RANGELAND BEEF PRODUCTION AND MARKETING ENTERPRISE BUDGET COMBINATIONS

Gerald Marousek, Leroy Stodick and Robert Smathers

A.E. Research Series No. 95 - 1 February 1995

THE AUTHORS

The authors are, respectively, Agricultural Economist, Operations Research Specialist and Research Associate

ACKNOWLEDGMENT

Information for the budgets was provided by these members of the Oregon Country Beef Cooperative: Ken Bentz, Larry Brown, Stacy Davies, "Doc" Hatfield, Alva Mitchell, Jack Southworth and Dan Warnock. Wilson Gray, Dan Hinman and Neil Rimbey, University of Idaho Cooperative Extension System, made contacts and suggestions. The support of all is acknowledged and appreciated.

with the second second

Antesta occul in No. 7 abs

170.4

RANGELAND BEEF PRODUCTION AND MARKETING ENTERPRISE BUDGET COMBINATIONS

Gerald Marousek, Leroy Stodick and Robert Smathers

Beef cattle producers are increasingly exploring alternatives to traditional methods of marketing their animals. Several alternatives to selling calves at weaning are possibilities: backgrounding or "warming up" animals before feedlot placement, stocking on pasture or rangeland to yearling or older age, retaining ownership of calves or yearlings in custom finishing lots. We have studied the income and risk trade offs of some of these alternative value-adding management and marketing systems for rangeland beef cattle producers.¹

The value-added concept is carried a step further in viewing the end result of beef cattle production as marketing a consumer product, rather than selling a commodity (animal). The goal becomes optimizing total net returns to the operation through best satisfying consumer demand for your product --- providing what consumers want, when and where they want it, at the maximum price they will pay.

One of the ways to move into this type of marketing is to identify a specific market segment or niche. "Niche marketing" is learning the exact requirements for a particular market, and matching production to fulfill those requirements. In beef marketing those requirements might include particular cuts, tenderness, size and trim, delivery schedule, production history (e.g. hormone use), etc. For producers who can meet a set of specifications, a niche market resulting in premium prices may be possible.

The budgets presented here resulted from discussions with members of a small group of ranchers who have organized a cooperative to pursue a value-adding, niche marketing approach to their rangeland cattle enterprises. Oregon Country Beef (OCB) members have rather typical western U.S. ranch resources: high desert and mountain public (BLM, Forest Service) and private forage. Their uncommon characteristic is the extension of their total ranching endeavor beyond the traditional cow-calf operation.

The budgets are loosely modeled from operations of selected OCB members, in that they portray various alternative enterprise combinations being followed. But they are generic in that they do not represent any particular member's operation. They incorporate information from interviews with OCB members along with the program and data base of the University of Idaho Enterprise Budget System. The organization and specifications for the budgets are given in Table 1. The reader should be familiar with this information when analyzing the budgets.

¹The Economics of Alternative Beef Cattle Management and Marketing Systems, Research Bulletin No. 153, Agricultural Experiment Station, University of Idaho (May 1992); "Economics of Value-Adding Rangeland Beef Cattle Enterprises," <u>Rangelands</u>, Vol. 16, No. 1 (February 1994).

- Table 1. Organization and Specifications for Rangeland Beef Production and Marketing Enterprise Budget Combinations
- Budgets are calculated on a total herd basis for a 500 cow herd; they should be comparable on a <u>per head</u> basis for cow herds in the 300 to 700 head range, i.e. totals for a 300 head herd should be about 60% of the 500 head budget, etc.
- Budgets are calculated in four stages, according to marketing options:

1.	Cow-calf: selling weaner calves	450 lb. steers @ \$90 400 lb. heifers @ \$80
2B.	Cow-calf and backgrounding: selling spring yearlings	700 lb. steers @ \$80 650 lb. heifers @ \$75
2S.	Cow-calf and stocking: selling fall yearlings	800 lb. steers @ \$70 750 lb. heifers @ \$70
3B.	Cow-calf, backgrounding and finishing: live weight sale	1050 lb. steers @ \$68 1000 lb. heifers @ \$66
3S.	Cow-calf, stocking and finishing: live weight sale	1150 lb. steers @ \$71 1100 lb. heifers @ \$69

- 4B. Cow-calf, backgrounding, finishing and slaughtering: carcass contract sale 1050 lb. steers X 60.67% carcass yield @ \$145 contract 1000 lb. heifers X 60.67% carcass yield @ \$145 contract
- 4S. Cow-calf, stocking, finishing and slaughtering: carcass contract sale
 1150 lb. steers X 60.67% carcass yield @ \$145 contract
 1100 lb. heifers X 60.67% carcass yield @ \$145 contract
- 5B. Cow-calf, backgrounding, finishing and mixed marketing: combination sale 60% sold live weight, i.e. 3B.
 40% sold carcass contract, i.e. 4B.
- 5S. Cow-calf, stocking, finishing and mixed marketing: combination sale 60% sold live weight, i.e. 3S. 40% sold carcass contract, i.e. 4S.
- 3. Budget tables for each enterprise (cow/calf to marketing stage) are packaged together. Returns to risk and management equal gross receipts less total costs. This figure, whether plus or minus, is carried forward to the final stage. Returns to risk and management (cowcalf to market) is the "bottom line" on the last table of each budget.

(continued)

Table 1. (continued)

- 4. The major specifications for the budgets include:
 - a. calf weaning rate: 90%.
 - b. post-weaning death loss is recorded at end of production stage: backgrounding lot, 1%; stockers on grass, 1%; finishing lot, 0.5%.
 - c. cost and revenue estimate sources: 1994 Oregon Country Beef Cooperative member interviews (1993 records), 1992 University of Idaho Livestock Enterprise Budgets and 1994 published prices.
 - d. interest rates: short term operating loans, 8.75%; intermediate term machinery, equipment and livestock loans, 9.5%.
 - e. labor requirements are total for operation, including operator and family labor; labor rate, \$6.25/hr.
 - f. grazing fees: BLM/FS, \$2.00/AUM; private lease, \$10.00/head per month (yearlings).
 - g. cattle trucking rate: \$2.25/loaded mile.
 - daily gain and feeding period: backgrounding lot, 1.67 lb. for 150 days; stockers on grass, 1.3 lb. for 270 days; finishing lot, 3.0 lb. for 120 days.
 - feedlot costs: backgrounding, \$0.85/day; finishing, \$0.30/day yardage plus feed cost.
 - j. animal weights for live weight sales are net of shrink.
 - k. slaughtering cost = value of offal and hide.1
 - l. carcass grade and yield: Select (+) to Choice (-), Yield Grade 2.
 - m. hot carcass weight yield: 60.67%.2
 - n. contract carcass price: \$145/cwt.3

¹A general guideline is that the value of beef cattle by-products covers the total costs of slaughter plant operations. Oregon Country Beef Cooperative members received credit for 90% of the national drop price for by-products, less \$30.00 per head. Hides, the major component of by-product value, have a wide price variability. At \$90/cwt. for packer hides (January 1995) a net credit is realized. This is reflected in a \$5 - \$10/cwt. allowance in the contract carcass price.

²Average of 32 lots of Oregon Country beef slaughtered by Washington Beef Processors.

³Price includes allowance for by-product credit. See footnote 1.

Table 2 lists the enterprise combinations, the class of animals (or carcasses) marketed and the return to risk and management, for each of the nine budgets. Budget No. 1, selling weaner calves, showed a return after all costs of -\$11,095. Selling spring yearlings after custom backgrounding (Budget 2B) had a -\$9,856 return. Carrying calves over winter on range with supplemental feed, then placing on grass and selling fall yearling stockers, resulted in a -\$15,005 return (Budget 2S).

When backgrounded calves were fed to finished weight and grade (Budget 3B), total return was -\$15,989. Grass fed stocker yearlings fed to finish showed a total return of \$8,374 (Budget 3S). These two budgets (3B and 3S) were based on live weight slaughter animal sale.

Budgets 4 and 5 were based, in part, on the marketing arrangement of OCB. OCB contracted with a Japanese restaurant chain to supply 200 carcasses per week to specification, which are fabricated for shipment to Japan, where the product is featured in western (versus Japanese) style restaurants. OCB made a separate arrangement for slaughtering with the slaughtering plant paying "generic" (open market) price for carcasses and cuts not meeting contract specifications and allowing by-product credit.

Budgets 4 and 5 assume all animals produced by the 500 cow herd operations (minus heifer replacements and death losses) were finished, slaughtered and sold at the contract price. Actually, the feedlot places approximately 200 animals on feed each week. These animals are delivered to the feedlot by individual OCB members, who commit themselves to one or more 50 head (1 semitruck load = 1 pen) deliveries for specific week(s) one year in advance. Feedlot deliveries in fact do not require, or allow for, all the output of a 500 cow herd operation. Therefore, the returns for Budget 4B (backgrounded slaughter carcass sale) of \$51,235 and Budget 4S (stocker slaughter carcass sale) of \$71,206 cannot be construed as representing actual ranch income. The figures are useful for comparison with other enterprise combinations and marketing arrangements if, and to the extent, they are possible and achievable.

Budget 5 differs from 4 in that only 40% of the finished animals were sold on carcass contract, with the remaining 60% sold live weight. This more nearly approaches OCB experience since, due to economic slowdown in Japan, OCB agreed to reduce deliveries under the carcass contract to 40% of the original 200 carcasses per week schedule. The other 60% were actually slaughtered and sold open market; live weight sale was used in Budgets 5B and 5S to simplify market price assumptions and to allow comparisons with other live weight slaughter sales (Budgets 3B and 3S). In all other respects the conditions pertaining to Budget 4 apply to Budget 5. Backgrounded slaughter mixed marketing (40% carcass, 60% live weight sale) had a return of \$10,781 (Budget 5B). The 40% carcass, 60% live weight sale marketing mix for grass fed slaughter yearlings (Budget 5S) returned \$33,392.

These budgets are not "the gospel." Both technical (production) and economic (pricing) figures differ by time, place and individual operations. Most crucial is the ability to identify, meet the requirements of, and "nail down" value-adding niche markets. As an example of the continuing effort necessary for success, OCB members conduct in-store beef-sampling and interviewing, participate in industry conventions and solicit outlets for their beef products through upscale restaurants and health food stores. (Their beef is produced without the use of growth hormones or antibiotic feed additives.)

Table 2. Budgeted Returns to 500 Head Beef Cow Operation for Various Production and Marketing Enterprise Combinations

Budget No.	Enterprise Combination	Marketing Stage	Return ¹
1	Cow-calf	Weaner calves	\$(-)11,095
2B	Cow-calf and backgrounding	Spring yearlings	(-)9,856
2S	Cow-calf and stocking	Fall yearlings	(-)15,005
3B	Cow-calf, backgrounding and finishing	1000-1050 lb. live weight	(-)15,989
3S	Cow-calf, stocking and finishing	1100-1150 lb. live weight	8,374
4B	Cow-calf, backgrounding, finishing and slaughtering	600-650 lb. carcasses	51,235
4S	Cow-calf, stocking, finishing and slaughtering	650-700 lb. carcasses	71,206
5B	Cow-calf, backgrounding, finishing and mixed marketing	40% carcass sale, 60% live weight sale	10,781
5S	Cow-calf, stocking, finishing and mixed marketing	40% carcass sale, 60% live weight sale	33,392

¹Returns to risk and management from cow-calf to market; equal gross receipts less total costs.

Budget 1. Cow-Calf: Selling Weaner Calves

Table 1. Cow - Calf Winter on Federal Range Calves Sold at Weaning

	Weight		Price or	Number of	Value or
	each	Unit	cost/unit	units/herd	cost/herd
1. Gross receipts from production					\$
Steer calves	4.50	cwt	90.0000	225.0000	91,125.00
Heifer calves	4.00	cwt	80.0000	110.0000	35,200.00
Aged bulls	16.00	cwt	47.0000	10.0000	7,520.00
Cull cows	10.00	cwt	42.0000	85.0000	35,700.00
Cull replacement heifers	7.20	cwt	70.0000	10.0000	5,040.00
Total					\$174,585.00
2. Variable costs					\$
Alfalfa hay (cow herd)		ton	75.0000	281.2500	21,093.75
Alfalfa hay (all other animal	s)	ton	75.0000	135.9750	10,198.11
Feed barley (replacement h		cwt	5.5000	517.5000	2,846.25
Protein supplement (20%)		cwt	7.0000	350.0000	2,450.00
BLM		aum	2.0000	6,118.0000	12,236.00
Crop aftermath		aum	10.0000	787.5000	7,875.00
Salt		lb	0.0650	8,800.0000	572.00
Veterinarian medicine		head	13.5500	500.0000	6,775.00
Tractors(fuel,lubrication,rep	pairs)	\$			717.23
Machinery(fuel,lubrication,r	repairs)	\$			14,402.70
Equipment(fuel,lubrication,	repairs)	\$			3,887.83
Labor, tractor and machine	гу	hr	6.2500	1,380.8972	8,630.61
Labor, equipment		hr	6.2500	564.9993	3,531.25
Labor, livestock		hr	6.2500	2,450.0000	15,312.50
Interest on operating capital	nl .	\$	0.0875	47,782.5742	4,180.97
Total variable costs					\$114,709.20
3. Income above variable costs					\$59,875.80
4. Fixed costs					\$
Interest on livestock capital		\$	0.0950	370,259.7895	35,174.68
Interest on other equipmen		\$	0.0950	86,129.6875	8,182.32
Depreciation on horses		\$		1200 1000 1000 1000	168.00
Depreciation on beef bulls		\$			7,500.00
Depreciation on other equip	oment	\$			6,778.00
Other fixed costs, machine	ry and equipment	\$			9,944.85
Overhead		\$			3,223.05
Total fixed costs					\$70,970.90
5. Total costs					\$185,680.10
6. Returns to risk and management					-\$11,095.10

Budget 2B. Cow-Calf and Backgrounding: Selling Spring Yearlings

Table 1. Cow - Calf Winter on Federal Range Calves Retained

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
Gross receipts from production	odon	O.I.I.	COODUINE	dillomera	\$
Aged bulls	16.00	cwt	47.0000	10.0000	7,520.00
Cull cows	10.00	cwt	42.0000	85.0000	35,700.00
Cull replacement heifers	7.20	cwt	70.0000	10.0000	5,040.00
Total					\$48,260.00
2. Variable costs					\$
Alfalfa hay (cow herd)		ton	75.0000	281.2500	21,093.75
Alfalfa hay (all other animals	s)	ton	75.0000	135.9750	10,198.11
Feed barley (replacement h		cwt	5.5000	517.5000	2,846.25
Protein supplement (20%)		cwt	7.0000	350.0000	2,450.00
BLM		aum	2.0000	6,118.0000	12,236.00
Crop aftermath		aum	10.0000	787.5000	7,875.00
Salt		lb	0.0650	8,800.0000	572.00
Veterinarian medicine		head	13.5500	500.0000	6,775.00
Tractors(fuel,lubrication,repa	airs)	\$			717.23
Machinery(fuel, lubrication, re	epairs)	\$			14,402.70
Equipment(fuel,lubrication,re		\$			3,887.83
Labor, tractor and machiner		hr	6.2500	1,380.8972	8,630.61
Labor, equipment		hr	6.2500	564.9993	3,531.25
Labor, livestock		hr	6.2500	2,450.0000	15,312.50
Interest on operating capital		\$	0.0875	47,782.5742	4,180.97
Total variable costs					\$114,709.20
3. Income above variable costs					-\$66,449.20
4. Fixed costs					\$
Interest on livestock capital		\$	0.0950	370,259.7895	35,174.68
Interest on other equipment		\$	0.0950	86,129.6875	8,182.32
Depreciation on horses		\$			168.00
Depreciation on beef bull		\$ \$ \$ \$ \$			7,500.00
Depreciation on other equip	ment	\$			6,778.00
Other fixed costs, machinery	y and equipment	\$			9,944.85
Overhead		\$			3,223.05
Total fixed costs					\$70,970.90
5. Total costs					\$185,680.10
6. Returns to risk and management					-\$137,420.10

Budget 2B. (continued)

Table 2. Backgrounding Custom Fed Calves Sold

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production					\$
Steer calves Heifer calves	7.00 6.50	cwt	80.0000 75.0000	223.0000 109.0000	124,880.00 53,137.50
Total					\$178,017.50
2. Variable costs					\$
Yardage and feed Hauling Interest on carryover ¹ Interest on operating cap	ital	days head \$ \$	0.8500 4.8400 5,010.0000 0.0875	50,250.0000 335.0000 1.0000 12,677.3789	42,712.48 1,621.40 5,010.00 1,109.27
Total variable costs					\$50,453.15
3. Income above variable costs					\$127,564.35
4. Fixed costs					\$
Depreciation on other eq	uipment	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$50,453.15
6. Returns to risk and management	nt				\$127,564.35
7. Returns to risk and managemen	nt (cow-calf to ma	arket)			-\$9,855.75

Number of cattle in lot = 335; adg = 1.667 pounds; Days on feed = 150; death loss = 1%;

c:\marousek\budgets\backsell.doc

¹Interest on operating loan from cow-calf enterprise.

Budget 2S. Cow-Calf and Stocking: Selling Fall Yearlings

Table 1. Cow - Calf Winter on Federal Range Calves Retained

		Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gr	oss receipts from production	00011	0	ooobanii.	dillomora	\$
	Aged bulls Cull cows Cull replacement heifers	16.00 10.00 7.20	cwt cwt	47.0000 42.0000 70.0000	10.0000 85.0000 10.0000	7,520.00 35,700.00 5,040.00
Т	otal					\$48,260.00
2. Va	riable costs					\$
T	Alfalfa hay (cow herd) Alfalfa hay (all other animal Feed barley (replacement h Protein supplement (20%) BLM Crop aftermath Salt Veterinarian medicine Tractors(fuel,lubrication,rep Machinery(fuel,lubrication,rep Labor, tractor and machiner Labor, equipment Labor, livestock Interest on operating capita	pairs) epairs) epairs) ry	ton ton cwt cwt aum lb head \$ \$ hr hr hr	75.0000 75.0000 5.5000 7.0000 2.0000 10.0000 0.0650 13.5500 6.2500 6.2500 6.2500 0.0875	281.2500 135.9750 517.5000 350.0000 6,118.0000 787.5000 8,800.0000 500.0000 1,380.8972 564.9993 2,450.0000 47,782.5742	21,093.75 10,198.11 2,846.25 2,450.00 12,236.00 7,875.00 572.00 6,775.00 717.23 14,402.70 3,887.83 8,630.61 3,531.25 15,312.50 4,180.97
3. Inc	come above variable costs					-\$66,449.20
4. Fix	red costs					\$
т.	Interest on livestock capital Interest on other equipment Depreciation on horses Depreciation on beef bull Depreciation on other equip Other fixed costs, machiner Overhead	t oment	\$ \$ \$ \$ \$ \$	0.0950 0.0950	370,259.7895 86,129.6875	35,174.68 8,182.32 168.00 7,500.00 6,778.00 9,944.85 3,223.05 \$70,970.90
	tal costs					\$185,680.10
6. Re	turns to risk and management					-\$137,420.10

Budget 2S. (continued)

Table 2. Stocker **Grass Fed** Yearlings Sold

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production					\$
Yearling Steers Yearling Heifers	8.00 7.50	cwt	70.0000 70.0000	223.0000 109.0000	124,880.00 57,225.00
Total					\$182,105.00
2. Variable costs					\$
Alfalfa hay Protein supplement (20%) Deeded range Salt Interest on carryover ² Miscellaneous Labor, livestock Interest on operating capital Total variable costs		ton cwt head lb \$ head hr \$	75.0000 7.0000 10.0000 ¹ 0.0650 9,018.0000 5.0000 6.2500 0.0875	134.0000 402.0000 3,015.0000 4,527.0000 1.0000 335.0000 550.0000 25,723.1602	10,050.00 2,814.00 30,150.00 294.25 9,018.00 1,675.00 3,437.50 2,250.78 \$59,689.53
Income above variable costs					\$122,415.47
4. Fixed costs					\$
Depreciation on other equipm	nent	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$59,689.53
6. Returns to risk and management					\$122,415.47
7. Returns to risk and management (c	ow-calf to ma	arket)			-\$15,004.63

Number of cattle on grass = 335; Adg = 1.3 pounds; days on grass = 270; Death loss = 1%;

c:\marousek\budgets\stoksell.doc

¹Cost per head per month. ²Interest on operating loan from cow-calf enterprise.

Budget 3B. Cow-Calf, Backgrounding and Finishing: Live Weight Sale

Table 1. Cow - Calf Winter on Federal Range Calves Retained

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production					\$
Aged bulls Cull cows Cull replacement heifers	16.00 10.00 7.20	cwt cwt	47.0000 42.0000 70.0000	10.0000 85.0000 10.0000	7,520.00 35,700.00 5,040.00
Total					\$48,260.00
2. Variable costs					\$
Alfalfa hay (cow herd) Alfalfa hay (all other animals Feed barley (replacement he Protein supplement (20%) BLM Crop aftermath Salt Veterinarian medicine Tractors(fuel,lubrication,reparation) Machinery(fuel,lubrication,reparation) Equipment(fuel,lubrication,reparation) Labor, tractor and machinery Labor, equipment Labor, livestock Interest on operating capital	airs) epairs) epairs)	ton ton cwt cwt aum aum lb head \$ \$ hr hr	75.0000 75.0000 5.5000 7.0000 2.0000 10.0000 0.0650 13.5500 6.2500 6.2500 6.2500 0.0875	281.2500 135.9750 517.5000 350.0000 6,118.0000 787.5000 8,800.0000 500.0000 1,380.8972 564.9993 2,450.0000 47,782.5742	21,093.75 10,198.11 2,846.25 2,450.00 12,236.00 7,875.00 572.00 6,775.00 717.23 14,402.70 3,887.83 8,630.61 3,531.25 15,312.50 4,180.97
3. Income above variable costs					-\$66,449.20
4. Fixed costs					\$
Interest on livestock capital Interest on other equipment Depreciation on horses Depreciation on beef bull Depreciation on other equipment Other fixed costs, machinery Overhead		\$ \$ \$ \$ \$ \$ \$	0.0950 0.0950	370,259.7895 86,129.6875	35,174.68 8,182.32 168.00 7,500.00 6,778.00 9,944.85 3,223.05
Total fixed costs					\$70,970.90
5. Total costs					\$185,680.10
6. Returns to risk and management					-\$137,420.10

Budget 3B. (continued)

Table 2. Backgrounding Custom Fed Calves Retained

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production					\$
Total					\$0.00
2. Variable costs					\$
Yardage and feed Hauling Interest on carryover ¹ Interest on operating capit	al	days head \$	0.8500 4.8400 5,010.0000 0.0875	50,250.0000 335.0000 1.0000 12,677.3789	42,712.48 1,621.40 5,010.00 1,109.27
Total variable costs					\$50,453.15
3. Income above variable costs					-\$50,453.15
4. Fixed costs					\$
Depreciation on other equ	ipment	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$50,453.15
6. Returns to risk and management	1				-\$50,453.15

Number of cattle in lot = 335; adg = 1.667; Days on feed = 150; death loss = 1%;

(continue to Table 3)

c:\marousek\budgets\backret1.doc

¹Interest on operating loan from cow-calf enterprise.

Budget 3B. (continued)

Table 3. Finishing Stage
Background Animals
Live Weight Sale

		Weight		Price or	Number of	Value or
		each	Unit	cost/unit	units/herd	cost/herd
1. Gross red	ceipts from production					\$
Ste	eers	10.50	cwt	68.0000	221.0000	157,794.00
He	ifers	10.00	cwt	66.0000	108.0000	71,280.00
Total						\$229,074.00
2. Variable	costs					\$
Ya	rdage charge		days	0.3000	39,840.0000	11,952.00
Alfa	alfa hay		ton	75.0000	13.2800	996.00
Co	rn silage		ton	40.0000	287.6500	11,506.00
Ba	rley pellets		ton	55.0000	87.1559	4,793.57
	tatoes		ton	12.0000	575.1555	6,901.87
	ed barley		ton	110.0000	104.5800	11,503.80
	uling		head	8.3300	332.0000	2,765.56
	erest on carryover		\$	5,480.0000	1.0000	5,480.00
Inte	erest on operating capital		\$	0.0875	14,758.0039	1,291.32
Total var	riable costs					\$57,190.12
3. Income a	bove variable costs					\$171,883.88
4. Fixed cos	its					\$
De	preciation on other equipm	ent	\$			0.00
Total fixe	ed costs					\$0.00
5. Total cost	ts					\$57,190.12
6. Returns to	o risk and management					\$171,883.88
7. Returns to	o risk and management (co	w-calf to ma	arket)			-\$15,989.37

Number of cattle in lot = 332; adg = 3.00 pounds; Days on feed = 120; death loss = 1%;

c:\marousek\budgets\bgfnsell.doc

¹Interest on operating loan from backgrounding enterprise.

Budget 3S. Cow-Calf, Stocking and Finishing: Live Weight Sale

Table 1. Cow - Calf Winter on Federal Range Calves Retained

1. Gross receipts from production Aged bulls 16.00 cwt 47.0000 10.0000 7,520.00 Cull cows 10.00 cwt 42.0000 85.0000 35,700.00 Cull replacement heifers 7.20 cwt 70.0000 10.0000 5,040.00 Total \$48,260.00 2. Variable costs \$ Alfalfa hay (cow herd) ton 75.0000 281.2500 21,093.75 Alfalfa hay (all other animals) ton 75.0000 135.9750 10,198.11 Feed barley (replacement heifers) cwt 5.5000 135.9750 10,198.11 Feed barley (replacement heifers) cwt 7.0000 350.0000 2,450.00 BLM aum 2.0000 6,118.0000 12,236.00 Crop aftermath aum 10.0000 787.5000 7,875.00 Salt Ib 0.0650 8,800.0000 572.00 Veterinarian medicine head 13.5500 500.0000 6,775.00 Labor, tractors (fuel, lubrication, repairs) \$ 7717.23 Machinery (fuel, lubrication, repairs) \$ 14,402.70 Equipment (fuel, lubrication, repairs) \$ 14,402.70 Equipment (fuel, lubrication, repairs) \$ 14,402.70 Equipment hir 6.2500 584.9993 3,531.25 Labor, tractor and machinery hir 6.2500 584.9993 3,531.25 Labor, tractor and machinery hir 6.2500 584.9993 3,531.25 Labor, discount of the properties of th		Weight	11-34	Price or	Number of	Value or
Aged bulls 16.00 cwt 47.0000 10.0000 7,520.00 Cull cows 10.00 cwt 42.0000 85.0000 35,700.00 Cull replacement heifers 7.20 cwt 70.0000 10.0000 5,040.00 \$48,260.00 \$48		each	Unit	cost/unit	units/herd	cost/herd
Cull cows	1. Gross receipts from production					\$
Cull cows	Aged bulls	16.00	cwt	47.0000	10.0000	7,520.00
State		10.00	cwt	42.0000	85.0000	35,700.00
2. Variable costs Alfalfa hay (cow herd) Alfalfa hay (all other animals) Eed barley (replacement heifers) Cwt 5.5000 BLM Aum 2.0000 BLM Aum 2.0000 Crop aftermath Bib Oxeterinarian medicine Tractors(fuel,lubrication,repairs) Equipment(fuel,lubrication,repairs) BLD Labor, tractor and machinery Labor, ilvestock Interest on operating capital Interest on livestock capital Interest on other equipment Coverhead Alfalfa hay (cow herd) Crop 3.75.000 Crop 3.50.0000 Cwt Tractors(fuel,0.0000 Tractors(fuel,0.0000 Tractors(fuel,0.00000 Tractors(fuel,0.0000000 Tractors(fuel,0.00000000000000000000000000000000000	Cull replacement heifers	7.20	cwt	70.0000	10.0000	5,040.00
Alfalfa hay (cow herd) ton 75.0000 281.2500 21,093.75 Alfalfa hay (all other animals) ton 75.0000 135.9750 10,198.11 Feed barley (replacement heifers) cwt 5.5000 517.5000 2,846.25 Protein supplement (20%) cwt 7.0000 350.0000 2,450.00 BLM aum 2.0000 6,118.0000 12,236.00 Crop aftermath aum 10.0000 787.5000 7,875.000 Salt lb 0.0650 8,800.0000 572.00 Veterinarian medicine head 13.5500 500.0000 6,775.00 Tractors(fuel,lubrication,repairs) \$ 717.23 Machinery(fuel,lubrication,repairs) \$ 14,402.70 Equipment(fuel,lubrication,repairs) \$ 13,887.83 Labor, tractor and machinery hr 6.2500 1,380.8972 8,630.61 Labor, equipment hr 6.2500 564.9993 3,531.25 Labor, livestock hr 6.2500 2,450.0000 15,312.50 Interest on operating capital \$ 0.0875 47,782.5742 4,180.97 Total variable costs \$ \$ 114,709.20 \$ 3.114,709	Total					\$48,260.00
Alfalfa hay (all other animals) ton 75.0000 135.9750 10,198.11 Feed barley (replacement heifers) cwt 5.5000 517.5000 2,846.25 Protein supplement (20%) cwt 7.0000 350.0000 2,450.00 BLM aum 2.0000 6,118.0000 12,236.00 Crop aftermath aum 10.0000 787.5000 7,875.00 Salt lb 0.0650 8,800.0000 572.00 Veterinarian medicine head 13.5500 500.0000 6,775.00 Tractors(fuel,lubrication,repairs) \$ 717.23 Machinery(fuel,lubrication,repairs) \$ 717.23 Machinery(fuel,lubrication,repairs) \$ 14,402.70 Equipment(fuel,lubrication,repairs) \$ 14,402.70 Equipment(fuel,lubrication,repairs) \$ 14,402.70 Equipment hr 6.2500 564.9993 3,531.25 Labor, tractor and machinery hr 6.2500 564.9993 3,531.25 Labor, livestock hr 6.2500 2,450.0000 15,312.50 Interest on operating capital \$ 0.0875 47,782.5742 4,180.97 Total variable costs \$ 114,709.20 \$ 114,7	2. Variable costs					\$
Alfalfa hay (all other animals) ton 75.0000 135.9750 10,198.11 Feed barley (replacement heifers) cwt 5.5000 517.5000 2,846.25 Protein supplement (20%) cwt 7.0000 350.0000 2,450.00 BLM aum 2.0000 6,118.0000 12,236.00 Crop aftermath aum 10.0000 787.5000 7,875.00 Salt lb 0.0650 8,800.0000 572.00 Veterinarian medicine head 13.5500 500.0000 6,775.00 Tractors(fuel,lubrication,repairs) \$ 717.23 Machinery(fuel,lubrication,repairs) \$ 717.23 Machinery(fuel,lubrication,repairs) \$ 14,402.70 Equipment(fuel,lubrication,repairs) \$ 14,402.70 Equipment(fuel,lubrication,repairs) \$ 14,402.70 Equipment hr 6.2500 564.9993 3,531.25 Labor, tractor and machinery hr 6.2500 564.9993 3,531.25 Labor, livestock hr 6.2500 2,450.0000 15,312.50 Interest on operating capital \$ 0.0875 47,782.5742 4,180.97 Total variable costs \$ 114,709.20 \$ 114,7	Alfalfa hay (cow herd)		ton	75.0000	281.2500	21,093.75
Feed barley (replacement heifers))	ton		135.9750	
Protein supplement (20%)	Feed barley (replacement he	eifers)	cwt	5.5000		
BLM aum 2.0000 6,118.0000 12,236.00 Crop aftermath aum 10.0000 787.5000 7,875.00 Salt lb 0.0650 8,800.0000 572.00 Veterinarian medicine head 13.5500 500.0000 6,775.00 Tractors(fuel,lubrication,repairs) \$ 717.23 Machinery(fuel,lubrication,repairs) \$ 14,402.70 Equipment(fuel,lubrication,repairs) \$ 14,402.70 Equipment(fuel,lubrication,repairs) \$ 14,402.70 Equipment hr 6.2500 1,380.8972 8,630.61 Labor, ractor and machinery hr 6.2500 564.9993 3,531.25 Labor, livestock hr 6.2500 2,450.0000 15,312.50 Interest on operating capital \$ 0.0875 47,782.5742 4,180.97 Total variable costs \$ \$114,709.20 3. Income above variable costs \$ \$114,709.20 4. Fixed costs \$ \$ \$114,709.20 3. Income above variable costs \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			cwt	7.0000	350.0000	2,450.00
Crop aftermath Salt aum 10.0000 787.5000 7,875.00 Salt Ib 0.0650 8,800.0000 572.00 Veterinarian medicine head 13.5500 500.0000 6,775.00 Tractors (fuel, lubrication, repairs) \$ 717.23 Machinery (fuel, lubrication, repairs) \$ 14,402.70 Equipment (fuel, lubrication, repairs) \$ 3,887.83 Labor, tractor and machinery hr 6.2500 1,380.8972 8,630.61 Labor, equipment hr 6.2500 564.9993 3,531.25 Labor, livestock hr 6.2500 2,450.0000 15,312.50 Interest on operating capital \$ 0.0875 47,782.5742 4,180.97 Total variable costs \$ \$ \$ 114,709.20 3. Income above variable costs \$ \$ \$ \$ 4. Fixed costs \$ \$ \$ \$ \$ 9 Expeciation on beef bull Depreciation on beef bull D			aum	2.0000	6,118.0000	12,236.00
Salt Ib 0.0650 8,800.0000 572.00 Veterinarian medicine head 13.5500 500.0000 6,775.00 Tractors(fuel,lubrication,repairs) \$ 717.23 Machinery(fuel,lubrication,repairs) \$ 14,402.70 Equipment(fuel,lubrication,repairs) \$ 3,887.83 Labor, tractor and machinery hr 6.2500 1,380.8972 8,630.61 Labor, equipment hr 6.2500 564.9993 3,531.25 Labor, livestock hr 6.2500 2,450.0000 15,312.50 Interest on operating capital \$ 0.0875 47,782.5742 4,180.97 Total variable costs \$ \$ \$ \$ 4. Fixed costs \$ \$ \$ \$ 8. Interest on livestock capital \$ 0.0950 370,259.7895 35,174.68 9. Pepreciation on horses \$ \$ 86,129.6875 8,182.32 Depreciation on beef bull \$ 7,500.00 7,500.00 7,500.00 7,500.00 7,			aum	10.0000	787.5000	7,875.00
Tractors(fuel, lubrication, repairs) \$ 717.23 Machinery(fuel, lubrication, repairs) \$ 14,402.70 Equipment(fuel, lubrication, repairs) \$ 14,402.70 Equipment(fuel, lubrication, repairs) \$ 3,887.83 Labor, tractor and machinery hr 6.2500 1,380.8972 8,630.61 Labor, equipment hr 6.2500 564.9993 3,531.25 Labor, livestock hr 6.2500 2,450.0000 15,312.50 Interest on operating capital \$ 0.0875 47,782.5742 4,180.97 Total variable costs \$ \$114,709.20 3. Income above variable costs \$ \$114,709.20 4. Fixed costs \$ \$0.0950 370,259.7895 35,174.68 Interest on other equipment \$ 0.0950 86,129.6875 8,182.32 Depreciation on horses \$ 168.00 Depreciation on beef bull \$ 7,500.00 Depreciation on other equipment \$ 6,778.00 Other fixed costs, machinery and equipment \$ 9,944.85 Overhead \$ 3,223.05 Total fixed costs \$ \$70,970.90 5. Total costs \$ \$185,680.10			lb	0.0650	8,800.0000	572.00
Machinery(fuel, lubrication, repairs) \$ 14,402.70 Equipment(fuel, lubrication, repairs) \$ 3,887.83 Labor, tractor and machinery hr 6.2500 1,380.8972 8,630.61 Labor, equipment hr 6.2500 564.9993 3,531.25 Labor, livestock hr 6.2500 2,450.0000 15,312.50 Interest on operating capital \$ 0.0875 47,782.5742 4,180.97 Total variable costs Interest on livestock capital \$ 0.0950 370,259.7895 35,174.68 Interest on other equipment \$ 0.0950 370,259.7895 35,174.68 Interest on other equipment \$ 0.0950 86,129.6875 8,182.32 Depreciation on horses \$ 168.00 Depreciation on beef bull \$ 7,500.00 Other fixed costs, machinery and equipment \$ 9,944.85 Overhead \$ 3,223.05 Total fixed costs \$70,970.90 5. Total costs \$185,680.10	Veterinarian medicine		head	13.5500	500.0000	6,775.00
Equipment(fuel,lubrication,repairs) \$ 3,887.83 Labor, tractor and machinery hr 6.2500 1,380.8972 8,630.61 Labor, equipment hr 6.2500 564.9993 3,531.25 Labor, livestock hr 6.2500 2,450.0000 15,312.50 Interest on operating capital \$ 0.0875 47,782.5742 4,180.97 Total variable costs \$ \$114,709.20 3. Income above variable costs \$ \$114,709.20 4. Fixed costs \$ \$ \$114,709.20 5. Interest on livestock capital \$ 0.0950 370,259.7895 35,174.68 Interest on other equipment \$ 0.0950 86,129.6875 8,182.32 Depreciation on horses \$ 168.00 Depreciation on other equipment \$ 0.0950 86,129.6875 8,182.32 Depreciation on other equipment \$ 0.7,500.00 Depreciation on other equipment \$ 0.778.00 Other fixed costs, machinery and equipment \$ 0.778.00 Other fixed costs \$ \$70,970.90 5. Total costs \$ \$70,970.90 5. Total costs \$ \$185,680.10	Tractors(fuel,lubrication,repa	airs)				
Labor, tractor and machinery hr 6.2500 1,380.8972 8,630.61 Labor, equipment hr 6.2500 564.9993 3,531.25 Labor, livestock hr 6.2500 2,450.0000 15,312.50 Interest on operating capital \$ 0.0875 47,782.5742 4,180.97 Total variable costs \$ \$114,709.20 3. Income above variable costs \$ \$114,709.20 4. Fixed costs \$ \$ \$114,709.20 4. Fixed costs \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			\$			
Labor, equipment Labor, livestock Interest on operating capital Total variable costs Interest on livestock capital Interest on livestock capital Interest on other equipment Depreciation on horses Depreciation on other equipment Other fixed costs, machinery and equipment Overhead Total costs Labor, livestock Interest on operating capital Sologo So	Equipment(fuel,lubrication,re	epairs)	\$			
Labor, livestock Interest on operating capital \$ 0.0875 47,782.5742 4,180.97 Total variable costs \$ \$114,709.20 3. Income above variable costs \$ \$ \$145,680.10 Interest on livestock capital \$ 0.0950 370,259.7895 35,174.68 Interest on other equipment \$ 0.0950 86,129.6875 8,182.32 Depreciation on horses \$ \$ 168.00 Depreciation on other equipment \$ 0,7500.00 Other fixed costs, machinery and equipment \$ 9,944.85 Overhead \$ 3,223.05 Total fixed costs \$ \$185,680.10	Labor, tractor and machiner	/	hr		1,380.8972	
Interest on operating capital \$ 0.0875 47,782.5742 4,180.97	Labor, equipment		hr			
Total variable costs \$114,709.20 3. Income above variable costs \$-\$66,449.20 4. Fixed costs \$ Interest on livestock capital \$0.0950 370,259.7895 35,174.68 Interest on other equipment \$0.0950 86,129.6875 8,182.32 Depreciation on horses \$Depreciation on beef bull \$7,500.00 6,778.00 Other fixed costs, machinery and equipment \$0.0950 86,129.6875 \$168.00 7,500.00 6,778.00 Other fixed costs, machinery and equipment \$0.0950 86,129.6875 \$168.00 7,500.00 \$169.00 \$	Labor, livestock			6.2500		
3. Income above variable costs -\$66,449.20 4. Fixed costs \$ Interest on livestock capital \$ 0.0950 370,259.7895 35,174.68 Interest on other equipment \$ 0.0950 86,129.6875 8,182.32 Depreciation on horses \$ 168.00 Pepreciation on beef bull \$ 7,500.00 Pepreciation on other equipment \$ 6,778.00 Other fixed costs, machinery and equipment \$ 9,944.85 Overhead \$ 3,223.05 Total fixed costs \$70,970.90	Interest on operating capital		\$	0.0875	47,782.5742	4,180.97
4. Fixed costs \$ Interest on livestock capital \$ 0.0950 370,259.7895 35,174.68 Interest on other equipment \$ 0.0950 86,129.6875 8,182.32 Depreciation on horses \$ 168.00 Depreciation on beef bull \$ 7,500.00 Depreciation on other equipment \$ 6,778.00 Other fixed costs, machinery and equipment \$ 9,944.85 Overhead \$ 3,223.05 Total fixed costs \$70,970.90 5. Total costs \$185,680.10	Total variable costs					\$114,709.20
Interest on livestock capital \$ 0.0950 370,259.7895 35,174.68 Interest on other equipment \$ 0.0950 86,129.6875 8,182.32 Depreciation on horses \$ 168.00 Depreciation on beef bull \$ 7,500.00 Depreciation on other equipment \$ 6,778.00 Other fixed costs, machinery and equipment \$ 9,944.85 Overhead \$ 3,223.05 Total fixed costs \$70,970.90 5. Total costs \$185,680.10	3. Income above variable costs					-\$66,449.20
Interest on other equipment \$ 0.0950 86,129.6875 8,182.32 Depreciation on horses \$ 168.00 Depreciation on beef bull \$ 7,500.00 Depreciation on other equipment \$ 6,778.00 Other fixed costs, machinery and equipment \$ 9,944.85 Overhead \$ 3,223.05 Total fixed costs \$70,970.90 5. Total costs \$185,680.10	4. Fixed costs					\$
Interest on other equipment \$ 0.0950 86,129.6875 8,182.32 Depreciation on horses \$ 168.00 Depreciation on beef bull \$ 7,500.00 Depreciation on other equipment \$ 6,778.00 Other fixed costs, machinery and equipment \$ 9,944.85 Overhead \$ 3,223.05 Total fixed costs \$70,970.90 5. Total costs \$185,680.10	Interest on livestock capital		\$	0.0950	370 259 7895	35 174 68
Overhead \$ 3,223.05 Total fixed costs \$70,970.90 5. Total costs \$185,680.10			\$			
Overhead \$ 3,223.05 Total fixed costs \$70,970.90 5. Total costs \$185,680.10			s	0.0000	00,120.00.0	
Overhead \$ 3,223.05 Total fixed costs \$70,970.90 5. Total costs \$185,680.10			\$			7.500.00
Overhead \$ 3,223.05 Total fixed costs \$70,970.90 5. Total costs \$185,680.10		ment	\$			
Overhead \$ 3,223.05 Total fixed costs \$70,970.90 5. Total costs \$185,680.10			t S			
5. Total costs \$185,680.10						
	Total fixed costs					\$70,970.90
6. Returns to risk and management -\$137,420.10	5. Total costs					\$185,680.10
	6. Returns to risk and management					-\$137,420.10

Budget 3S. (continued)

Table 2. Stocker **Grass Fed** Yearlings Retained

Wei ea	-	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production				\$
Total				\$0.00
2. Variable costs				\$
Alfalfa hay Protein supplement (20%) Deeded range Salt Interest on carryover ² Miscellaneous Labor, livestock Interest on operating capital	ton cwt head lb \$ head hr \$	75.0000 7.0000 10.0000 ¹ 0.0650 9,018.0000 5.0000 6.2500 0.0875	134.0000 402.0000 3,015.0000 4,527.0000 1.0000 335.0000 550.0000 17,870.8359	10,050.00 2,814.00 30,150.00 294.25 9,018.00 1,675.00 3,437.50 1,563.70
Total variable costs				\$59,002.45
3. Income above variable costs				-\$59,002.45
4. Fixed costs				\$
Depreciation on other equipment	\$			0.00
Total fixed costs				\$0.00
5. Total costs				\$59,002.45
6. Returns to risk and management				-\$59,002.45

Number of cattle on grass = 335; Adg = 1.3#; days on grass = 270; Death loss = 1%;

(continue to Table 3)

c:\marousek\budgets\grasret1.doc

¹Cost per head per month. ²Interest on operating loan from cow-calf enterprise.

Budget 3S. (continued)

Table 3. Finishing Stage
Grass Fed Animals
Live Weight Sale

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production					\$
Steers	11.50	head	71.0000	221.0000	180,446.50
Heifers	11.00	head	69.0000	108.0000	81,972.00
Total					\$262,418.50
2. Variable costs					\$
Yardage charge		days	0.3000	39,840.0000	11,952.00
Alfalfa hay		ton	75.0000	13.2800	996.00
Corn silage		ton	40.0000	287.6500	11,506.00
Barley pellets		ton	55.0000	87.1600	4,793.80
Potatoes		ton	12.0000	575.1995	6,902.39
Feed barley		ton	110.0000	104.6000	11,506.00
Hauling		head	8.3300	332.0000	2,765.56
Interest on carryover ¹		\$	5,729.0000	1.0000	5,729.00
Interest on operating capital	al	\$	0.0875	16,813.5430	1,471.18
Total variable costs					\$57,621.93
3. Income above variable costs					\$204,796.57
4. Fixed costs					\$
Depreciation on other equip	pment	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$57,621.93
6. Returns to risk and management					\$204,796.57
7. Returns to risk and management	(cow-calf to ma	arket)			\$8,374.02

Number of cattle in lot = 332; adg = 3.00 pounds; Days on feed = 120; death loss = 1%;

c:\marousek\budgets\grfnsell.doc

¹Interest on operating loan from stocker enterprise.

Budget 4B. Cow-Calf, Backgrounding, Finishing and Slaughtering: Carcass Contract Sale

Table 1. Cow - Calf Winter on Federal Range Calves Retained

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
Gross receipts from production					\$
Aged bulls Cull cows Cull replacement heifers	16.00 10.00 7.20	cwt cwt	47.0000 42.0000 70.0000	10.0000 85.0000 10.0000	7,520.00 35,700.00 5,040.00
Total					\$48,260.00
2. Variable costs					\$
Alfalfa hay (cow herd) Alfalfa hay (all other animal Feed barley (replacement herotein supplement (20%) BLM Crop aftermath Salt Veterinarian medicine Tractors(fuel,lubrication,replacement) Machinery(fuel,lubrication,replacement) Labor, tractor and machines Labor, equipment Labor, livestock Interest on operating capital	eifers) pairs) epairs) epairs) ry	ton ton cwt cwt aum aum lb head \$ hr hr	75.0000 75.0000 5.5000 7.0000 2.0000 10.0000 0.0650 13.5500 6.2500 6.2500 6.2500 0.0875	281.2500 135.9750 517.5000 350.0000 6,118.0000 787.5000 8,800.0000 500.0000 1,380.8972 564.9993 2,450.0000 47,782.5742	21,093.75 10,198.11 2,846.25 2,450.00 12,236.00 7,875.00 572.00 6,775.00 717.23 14,402.70 3,887.83 8,630.61 3,531.25 15,312.50 4,180.97
Income above variable costs					-\$66,449.20
4. Fixed costs					\$
Interest on livestock capital Interest on other equipmen Depreciation on horses Depreciation on beef bull Depreciation on other equip Other fixed costs, machine	toment	\$ \$ \$ \$ \$ \$ \$	0.0950 0.0950	370,259.7895 86,129.6875	35,174.68 8,182.32 168.00 7,500.00 6,778.00 9,944.85 3,223.05
Total fixed costs					\$70,970.90
5. Total costs					\$185,680.10
6. Returns to risk and management					-\$137,420.10

Budget 4B. (continued)

Table 2. Backgrounding
Custom Fed
Calves Retained

1 Gross receipts from and dust	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
Gross receipts from production Total					\$
Total					\$0.00
2. Variable costs					•
Yardage and feed Hauling Interest on carryover ¹ Interest on operating capital Total variable costs		days head \$ \$	0.8500 4.8400 5,010.0000 0.0875	50,250.0000 335.0000 1.0000 12,677.3789	\$ 42,712.48 1,621.40 5,010.00 1,109.27 \$50,453.15
3. Income above variable costs					
4. Fixed costs					-\$50,453.15
Depreciation on other equipme	nt	\$			\$
Total fixed costs					0.00
5. Total costs					\$0.00
6. Returns to risk and management					\$50,453.15
to not and management					-\$50,453.15

Number of cattle in lot = 335; adg = 1.667; Days on feed = 150; death loss = 1%;

(continue to Table 3)

c:\marousek\budgets\backret2.doc

¹Interest on operating loan from cow-calf enterprise.

Budget 4B. (continued)

Table 3. Finishing Stage Background Animals

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from	production				\$
Steers Heifers	1.00 1.00	head head	80.0000 ¹ 80.0000 ¹	223.0000 109.0000	17,840.00 8,720.00
Total					\$26,560.00
2. Variable costs					\$
Yardage cha Alfalfa hay Corn silage Barley pellets Potatoes Feed barley Hauling Interest on counterest on of	s arryover ² perating capital	days ton ton ton ton head \$	0.3000 75.0000 40.0000 55.0000 12.0000 110.0000 8.3300 5,480.0000 0.0875	39,840.0000 13.2800 287.6500 87.1559 575.1555 104.5800 332.0000 1.0000 14,758.0039	11,952.00 996.00 11,506.00 4,793.57 6,901.87 11,503.79 2,765.56 5,480.00 1,291.32 \$57,199.11
3. Income above varia	able costs				-\$30,639.11
4. Fixed costs					\$
Depreciation	on other equipment	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$57,199.11
6. Returns to risk and	management				-\$30,639.11

Number of cattle in lot = 332; adg = 3.00 pounds; Days on feed = 120; death loss = 1%;

(continue to Table 4)

c:\marousek\budgets\bgfnret.doc

¹Advance payment of \$80.00 per head for each animal sold on carcass contract. ²Interest on operating loan from backgrounding enterprise.

Budget 4B. (continued)

Marketing Stage Background Animals Table 4. Carcass Sale

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production	4 18				\$
Steers Heifers	6.37 ¹ 6.07 ¹	head head	132.3275 ² 131.6984 ³	221.0000 108.0000	186,286.68 86,336.20
Total					\$272,622.88
2. Variable costs					\$
Hauling		head	8.7400	329.0000	2,875.46
Total variable costs					\$2,875.46
3. Income above variable costs					\$269,747.42
4. Fixed costs					\$
Depreciation on other ed	quipment	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$2,875.46
6. Returns to risk and manageme	nt				\$269,747.42
7. Returns to risk and manageme	ent (cow-calf to ma	arket)			\$51,235.06

Number of cattle in lot = 329;

c:\marousek\budgets\bgcarcas.doc

¹Carcass weight at 60.67% yield.
²Price = (total value of steers minus advance payment for steers) / total weight of steers.
³Price = (total value of heifers minus advance payment for heifers) / total weight of heifers.

Budget 4S. Cow-Calf, Stocking, Finishing and Slaughtering: Carcass Contract Sale

Table 1. Cow - Calf Winter on Federal Range Calves Retained

		Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1 C	accinta from production	Caon	Onne	costant	unitarriera	
1. Gross re	eceipts from production					\$
A	ged bulls	16.00	cwt	47.0000	10.0000	7,520.00
C	cull cows	10.00	cwt	42.0000	85.0000	35,700.00
C	Cull replacement heifers	7.20	cwt	70.0000	10.0000	5,040.00
Total						\$48,260.00
2. Variable	e costs					\$
۸	Ifalfa hay (cow herd)		ton	75.0000	281.2500	21,093.75
	Ifalfa hay (all other animals	e)	ton	75.0000	135.9750	10,198.11
	eed barley (replacement h		cwt	5.5000	517.5000	2.846.25
	rotein supplement (20%)	eliels)	cwt	7.0000	350.0000	2,450.00
	SLM		aum	2.0000	6,118.0000	12,236.00
	crop aftermath		aum	10.0000	787.5000	7,875.00
	Salt		lb	0.0650	8,800.0000	572.00
	eterinarian medicine		head	13.5500	500.0000	6,775.00
	ractors(fuel,lubrication,rep	airs)	\$	10.000		717.23
	Machinery(fuel, lubrication, re		\$			14,402.70
	quipment(fuel,lubrication,r		\$			3,887.83
	abor, tractor and machiner		hr	6.2500	1,380.8972	8,630.61
	abor, equipment	,	hr	6.2500	564.9993	3,531.25
	abor, livestock		hr	6.2500	2,450.0000	15,312.50
	nterest on operating capita	1	\$	0.0875	47,782.5742	4,180.97
Total v	ariable costs					\$114,709.20
3. Income	above variable costs					-\$66,449.20
4. Fixed co	osts					\$
le le	nterest on livestock capital		\$	0.0950	370,259.7895	35,174.68
	nterest on other equipment		\$	0.0950	86,129.6875	8,182.32
	epreciation on horses		\$	0.0000	00,120.0010	168.00
	epreciation on beef bull		\$			7,500.00
	epreciation on other equip	ment	\$			6,778.00
	ther fixed costs, machiner					9,944.85
	verhead	,	\$			3,223.05
Total fi	ixed costs					\$70,970.90
5. Total co	osts					\$185,680.10
6. Returns	to risk and management					-\$137,420.10

Budget 4S. (continued)

Table 2. Stocker Grass Fed **Yearlings Retained**

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production					\$
Total					\$0.00
2. Variable costs					\$
Alfalfa hay Protein supplement (20%) Deeded range Salt Interest on carryover ² Miscellaneous Labor, livestock Interest on operating capital Total variable costs		ton cwt head lb \$ head hr \$	75.0000 7.0000 10.0000 ¹ 0.0650 9,018.0000 5.0000 6.2500 0.0875	134.0000 402.0000 3,015.0000 4,527.0000 1.0000 335.0000 550.0000 17,870.8359	10,050.00 2,814.00 30,150.00 294.25 9,018.00 1,675.00 3,437.50 1,563.70 \$59,002.45
3. Income above variable costs					-\$59,002.45
4. Fixed costs					\$
Depreciation on other equipment	nent	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$59,002.45
6. Returns to risk and management					-\$59,002.45

Number of cattle on grass = 335; Adg = 1.3#; days on grass = 270; Death loss = 1%;

(continue to Table 3)

c:\marousek\budgets\grasret2.doc

¹Cost per head per month. ²Interest on operating loan from cow-calf enterprise.

Budget 4S. (continued)

Table 3. Finishing Stage Grass Fed Animals

	Weight		Price or	Number of	Value or
	each	Unit	cost/unit	units/herd	cost/herd
1. Gross receipts from production					\$
Steers Heifers	1.00 1.00	head head	80.0000 ¹ 80.0000 ¹	223.0000 109.0000	17,840.00 8,720.00
Total					\$26,560.00
2. Variable costs					\$
Yardage charge Alfalfa hay Corn silage Barley pellets Potatoes Feed barley Hauling Interest on carryover ² Interest on operating ca	oital	days ton ton ton ton ton head \$	0.3000 75.0000 40.0000 55.0000 12.0000 110.0000 8.3300 5,729.0000 0.0875	39,840.0000 13.2800 287.6500 87.1600 575.1995 104.6000 332.0000 1.0000 16,813.5430	11,952.00 996.00 11,506.00 4,793.80 6,902.39 11,506.00 2,765.56 5,729.00 1,471.18 \$57,621.93
3. Income above variable costs					-\$31,061.93
4. Fixed costs					\$
Depreciation on other ed	quipment	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$57,621.93
6. Returns to risk and management	nt				-\$31,061.93

Number of cattle in lot = 332; adg = 3.00 pounds; Days on feed = 120; death loss = 1%;

(continue to Table 4)

c:\marousek\budgets\grfnret.doc

¹Advance payment of \$80.00 per head for each animal sold on carcass contract. ²Interest on operating loan from stocker enterprise.

Budget 4S. (continued)

Marketing Stage Grass Fed Animals Table 4. **Carcass Sale**

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production					\$
Steers Heifers	6.98 ¹ 6.67 ¹	head head	133.4350 ² 132.8950 ³	221.0000 108.0000	205,834.16 95,732.24
Total					\$301,566.40
2. Variable costs					\$
Hauling		head	8.7400	329.0000	2,875.46
Total variable costs					\$2,875.46
3. Income above variable costs					\$298,690.94
4. Fixed costs					\$
Depreciation on other eq	uipment	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$2,875.46
6. Returns to risk and managemen	nt				\$298,690.94
7. Returns to risk and managemen	nt (cow-calf to ma	rket)			\$71,206.46

Number of cattle in lot = 329;

c:\marousek\budgets\grcarcas.doc

¹Carcass weight at 60.67% yield.
²Price = (total value of steers minus advance payment for steers) / total weight of steers.
³Price = (total value of heifers minus advance payment for heifers) / total weight of heifers.

Budget 5B. Cow-Calf, Backgrounding, Finishing and Mixed Marketing: Live Weight and Carcass Contract Sale

Table 1. Cow - Calf Winter on Federal Range Calves Retained

	Weight	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
Gross receipts from production					\$
Aged bulls Cull cows Cull replacement heifers	16.00 10.00 7.20	cwt cwt	47.0000 42.0000 70.0000	10.0000 85.0000 10.0000	7,520.00 35,700.00 5,040.00
Total					\$48,260.00
2. Variable costs					\$
Alfalfa hay (cow herd) Alfalfa hay (all other animal Feed barley (replacement herotein supplement (20%) BLM Crop aftermath Salt Veterinarian medicine Tractors(fuel,lubrication,replacement) Machinery(fuel,lubrication,replacement) Labor, tractor and machines Labor, equipment Labor, livestock Interest on operating capital	pairs) epairs) repairs) ry	ton ton cwt cwt aum aum lb head \$ \$ hr hr	75.0000 75.0000 5.5000 7.0000 2.0000 10.0000 0.0650 13.5500 6.2500 6.2500 6.2500 0.0875	281.2500 135.9750 517.5000 350.0000 6,118.0000 787.5000 8,800.0000 500.0000 1,380.8972 564.9993 2,450.0000 47,782.5742	21,093.75 10,198.11 2,846.25 2,450.00 12,236.00 7,875.00 572.00 6,775.00 717.23 14,402.70 3,887.83 8,630.61 3,531.25 15,312.50 4,180.97
Total variable costs					\$114,709.20
Income above variable costs					-\$66,449.20
4. Fixed costs Interest on livestock capital Interest on other equipment Depreciation on horses Depreciation on beef bull Depreciation on other equip Other fixed costs, machiner Overhead	oment	* * * * * * * *	0.0950 0.0950	370,259.7895 86,129.6875	\$ 35,174.68 8,182.32 168.00 7,500.00 6,778.00 9,944.85 3,223.05
Total fixed costs					\$70,970.90
5. Total costs					\$185,680.10
6. Returns to risk and management					-\$137,420.10

Budget 5B. (continued)

Table 2. Backgrounding Custom Fed Calves Retained

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
	eacii	Ome	Costruint	unismera	cosunerd
1. Gross receipts from production					\$
Total					\$0.00
2. Variable costs					\$
Yardage and feed		days	0.8500	50,250.0000	42,712.48
Hauling		head	4.8400	335.0000	1,621.40
Interest on carryover ¹		\$	5,010.0000	1.0000	5,010.00
Interest on operating capita	al	\$	0.0875	12,677.3789	1,109.27
Total variable costs					\$50,453.15
3. Income above variable costs					-\$50,453.15
4. Fixed costs					\$
Depreciation on other equi	pment	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$50,453.15
6. Returns to risk and management					-\$50,453.15

Number of cattle in lot = 335; adg = 1.667; Days on feed = 150; death loss = 1%;

(continue to Table 3)

c:\marousek\budgets\backret3.doc

¹Interest on operating loan from cow-calf enterprise.

Budget 5B. (continued)

Finishing Stage Table 3. **Background Animals**

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production					\$
Steers Heifers	1.00 1.00	head head	80.0000 ¹ 80.0000 ¹	89.0000 44.0000	7,120.00 3,520.00
Total					\$10,640.00
2. Variable costs					\$
Yardage charge Alfalfa hay Corn silage Barley pellets Potatoes Feed barley Hauling Interest on carryover ² Interest on operating capita	al	days ton ton ton ton ton head \$	0.3000 75.0000 40.0000 55.0000 12.0000 110.0000 8.3300 5,480.0000 0.0875	39,840.0000 13.2800 287.6500 87.1559 575.1555 104.5800 332.0000 1.0000 14,758.0039	11,952.00 996.00 11,506.00 4,793.57 6,901.87 11,503.79 2,765.56 5,480.00 1,291.32 \$57,190.11
3. Income above variable costs					-\$46,550.11
4. Fixed costs					\$
Depreciation on other equi	pment	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$57,190.11
6. Returns to risk and management					-\$46,550.11

Number of cattle in lot = 332; adg = 3.00 pounds; Days on feed = 120; death loss = 1%;

(continue to Table 4)

c:\marousek\budgets\bgfnrt40.doc

¹Advance payment of \$80.00 per head for each animal sold on carcass contract. ²Interest on operating loan from backgrounding enterprise.

Budget 5B. (continued)

Table 4. **Marketing Stage Background Animals** 40% Carcass Sale, 60% Live Weight Sale

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production					\$
Steers Heifers Steers Heifers	6.37 ¹ 6.07 ¹ 10.50 10.00	head head cwt cwt	132.2984 ² 131.5139 ³ 68.0000 66.0000	88.0000 43.0000 133.0000 65.0000	74,161.19 34,326.44 94,962.00 42,900.00
Total					\$246,349.63
2. Variable costs					\$
Hauling		head	8.7400	131.0000	1,144.94
Total variable costs					\$1,144.94
3. Income above variable costs					\$245,204.69
4. Fixed costs					\$
Depreciation on other equipment		\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$1,144.94
6. Returns to risk and management					\$245,204.69
7. Returns to risk and management (cow-calf to market)					\$10,781.33

Number of cattle in lot = 329;

c:\marousek\budgets\bgcarc40.doc

¹Carcass weight at 60.67% yield.

²Price = (total value of steers minus advance payment for steers) / total weight of steers.

³Price = (total value of heifers minus advance payment for heifers) / total weight of heifers.

Budget 5S. Cow-Calf , Stocking, Finishing and Mixed Marketing: Live Weight and Carcass Contract Sale

Table 1. Cow - Calf Winter on Federal Range Calves Retained

	Weight	74.2	Price or	Number of	Value or
	each	Unit	cost/unit	units/herd	cost/herd
Gross receipts from production					\$
Aged bulls	16.00	cwt	47.0000	10.0000	7,520.00
Cull cows	10.00	cwt	42.0000	85.0000	35,700.00
Cull replacement heifers	7.20	cwt	70.0000	10.0000	5,040.00
Total					\$48,260.00
2. Variable costs					\$
Alfalfa hay (cow herd)		ton	75.0000	281.2500	21,093.75
Alfalfa hay (all other animal	s)	ton	75.0000	135.9750	10,198.11
Feed barley (replacement h		cwt	5.5000	517.5000	2,846.25
Protein supplement (20%)		cwt	7.0000	350.0000	2,450.00
BLM		aum	2.0000	6,118.0000	12,236.00
Crop aftermath		aum	10.0000	787.5000	7,875.00
Salt		lb	0.0650	8,800.0000	572.00
Veterinarian medicine		head	13.5500	500.0000	6,775.00
Tractors(fuel,lubrication,rep	airs)	\$			717.23
Machinery(fuel,lubrication,re		\$			14,402.70
Equipment(fuel,lubrication,repairs)		\$			3,887.83
Labor, tractor and machinery		hr	6.2500	1,380.8972	8,630.61
Labor, equipment		hr	6.2500	564.9993	3,531.25
Labor, livestock		hr	6.2500	2,450.0000	15,312.50
Interest on operating capital		\$	0.0875	47,782.5742	4,180.97
Total variable costs					\$114,709.20
3. Income above variable costs					-\$66,449.20
4. Fixed costs	4. Fixed costs				\$
Interest on livestock capital		\$	0.0950	370,259.7895	35,174.68
Interest on other equipment		\$	0.0950	86,129.6875	8,182.32
Depreciation on horses					168.00
Depreciation on beef bull		\$ \$ \$			7,500.00
Depreciation on other equip	ment	\$			6,778.00
Other fixed costs, machiner					9,944.85
Overhead		\$			3,223.05
Total fixed costs					\$70,970.90
5. Total costs					\$185,680.10
6. Returns to risk and management					-\$137,420.10

Budget 5S. (continued)

Table 2. Stocker **Grass Fed** Yearlings Retained

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production					\$
Total					\$0.00
2. Variable costs					\$
Alfalfa hay Protein supplement (20%) Deeded range Salt Interest on carryover ² Miscellaneous Labor, livestock Interest on operating capital Total variable costs		ton cwt head lb \$ head hr \$	75.0000 7.0000 10.0000 ¹ 0.0650 9,018.0000 5.0000 6.2500 0.0875	134.0000 402.0000 3,015.0000 4,527.0000 1.0000 335.0000 550.0000 17,870.8359	10,050.00 2,814.00 30,150.00 294.25 9,018.00 1,675.00 3,437.50 1,563.70 \$59,002.45
3. Income above variable costs					-\$59,002.45
4. Fixed costs					\$
Depreciation on other equipment	nent	\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$59,002.45
6. Returns to risk and management					-\$59,002.45

Number of cattle on grass = 335; Adg = 1.3#; days on grass = 270; Death loss = 1%;

(continue to Table 3)

c:\marousek\budgets\grasret3.doc

¹Cost per head per month. ²Interest on operating loan from cow-calf enterprise.

Budget 5S. (continued)

Table 3. Finishing Stage Grass Fed Animals

	Weight		Price or	Number of	Value or
	each	Unit	cost/unit	units/herd	cost/herd
1. Gross receipts from production					\$
Steers	1.00	head	80.0000 ¹	89.0000	7,120.00
Heifers	1.00	head	80.0000 ¹	44.0000	3,520.00
Total					\$10,640.00
2. Variable costs					\$
Yardage charge		days	0.3000	39,840.0000	11,952.00
Alfalfa hay		ton	75.0000	13.2800	996.00
Corn silage		ton	40.0000	287.6500	11,506.00
Barley pellets		ton	55.0000	87.1600	4,793.80
Potatoes		ton	12.0000	575.1995	6,902.39
Feed barley		ton	110.0000	104.6000	11,506.00
Hauling		head	8.3300	332.0000	2,765.56
Interest on carryover ²		\$	5,729.0000	1.0000	5,729.00
Interest on operating capital		\$	0.0875	16,813.5430	1,471.18
Total variable costs					\$57,621.93
3. Income above variable costs					-\$46,981.93
4. Fixed costs					\$
Depreciation on other equipment		\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$57,621.93
6. Returns to risk and management					-\$46,981.93

Number of cattle in lot = 332; adg = 3.00 pounds; Days on feed = 120; death loss = 1%;

(continue to Table 4)

c:\marousek\budgets\grfnrt40.doc

¹Advance payment of \$80.00 per head for each animal sold on carcass contract. ²Interest on operating loan from stocker enterprise.

Budget 5S. (continued)

Marketing Stage Grass Fed Animals Table 4. 40% Carcass Sale, 60% Live Weight Sale

	Weight each	Unit	Price or cost/unit	Number of units/herd	Value or cost/herd
1. Gross receipts from production					\$
Steers Heifers Steers Heifers	6.98 ¹ 6.67 ¹ 11.50 11.00	head head cwt cwt	133.4084 ² 132.7271 ³ 71.0000 69.0000	88.0000 43.0000 133.0000 65.0000	81,944.78 38,067.46 108,594.50 49,335.00
Total					\$277,941.74
2. Variable costs					\$
Hauling		head	8.7400	131.0000	1,144.94
Total variable costs					\$1,144.94
3. Income above variable costs					\$276,796.80
4. Fixed costs					\$
Depreciation on other equipment		\$			0.00
Total fixed costs					\$0.00
5. Total costs					\$1,144.94
6. Returns to risk and management				\$276,796.80	
7. Returns to risk and management (cow-calf to market)				\$33,392.32	

Number of cattle in lot = 329;

c:\marousek\budgets\grcarc40.doc

¹Carcass weight at 60.67% yield.

²Price = (total value of steers minus advance payment for steers) / total weight of steers.

³Price = (total value of heifers minus advance payment for heifers) / total weight of heifers.