

Enterprise Budget:

Dairy Goats

INTEREST IN DAIRY GOAT PRODUCTION has been growing recently for a variety of reasons. Dairy goats are less costly to buy and feed for someone starting in the dairy business. The average dairy cow in Iowa produces 65 pounds of milk a day with some top-performing cows producing up to 150 pounds. Cows also eat 50 pounds a day. On the other hand, dairy goats eat 6 pounds a day and produce 4-7 pounds of milk. The demand for goat cheese and products has increased because of the added health benefits and alternative offerings for people with allergies to regular milk. Before starting your goat enterprise, consider your labor, physical, and management resources.



Physical Attributes

Dairy goats are seasonal breeders whose breeding season runs from late summer through early winter. The estrus cycle is 18-21 days and the gestation period is five months. Breeding can be done naturally with bucks or by artificial insemination. After kidding the doe will milk for approximately 10 months with a two-month dry period. The six major breeds produced are:

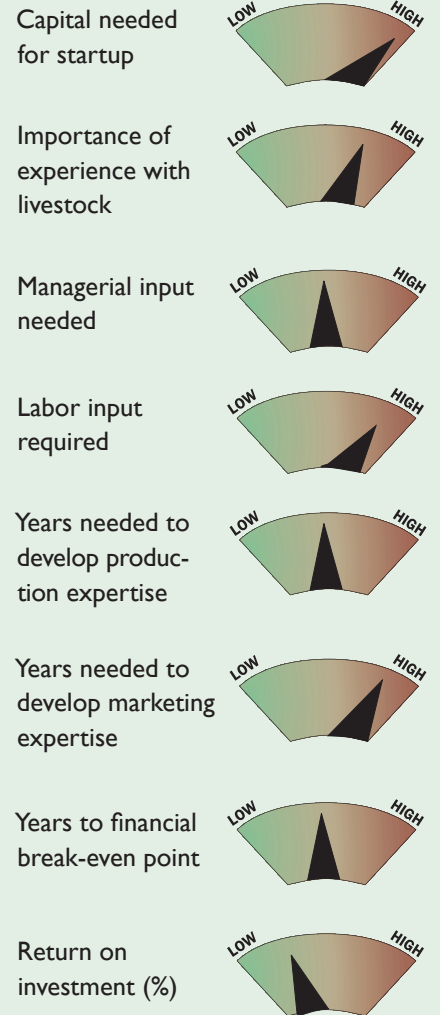
- Saanen- heavy milk producers, 3-4 percent milk fat, medium to large in size, coat is white or light cream color
- Nubian- all-purpose goat useful for milk, meat, and hide, not a heavy milk producer, high butter fat, adapts to hot conditions, large frame, can breed all year allowing for milk production all year long
- Toggenburg- oldest known goat breed, Swiss goat, medium size, sturdy, vigorous, alert, performs better in cooler conditions, excellent udder development, high milk production, 3.7 percent milk fat
- LaMancha- high butter fat, excellent dairy temperament, sturdy goat that can still perform under hardship conditions, known for their “gopher” and “elf” ears
- Oberhasli- medium size, vigorous, chamois color, Swiss dairy goat
- Alpine- rangy goat, large frame, excellent milkers, well-shaped udders with well-placed teats of desirable shape

There are many excellent resources available on raising dairy goats, including those at the National Sustainable Agriculture Information Service with online publications at <http://www.attra.org/attra-pub/goatoverview.html> and <http://attra.ncat.org/attra-pub/dairy-goats.html>.

Potential Return

Yields - It is estimated that goats can produce 1,200-2,600 pounds of milk per doe a year. The average lactation time for a goat is 284 days and the average kid rate is two per doe. According

Enterprise Assessment



to the 2007 Census of Agriculture data, Iowa had 22,269 dairy goats on 652 farms, up from 8,524 goats and 447 farms in 2002. The number of dairy goats actually sold was only 5,575 during 2007. The number of dairy goats continues to grow in Iowa. In 2009 the USDA estimated there were 24,500 dairy goats in Iowa and by 2010 the number had grown to 29,500.

Dairy Goats

| Cash Incomes | Price | Unit | Quantity | Per Doe | Does in Herd 100 |
|--------------------------------|--------------------|------------------------------------|-----------------|-----------------|--------------------|
| Milk Sales | \$31.00 | cwt | 16 cwts | \$496.00 | \$49,600 |
| Billy Kids | \$2.00 | head | 0.80 head | \$1.60 | \$160 |
| Cull Does | \$60.00 | head | 0.30 head | \$18.00 | \$1,800 |
| Doe Kids | \$50.00 | head | 0.50 head | \$25.00 | \$2,500 |
| Other Income | | | | \$0.00 | \$0.00 |
| Total Income | | | | \$540.60 | \$54,060.00 |
| Cash Costs | | | | | |
| Forage dry matter | \$100.00 | ton | 0.90 tons | \$90.00 | \$9,000.00 |
| Grain Mixture | \$0.09 | lb | 1350.0 lbs | \$114.75 | \$11,475.00 |
| Milk Replacer | \$1.80 | lb | 25.0 lbs | \$45.00 | \$4,500.00 |
| Supplies | | | | \$12.00 | \$1,200.00 |
| Vet Fees/ Medicine | | | | \$15.00 | \$1,500.00 |
| Bedding | \$70.00 | ton | 0.15 tons | \$10.50 | \$1,050.00 |
| Fuel | \$2.49 | gallon | 2.00 gallons | \$4.98 | \$498.00 |
| Custom Hire | | | | \$7.00 | \$700.00 |
| Utilities | | | | \$14.00 | \$1,400.00 |
| Repairs/Other | | | | \$10.00 | \$100.00 |
| Total Cash Costs | | | | \$323.23 | \$32,323.00 |
| Investment Costs | | | | | |
| | \$ FM Value | Depreciation | Interest | | |
| Equipment/Parlor | \$12,000 | 7.00% | 8.00% | \$18.00 | \$1,800.00 |
| Building/Housing | \$3,000 | 10.00% | 8.00% | \$5.40 | \$540.00 |
| Machinery/Other | \$2,500 | 5.00% | 8.00% | \$3.25 | \$325.00 |
| Livestock | | | | | |
| Does | \$225 head | 0.00% | 8.00% | \$18.00 | \$1,800.00 |
| Kids (from cull does %) | \$125 head | 0.00% | 8.00% | \$3.00 | \$300.00 |
| Bucks (20 does/ bucks) | \$200 head | 40.00% | 8.00% | \$4.80 | \$480.00 |
| Total Investment | \$44,750 | | | | |
| Investment Costs | | | | \$52.45 | \$5,245.00 |
| Total Costs | | | | \$375.68 | \$37,568.00 |
| Net Return to Labor | | | | \$164.92 | \$16,492.00 |
| Labor Costs | \$9.00/hr | | 15 hours | \$135.00 | \$13,500.00 |
| 14.7 % Return on Assets | | Net Return Over Total Costs | | \$29.92 | \$2,992.00 |

Prepared by Larry F. Tranel, Dairy Field Specialist, Iowa State University Extension, 2006

This budget is a general estimate for educational purposes only.

Producers are encouraged to determine their own budget for their particular operation.

Costs on dairy goat farms vary considerably due to genetics, production levels, feed costs, management, labor efficiency with numbers of does milked with equipment and parlor investment, etc.

Labor

Dairy goats will require milking twice a day, seven days a week. Many producers get burned out with this milking schedule, so a beginning producer should be committed to putting in the amount of time required to have a successful operation.

Risks

The biggest risk is finding a market with stable prices for the milk. There are a limited number of processors to contract with, so producers might have to explore alternative markets. These can include specialty and niche markets that may require extra time and resources.

Besides being aware of the market risks, producers need to use good health practices to prevent the spread of disease and illness in the herd. These problems can be prevented by good pasture management with rotational grazing and not allowing the pasture to get too short.

Marketing

Before starting a goat enterprise it is important to make sure there is a market for the product in the area. Contact processors before building any facilities to see if they need more milk and if they are willing to negotiate a contract. Since processors do not take on

Dairy Goats

many new farms, some beginners may find it easier to buy an existing herd from a producer who is leaving the business. If there is no place to sell the milk, farmers might have to market the product themselves. Potential market places include farmer's markets, retail stores, and restaurants. Some farmers use the Internet as another venue to sell and market their products. Yet another alternative would be to join a coop of producers such as the Mount Sterling cooperative in southwestern Wisconsin that has some Iowa members. This cooperative processes and markets the milk for its producer members.

Processing

If you do not have any processors in your area, you might choose to process and market your own milk. Goat milk can be sold as fluid milk or used to make ice cream and cheese. Be sure to check out your state regulations and get the proper licenses before beginning your business. Contact your state authorities using the information at www.adga.org/StartDairy.htm.

Some home processors sell cheese in gift baskets with crackers and summer sausage. Others offer wine in a basket with their cheese. Gift baskets can be a great way to market your products, especially during holiday seasons.

Besides food products, soaps also can be produced using goat's milk. Goat's milk has a high content of beta-casein and triglycerides which hydrates and balances the skin pH. Goat milk soap is very soothing and moisturizing to the skin. It contains glycerin which draws moisture from the air to keep the skin hydrated.

Market Outlook

The market outlook for dairy goats looks good with additional niche markets becoming available. Goat's milk typically is used to produce cheeses such as feta, gjetost, chabichou, and pyramide. Reduced-fat cheeses also are drawing increased interest because the crumbly properties of goat cheese make the taste and texture similar to regular cheese. Goat milk is a great alternative for people who are allergic to regular cows' milk.

Finances and Economics

The start-up costs for getting into the dairy goat business depend on whether or not you have buildings and land already available. Outgrown dairies in Wisconsin have been converted into goat milking parlors. However, if you want to build a Grade A dairy, it takes a substantial investment for a milking barn and parlor with concrete, separate milk room for cooling and storing,



milking equipment, milk lines, drains, and wash sinks.

Anyone who is interested in dairy goats should read the Wisconsin Goat Dairy Profitability Project final report. This study compared goat dairy farms in Wisconsin based on profitability. This report provides detailed, actual information on financing, production, and other aspects of goat dairy production. The report can be found at the website for Wisconsin Goat Dairy Profitability Project at <http://www.dbicusa.org/documents/PUBLICATION%20Goat%20Dairy%20Profitability%20Project%202008%20FINAL.pdf>.

Dr. Larry Tranel at Iowa State University has worked extensively with



Dairy Goats

dairy goats. A dairy goat budget from Dr. Tranel appears on page 2, but it serves only as an example. Interested parties should determine their own budget based on all information available and their own particular set of resources.

Sources

American Dairy Goat Association
<http://www.adga.org>

Iowa Dairy Goat Association
<http://iowadairygoat.org/>

Iowa State Extension Dairy Team
<http://www.extension.iastate.edu/dairy-team/>

Iowa State Extension Dairy Goat and Dairy Sheep Resources

<https://www.extension.iastate.edu/dairyteam/dairy-goats-sheep>

Agricultural Marketing Resource Center

http://www.agmrc.org/commodities_products/livestock/goats/dairy_goats.cfm



Oklahoma State Livestock Breeds
<http://www.ansi.okstate.edu/breeds/goats/>

Maryland Small Ruminant Page
<http://www.sheepandgoat.com/economic.html>

University of Florida
<http://edis.ifas.ufl.edu/DS134>

Langston University
<http://www.luresext.edu/goats/index.htm>

National Sustainable Agriculture Information Service
<http://attra.ncat.org/attra-pub/dairy-goats.html>

Processors:

Northern Prairie Chevre
<http://www.northernprairiechevre.com/>

Mt. Sterling Co-op Creamery
<http://www.buygoatcheese.com/>



Prepared by Mike Duffy and Jodi Calvert, ISU Department of Economics, Extension Economics. Designed by Tina Davis, ISU graphics design student. Financial support from the Leopold Center for Sustainable Agriculture.

**October 2010 BFC 26
Hyperlinks in this
publication were
updated June 2016.
Some sites are no
longer available.**



**Beginning
Farmer Center**

This institution is an equal opportunity provider. For the full non-discrimination statement or accommodation inquiries, go to www.extension.iastate.edu/diversity/ext.