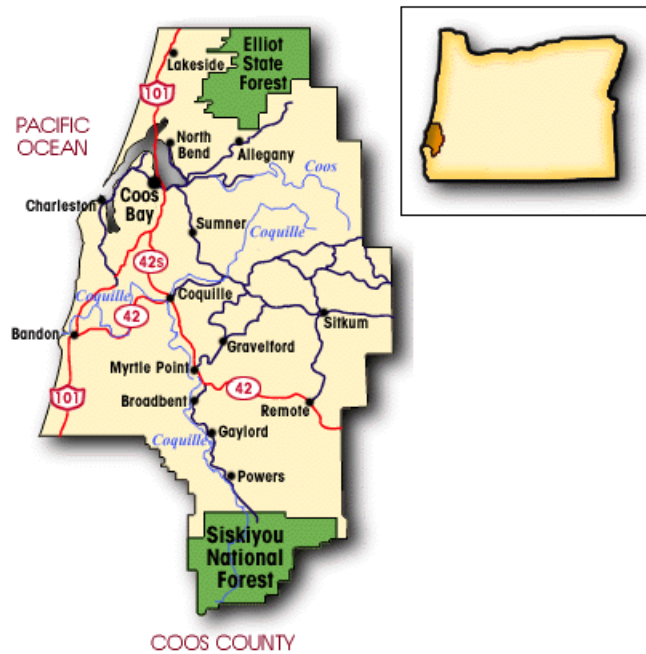


FEASIBILITY EVALUATION OF DAIRY FARMING IN COOS COUNTY, OREGON



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INTRODUCTION

This study evaluates the potential for establishing dairy farms and producing milk on properties in Coos County, Oregon. The study was in response to changing in the milk processing situation in the county and the anticipated need for more milk production in the county. The information used in the analysis was assembled during site visits and from a variety of reliable sources.

County information

County Seat: Courthouse, 250 N Baxter, Coquille 97423

Phone: (541) 396-3121

Fax: (541) 396-4861

Web: <http://www.co.coos.or.us/>

County Clerk: Terri Turi

Phone: (541) 396-3121 Ext 241

Fax: (541) 396-4861

Email: coosclerk@co.coos.or.us

Board of Commissioners

Phone: (541) 396-3121 Ext. 225

Fax: (541) 396-4861

Email: coosboc@co.coos.or.us

Established: Dec. 22, 1853

Elev. at Coquille: 40'

Area: 1,629 sq. mi.

Average Temp.: January 44.2°, July 60.9°

2003 Assessed Value: \$2,578,552,381

2003 Real Market Value: \$3,035,740,683

Annual Precipitation: 56.8"

Economy: Forest products, fishing, agriculture, shipping, recreation and tourism.

Points of Interest: Lumber port, myrtlewood groves, Shore Acres State Park and Botanical Gardens, beaches, Oregon Dunes National Recreation Area, museums, fishing fleets, boat basins, scenic golf courses.

Coos County was created by the Territorial Legislature from parts of Umpqua and Jackson Counties in 1853 and included Curry County until 1855. The county seat was Empire City until 1896, when it was moved to Coquille. Although trappers had been in the area a quarter-century earlier, the first permanent settlement in present Coos County was at Empire City, now part of Coos Bay, by members of the Coos Bay Company in 1853. The name "Coos" derives from a native Coos Bay Indian tribe and translates to "lake" or "place of pines."

Forest products, tourism, fishing and agriculture dominate the Coos County economy. Boating, dairy farming, myrtlewood manufacturing, shipbuilding and repair and agriculture specialty products including cranberries, also play an important role. The International Port of Coos Bay, considered the best natural harbor between Puget Sound and San Francisco, is the world's largest forest products shipping port.

County Officials: Commissioners—John Griffith (R) 2004, Nikki Whitty (D) 2006, Gordon Ross (I) 2006; Dist. Atty. Paul R. Burgett (NP) 2004; Assess. Bob Main (R) 2004; Sheriff Andy Jackson (NP) 2005; Surv. Karlas Seidel (D) 2004; Treas. Mary Barton (D) 2004; Clerk Terri Turi (NP) 2006.

CLIMATE

Coos County is on the southern Oregon coast. Natural vegetation is forested hills and mountains sloping down to river valleys. Average rainfall varies from 52 to 74 inches throughout the county with about 80% of the rain falling from November through April. It seldom snows. Storm data for engineering purposes are approximately:

25 year, 24 hour storm = 5.2" to 6.7" rain

Relative humidity is low to moderate in the summer and high in the winter months. Winds can blow from any direction, but generally come from the southwest. Winter storms can bring winds of 80 to 100 miles per hour on coastal headlands, but are moderated by the time winds reach the inland valleys. Minimum design for shear and lift are used.

Coos County has a growing season of approximately 280 to 300 days. Average January temperature is about 44°F; July is 61° (see detailed information for North Bend, Coquille, and Bandon at the end of this report). Nighttime frost can occur during winter months. Occasionally, daytime temperatures may be below freezing for a few days. July, August, and September have the potential for highest temperatures. Highs may reach 95 to 100° rarely during these months, nighttime temperatures moderate to 45-50° even during warmest weather. Cooling cows should not be needed. Average annual temperature is about 52.6°. Ideal for cattle is 55-60°.

Rainy winter weather would make freestall-type cow housing a necessity. Manure could be handled as a liquid or a solid. Waste would be stored in large tanks or deep lagoons for application during the summer. Storage to handle six months accumulation of manure and wash water would be advisable. This much storage is required by regulators in some areas of Oregon. To use the nitrogen in waste water efficiently, it would take one acre for every five cows. To use the phosphorus efficiently, it would take one acre for 1.5 cows.

Mean lake evaporation in the area is approximately 20", mostly from May through October.

TOPOGRAPHY

The livestock areas of Coos County are gently sloped river valleys on most properties. Dairy facilities are usually built on hillsides just above river bottom pastures. Many pastures are subject to winter flooding. Larger, tillable fields are found in the main river valley around Coquille and Myrtle Point.

SOILS

The topsoil is a deep, river alluvium almost free of rocks on the valley floor. Steeper hillsides and building areas at the base of hillsides contain more rock and would be less suitable for crop production. The soil is quite permeable. It would be highly suitable for dairy waste water application during the dry summer months. Organic matter from dairy waste should improve the productivity of the soils somewhat. The climate and soil structure should not increase construction costs.

Grass for hay, grazing or silage is the main livestock feed crop, but cereals for grain or hay, and horticultural crops

would grow well in areas of the county. More information is shown in the agricultural census data near the end of this report. Irrigated land price is about \$1,000 to \$1500 per acre.

WATER AND POWER

Absolutely essential to crop and milk production, water in Coos County area is adequate. Irrigation is usually drawn from river sources. Residential and cattle water would come from relatively shallow dug wells.

Permits from the Oregon Water Resources Department are not required for watering livestock, for domestic household use up to 15,000 gallons per day, and for industrial uses up to 5,000 gallons per day. A non-irrigation well could be developed for those uses without a permit or water rights.

The local electrical supplier charges a demand and usage fee for electricity. Rates vary with usage, but would be approximately \$.06 to \$.08 per kWh (similar to most areas in Oregon). Co-generation would be possible by producing methane gas from cattle wastes. A recent economic analysis shows that fuels would need to be in range of the \$1.50 per gallon for methane generation to be cost-effective, but it could be a possibility with higher fuel prices and a number of dairies in a small area. Three-phase electrical service is available in the county, however there are some properties that will require a significant investment (\$50,000-\$100,000) to bring the power to a property.

SUPPORT AND ASSOCIATED SERVICES

There are good paved roads in the area maintained by Coos County and the Oregon Department of Transportation. Some ranches would be served by gravel roads that are passable year round.

Housing is limited in Coos County. There is short-term lodging through motels, but long-term employee housing would likely need to be developed on some dairy ranches. Some sites have old prepared "pads" for mobile homes, including water and sewage.

There are adequate school systems for K through 12th grade education. The Southwest Oregon Community College is in Coos Bay and offers classes throughout the county. The state's agricultural university is in Corvallis, about a three hour drive away. There is a local office of the Oregon State University Extension Service in Myrtle Point serving local producers. Follow these links to learn more about the local office or the dairy program at OSU.
<http://extension.oregonstate.edu/coos/> <http://oregonstate.edu/dept/animal-sciences/dairy/>

There is a reasonable labor force with wage rates of \$8 to 10 per hour. However, most individuals have no experience in dairying and would require training.

There are many churches in the county and rural volunteer fire departments serve the areas. Emergency medical transportation and treatment is available. Local hospitals are in Coos Bay and Coquille. There are numerous scenic areas available as day trips. Contact the Coos County Chamber of Commerce or Economic Development Department, both in Coquille, for more information.

Feed for dairies would be available off local farms and by truck delivery. Major commodity brokers report grains and byproducts would be available in the area for prices slightly higher than in the Willamette Valley near Portland. Commercially prepared grains would have to be mixed and trucked from the Portland area. This would add \$25-\$30 to their cost per ton. The most feasible program would be farm mixed commodity feeding as is common on larger dairies now. There is sacked feed in several county towns. Additional feed supplies would likely develop with

increasing dairy herds.

There are local large-animal veterinarians and dairy supply companies serve the area. Urgently needed spare parts need to be stored on the farm.

The nearest cattle sale yards are in Eugene and Lebanon. Lebanon Auction picks up animals in the area every Wednesday at Myrtle Point. Also, banking and construction materials for dairy operations are available locally.

Milk would be likely be marketed through a processor in Myrtle Point. Hauling charges would be moderate (\$.30 per cwt.) and there would likely be a small (\$.10-.20/cwt.) location differential imposed by the Federal order. Some local producers have chosen to produce organic milk for a Willamette Valley processor.

SUMMARY

In general, Coos County has potential to support a much larger dairy industry. While it is some distance from services and the milk markets of more populace western Oregon, it has some significant advantages over other areas of Oregon and Washington.

Advantages

1. **Less expensive land.** Dairy farms require land for manure disposal (1 acre/5 cows) and feed production (1 acre/ 3 cows). Coos County has a long growing season. Soils are able to accept liquid waste and can produce top-quality grass for dairy cattle. However, note that many of the areas suitable have been developed. A new producer would likely choose to re-model an existing dairy or beef ranch.
2. **Adequate water.** Dairies use between 30 and 100 gallons of water per cow daily for cow nourishment, waste removal, and equipment maintenance. The lower figure would provide basic nutrition requirements and minimal wash water. The higher figure would include water for cow cooling as well as the other uses. More is needed for crop production. It appears there is an abundant supply of suitable quality water.
3. **Open space.** Odors and aerosols from manure disposal can offend residential developments. Population is lower than other areas of western Oregon or Washington and prevailing winds can be used to minimize fly and odor complaints.
4. **Specialized development.** Residential pressure is limited in the area. Increasing non-agricultural residents are not likely to disrupt dairy development. With room for more dairy operations, Coos County could accommodate additional supply services, like veterinary care, feed and supply outlets, milk processing, etc. to accommodate increasing demand. County officials are very supportive of dairy development in Coos County.
5. **Good cow climate.** Large-scale dairying is best suited to moderate climates. With appropriate planning for winter rainfall, cattle could produce well in the local climate and waste water disposal problems would be minimized.

Disadvantages

1. **Distance to metropolitan area.** This would be a drawback for family and farm needs. It would be a two hour drive to specialized retail and service outlets. The population of Coos County is relatively small. This may be attractive to some, but will discourage some qualified buyers.

2. **Lack of integral support services.** Dairy supplies must come out of Salem. Cull dairy cattle would need to be trucked to sale. There is only one milk processor in the county. This would likely improve as the dairy cow population in the area increased, but will discourage dairy operators.

3. **Certain costs of production.** Transporting feed commodities into the county will cost slightly more than near a major highway. Cows must be protected from the rainy winter weather so housing costs would be higher than in a warmer climate. Housing must be provided to hired employees. This can be offered as part of the compensation, but will usually cost more than simply higher wages.

ECONOMIC FEASIBILITY

Two budget scenarios are included: a 100 cow and a 300 cow dairy with 50% equity in land, 20% equity in buildings, and 70% equity in the cow herd.

Most dairies with less than 50% total equity are in a negative cash flow today, regardless of the location. Farm-produced feed and replacement heifers will improve the cash flow of these budgets. Costs vary widely and these would only serve as a guide to the profitability of a dairy operation in the area.

1997 CENSUS OF AGRICULTURE HIGHLIGHTS OF AGRICULTURE: 1997 AND 1992 COOS COUNTY, OREGON

| | 1997 | 1992 |
|--|---------|---------|
| Farms | 675 | 722 |
| Land in farms | 163,021 | 174,872 |
| Average size of farm | 242 | 242 |
| Value of land and buildings*: | | |
| Average per farm | 344,882 | 301,592 |
| Average per acre | 1,450 | 1,237 |
| Estimated market value of all machinery and equipment* | | |
| Average per farm | 30,437 | 29,103 |
| Farms by size: | | |
| 1 to 9 acres | 75 | 70 |
| 10 to 49 acres | 209 | 205 |
| 50 to 179 acres | 215 | 252 |
| 180 to 499 acres | 111 | 131 |
| 500 to 999 acres | 35 | 34 |
| 1,000 acres or more | 30 | 30 |
| Total cropland | 537 | 583 |
| acres.. | 42,678 | 47,292 |
| Harvested cropland | 407 | 418 |
| acres.. | 13,981 | 14,115 |
| Irrigated land | 270 | 289 |
| acres.. | 10,911 | 10,150 |
| Market value of agricultural products sold..... | 30,527 | 27,527 |
| Average per farm | 45,225 | 38,126 |
| Crops, including nursery and greenhouse crops..... | 14,264 | 11,567 |
| Livestock, poultry, and their products..... | 16,263 | 15,960 |
| Total farm production expenses..... | 23,122 | 20,461 |
| Average per farm | 34,255 | 28,339 |
| Operators by principal occupation: | | |
| Farming | 369 | 426 |
| Other | 306 | 296 |
| Operators by days worked off farm: | | |
| Any | 356 | 368 |
| 200 days or more | 215 | 211 |

| | | |
|---------------------------------------|--------|--------|
| Livestock and poultry: | | |
| Cattle and calves inventory...farms.. | 424 | 486 |
| number.. | 28,338 | 27,816 |
| Beef cowsfarms.. | 337 | 376 |
| number.. | 11,765 | 11,102 |
| Milk cowsfarms.. | 51 | 75 |
| number.. | 3,831 | 4,843 |
| Cattle and calves soldfarms.. | 401 | 438 |
| number.. | 16,199 | 14,766 |
| Sheep and lambs inventoryfarms.. | 87 | 119 |
| number.. | 12,467 | 26,923 |

* Data are based on a sample of farms.
Source: 1997 Census of Agriculture, Volume 1 Geographic Area Series, "Table 1.

Local Contacts

Valley Crest Foods (processor/handler)
302 2nd St.
Myrtle Point, OR 97458
541-572-5717

Chamber of Commerce
119 N. Birch
Coquille, OR 97423
541-396-3414

Organic Valley Dairies (handler)
CROPP Cooperative
507 W. Main St.
LeFarge, WI 54639
888-444-6455

USDA Service Center
NRCS, FSA
382 N. Central St.
Coquille, OR 97423
541-396-2841

ANNUAL PRECIPITATION

(PERIOD: 1990 TO 1999)
MONTHLY MEANS

Coos County

