400	.55-.9	2G	4100	.6-1.0	2G
Limy Upland	LiU	1600	.25-.4	4G1	2400	.35-.6	3G	3000	.45-.7	3G1	3600	.55-.9	2G
Savannah	Sv	1800	.25-.4	4G	2200	.35-.6	4G1	3000	.45-.7	3G	NA ³	NA ³	—
Choppy Sands	CS	1900	.2-.3	4G1	2600	.25-.4	3G	3000	.45-.7	3G1	NA ³	NA ³	—
Shallow Clay	SwC	900	.2-.3	4G	1600	.25-.4	4G1	2300	.45-.7	3G	NA ³	NA ³	—
Shallow Limy	SwL	900	.2-.3	4G	1300	.25-.4	4G1	2000	.45-.7	3G	2700	.5-.8	3G
Shallow Sandy	SwS	NA ³	NA ³	—	NA ³	NA ³	—	NA ³	NA ³	—	2300	.5-.8	3G
Shallow to Gravel	SwG	800	.2-.3	4G	1200	.25-.4	4G	1600	.35-.6	4G1	2000	.5-.8	3G
Thin Loess	TL	NA ³	NA ³	—	2100	.25-.4	3G	2500	.35-.6	3G	3300	.5-.8	3G1
Dense Clay	DC	NA ³	NA ³	—	NA ³	NA ³	—	NA ³	NA ³	—	2000	.5-.8	3G
Saline Uplands	SU ⁵	700	.1-.2	4G	900	.15-.3	4G	NA ³	NA ³	—	NA ³	NA ³	—
Panspots	Ps ⁵	500	.1-.2	4G	600	.15-.3	4G	NA ³	NA ³	—	NA ³	NA ³	—

¹AUM's per acre are based on site being in good condition producing 51-75% of its potential in kinds, percents, and amounts of natural vegetation.

²See Nebraska Vegetative Zones map in this section for reference to areas in each zone.

³NA indicates not applicable in this zone.

⁴Assignment of land valuation groups for the Wet Land Range Sites adjusted for quality of forage.

⁵These two range sites need to be classified locally into subgroups of 4G since they produce very low amounts of useable forage.

⁶Forage production columns expressed in pounds per acre, air dried.

Grassland Table II

Nebraska Department of Revenue

Grassland Table 2

Acres Needed for Grazing per Animal Unit Month
When Site is in Good Condition¹

AUM per Acre	Acres Needed For 1 Month Per AU	Acres Needed For 5 Months ²	Acres Needed For 6 Months
.2	5 acres	25 acres	30 acres
.3	3.3	16.5	20.0
.4	2.5	12.5	15.0
.45	2.2	11.0	13.0
.5	2.0	10.0	12.0
.55	1.8	9.0	11.0
.6	1.7	8.5	10.0
.65	1.5	7.5	9.0
.7	1.4	7.0	8.5
.75	1.3	6.5	8.0
.8	1.25	6.3	7.5
.85	1.2	6.0	7.0
.9	1.1	5.5	6.5
.95	1.05	5.3	6.3
1.0	1.0	5.0	6.0
1.1	.9	4.5	5.5
1.2	.8	4.0	5.0
1.3	.75	3.7	4.5
1.4	.7	3.5	4.3
1.5	.65	3.3	4.0
1.6	.6	3.0	3.5
2.0	.5	2.5	3.0
2.4	.4	2.0	2.5
3.0	.3	1.5	1.8
4.0	.25	1.2	1.5
5.0	.2	1.0	1.2
10.0	.1	.5	.6

¹ An Animal Unit is a full grown cow weighing 1,000 pounds or a two year old steer or their equivalent. An Animal Unit Month is the forage or feed necessary to carry an Animal Unit for one month (Normally estimated at 25 pounds of dry material a day or 750 pounds per month)

² The total acres needed are approximate and will vary with site condition and management practices.

Grazing Land Leasing

- ✦ From 1/3 to 1/2 of all grazing land leased in most counties
- ✦ Animal-Unit-Month (AUM) rate almost universal in major range areas
 - ◆ Adjusts for carrying capacity variation
 - ◆ Accounts for length of grazing season

Example:

Cherry County

Zone II

Choppy Sands

(3G)

AUM Rate

.24 to .4

AUM /acre	Acres Needed for	
	1 month	5 months
.25	4 acres	20 acres
.40	2.5 acres	12.5 acres

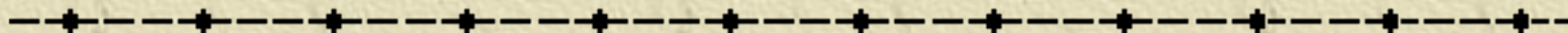
Historical Cash Rental Rates For Cow-Calf Pairs for Major Grazing land Areas

Year	Northwest	North	Central	Southwest	South
	-----Dollars per Cow/calf pair per month -----				
1981	13.00	13.30	15.80	14.40	13.75
1986	10.70	10.50	10.60	10.40	10.70
1991	14.855	20.00	20.30	18.25	17.50
1996	16.40	23.00	21.80	20.35	21.15
2001	19.65	25.10	24.45	25.00	22.20
2006 P	23.00	29.40	28.70	26.70	26.00

Source: Nebraska Farm Real Estate Market Development Survey Series.

Source: Nebraska Farm Real Estate Market Development Survey Series

Preliminary 2006 Cash Rental Rates For Major Grazing land Areas



	Northeast	Northwest	North	Central	Southwest	South
	----- Dollars per Month -----					
Cow-Calf pair Rates						
Average	29.70	23.00	29.40	28.70	26.70	26.00
Range: High	36.40	27.25	33.75	32.75	31.65	30.00
Low	22.00	18.50	23.75	22.90	21.70	17.50
Stocker (500-600 lb) Rates						
Average	16.70	15.75	17.65	17.55	16.00	---
Range: High	20.65	18.50	21.0	20.80	19.00	
Low	14.00	12.25	15.00	15.20	13.00	

Why variation in rates?

- ✦ Market demand variation
- ✦ Variation in Negotiated contributions

Typical Land Owners Responsibilities:

- ◆ Perimeter fencing
- ◆ Materials for maintaining perimeter fencing
- ◆ Watering facilities and maintenance

Low End of AUM Rate:

- ◆ Tenant responsible for perimeter fencing
- ◆ Tenant providing water

High end of AUM Rate

- ◆ Fencing and its maintenance
- ◆ Good Water
- ◆ Salt and minerals
- ◆ Daily observing/tending the livestock

2006 County Rental Surveys

Dawson County:

	Average	Range
Cow-calf/mo.	\$27.46	\$24.00-32.50
Cow-calf/ac.	\$26.29	\$20.00-30.00
Yearling Steer/mo.	\$20.00	\$15.50-25.00
Yearling steer/ac.	\$24.56	\$15.00-30.00
Stocking rate	6.35 ac/cow-calf 3.97 ac/yearling	
Corn Stocks		
Per acre: Landowner fences	\$8.77	\$7.00 – 10.00
Per acre: Renter fences	\$6.53	\$5.00 – 8.00

2006 County Rental Surveys

Custer County:

	Average	Range
Cow-calf/mo.	\$28.75	\$20.00-35.00
Yearling Steer/mo.	\$18.24	\$12.00-27.00
\$/acre	\$22.79	\$10.00-35.00
Corn Stocks		
Per acre: Renter fences (76% of time)	\$9.83	\$6.00-15.00

2006 County Rental Surveys

Saline County:

	Average	Range
Cow-calf/mo.	\$29.43	\$23.35-31.65
Cow-calf/ac	\$24.05	\$23.00-29.00
Corn Stocks		
Per acre:	\$3.00	----

2006 County Rental Surveys

Nemaha County:

	Average	Range
Cow-calf/mo.	\$23.50	\$19.00-28.00
Yearling Steer/mo.	\$15.00	\$8.00-19.00
\$/acre	\$38.20	\$28.60-53.20

Where are pasture rates headed?

Near Term: Steady to Upward

- ◆ Strength of cattle economy through 2006
- ◆ Herd, expansion into 2007

Longer Term: Rates will move with:

- ◆ The cattle economy
- ◆ Weather variation and forage production across the U.S.

New factors to watch on the horizon.

✦ Hunting clubs and game preserves

✦ Consumer demand for:

- ✦ Grass-fed beef

- ✦ Region – specific beef

***Capitalizing on Niche
Agriculture:***

Nebraska Sandhills
All-Natural Beef



Jessica McCall

AECN 376

Websites

✦ <http://agecon.unl.edu>

◆ Cornhusker Economics 3-22-06

/cornhusker/3-22-06.pdf

◆ Nebraska Farm Real Estate Market
Developments: 2004-05

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