RATE OF GAIN
ANNUAL CLOVER TRIAL

March 28, 1967

Cooperator: Chamberlain Ranch - Ed Fjelline, Manager.

Soil Type: Placentia Sandy loam.

Purpose: To determine meat gains on improved annual clover range.

Procedure: One 90 acre field was divided in half in December 1964. Annual clovers had been flown on in 1953 and the fields grazed every year since. No fertilization was done until 1964. One field was disced, reseeded with 11 lbs. Rose and Sub Clover in December 1964 and 500 lbs. 0-20-0 applied to field #2.

Grazing Record:

Spring Period - 1965
3/29/65-6/18/65 (81 days)

Total wt. in (86 Hd)	43,170
Total wt. out (86 Hd)	60,373
Total gain	17,203
Ave. gain/Hd.	200 lbs.
Ave. gain/Hd./day	2.47 lbs.

Fall Period - 1965
9/9/65 - 10/17/65 (38 days)

Total wt. in (82 Hd)	60,250
Total wt. out (82 Hd)	66,210
Total gain	5,960
Ave. gain/Hd.	72.7 lbs.
Ave. gain/Hd/day	1.91 lbs.

Total lbs. gain/acre 1965 - - - - - 257.4 lbs.
Ave. daily gain/Head (spring & fall) 1965 2.29 lbs.

Spring Period - 1966
3/18/66 - 5/16/66 (59 days)

Field #1 (45 acres)

Total wt. in (34 Hd)	15,320
Total wt. out (34 Hd)	19,878
Total Gain	4,558 lbs.
Ave. gain/Hd/day	2.27 lbs.

Field #2 (45 acres)

Total wt. in (58 Hd) - - - - - - - - -	26,090
Total wt. out (58 Hd) - - - - - - - -	34,820
Total gain - - - - - - - - - - - - - - -	8,730 lbs.
Ave. gain/Hd/day - - - - - - - - - - -	2.59 lbs.
Pounds Gained Field #2 over #1 - - -	4,172 lbs.
Pounds Gain/acre due to 1964 0-20-0	92.8 lbs.

Fall Period - 1966

Sixty-eight head entered the field October 27, 1966. Because of continuous rain starting the middle of November, weights were not taken until December 9, 1966. The cattle showed no gain. The feed was gone by November 20 so no fall grazing records were valid.

PLACER COUNTY
IRRIGATED PASTURE TRIAL
SUMMER 1966

COOPERATOR - T. L. Chamberlain, Owner, and Ed Fjelline, Manager - Chamberlain Ranch

SOIL TYPE - Placentia sandy loam

PROCEDURE - Three irrigated pasture fields composed of ladino clover, trefoil, ryegrass, and dallasgrass were used in the trial. The three fields lie adjacent to each other, are level and flood irrigated. The three fields were all hayed the last of May and grazed starting June 22nd. All fields received 300 pounds of single superphosphate during the winter of 1965-66.

GRAZING PLAN - Ninety head of 2 year old heifers and 29 head of 3 year old heifers were used in the test. Cattle were individually identified by ear tattoo at the start of the trial and sorted by a gate cut into three groups. Because the fields varied in size, cattle numbers were adjusted so that each field carried 1.4 Animal Units/acre. The 2 year old heifers weighed approximately 700 lbs. and figured at .7 A.U., the 3 year olds were figured at 1 A.U.

	TREATMENTS		
	Field #1	Field #2	Field #3
Acres per field	22.4	23	21.4
Fertilization			
Single Super Phosphate lbs/acre	300	300	300
Ammonium Sulfate lbs/acre	0	600, 1 lb N/acre/day	600, 1 lb N/acre/day
Pasture Hay Fed lbs/head	0	0	456
Utilization			
Animals per field	41	40	38
Stocking Rate head/acre	1.78	1.74	1.77
Average weight/animal June 22	720.5	746.2	627.9
Average weight/animal Oct. 26	800.5	860.8	836.2
Gain/head in lbs (126 days)	80.0	114.6	208.3
Gain/acre in lbs (126 days)	146.2	199.5	369.5
Average daily gain (lbs/head)	0.63	0.91	1.65
Effects of Treatments			
Increased meat from N lbs/acre	0	53.3	
Cost of N per acre @ 10¢/lb	0	$12.60	
Profit from N per acre @ 22¢/lb		$- .86	
Increased meat from hay lbs/acre	0	0	170
Cost of hay per acre @ 1.25¢/lb	0	0	$10.18
Profit from hay per acre @ 22¢/lb	0	0	$27.22
1 A.U.M = 1000#/mo.	5.8 AUM	5.9 AUM	5.46 AUM

UNIVERSITY COOPERATORS - Bill Martin, Soils Specialist; Jim Street, Range Improvement Specialist; Jim Elings, Livestock Specialist; Ed Loomis, Parasitologist; Bob Bushnell, Animal Health Specialist; and Farm Advisors Bob Petersen and Jack Herr

FERTILIZER SOURCE - 18.52 tons Sulphate of Ammonia (21%N) were donated courtesy John Taylor Fertilizer and Valley Nitrogen for the test.

SEEDBEDS FOR ANNUAL CLOVERS

WALTER FIDDYMENT RANCH

300 acre field

Soil Types: Rocklin and Whitney fine sandy loam.

History: Grained through 1965 - Disced in April 1966.

Seeding: 5 lbs. Dinninup Sub, 4 lbs. Kondinin Rose and 1 lb. Crimson per acre was pelleted and flown on prior to a rain in November 1966.

Fertilization: 400 lbs/acre 0-20-0 was broadcast prior to seeding and lightly disced in before seeding. An excellent seedbed was prepared.

100 acre field

History: Irrigated pasture was plowed out in 1957. The field was grained in alternate years with the last harvest in 1965.

Seeding: An excellent seedbed was prepared. Seed was flown on at the rate of 4 lbs. Rose, 3 lbs. Sub and 1 lb. Crimson per acre.

Fertilization: 4 tons turkey manure was spread on the south 30 acres prior to planting and disced in. 400 lbs. 0-20-0 was applied and disced in on the remaining 70 acres.

Grazing: The field was grazed from early March to April 25, 1966. 150 weaners grazed the field from August 1 - November 1, 1966.