



# Icelandic Sheep Breeders of North America

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## Icelandic Sheep as a Dairy Animal

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### History

Icelandic Sheep have been used for the main dairy animal in Iceland and known as the poor mans cow for 1000 years. Not until the 1940's did this change with the advent of mechanized haying in Iceland, which allowed enough hay to be harvested to use cows as the primary dairy animal. Up until that point in time all haying was done by hand. Haying season was very short and frequent rain was always a problem. Only rich farmers could afford to put up enough hay with hired labor to keep a cow. So the Icelandic sheep was the main dairy animal for most farms. The sheep were expected to winter over on the equivalent of 2 square hay bales, the fat on their backs and winter grazing when conditions were suitable.

Lambing took place in May and June and was timed for warmer weather and the emergence of grass. Sometimes a ewe was milked out before she lambbed and this watery fluid was used to make glue that was used in bookbinding, woodworking and made into glazes and ink. The first milk or colostrum was usually left for the lambs. If an excellent milker had more than her lamb needed then the colostrum was made into custard.

At 2 weeks of age the lambs started the weaning process by corralling the ewes in the evening about 6PM. The lambs were separated from the ewes and put in a separate shelter for the night and the ewes were again let out in the care of the shepherd to graze all night. In the morning at 6AM the ewes were corralled and milked out. After milking, the lambs and ewes were reunited to spend the day together.

This process went on for 4 to 6 weeks until the lambs were mature enough to be fully weaned. At this time the male lambs were castrated and driven up into the mountains or to inland common pastures along with the horses and other non-milking stock. The cows and ewes that were being milked were kept behind. The ewes were then milked 2 to 3 times a day and most gave a liter. Good milkers gave 2 or even 3 liters. The milk was used to make butter, cheese or skyr, which is a semi-soft cheese similar to thick yogurt mixed with cream cheese. The last milkings before the ewe was dried up was boiled down into a thick substance. In some districts, the farmers would establish shelters at the upper reaches of valleys or on the edge of moors, which in essence were summer dairies. The usual set up included 3 buildings: a dwelling, a milk house and a summer kitchen. The shepherd, a milkmaid and a teenage girl who would help with the milking and cheese and butter-making occupied these shelters. These summer dairies were located near summer pastures and eliminated the need for long trekking to tend the stock. This also kept the stock away from the home pastures, which were used exclusively for hay production.

### Today

There is growing interest in establishing small farmer owned sheep dairies. The lucrative sheep cheese market in the USA has fueled interest in these specialty farm enterprises. Sheep milk is high in fat and dissolved solids which are what is needed to make excellent, high yielding cheese from relatively small amounts of milk.

Sheep milk is also being made into very profitable yogurt, which is velvety smooth, creamy and naturally

sweet. It needs no sweetener or fruit to make it palatable. It is a desert quality dairy product.

The problem is to find excellent milking stock that is both hardy and has an excellent yield of milk for 180 days. Until now the leading milking sheep breed was the East Friesian which has been selected for high milk production. Unfortunately the breed is not hardy and the lambs are frail and have a low survival rate. The East Friesians also need inputs of grain in order to produce high milk yields. Since grain is the biggest cost in livestock raising, animals that need grain show lower profits. Icelandic sheep on the other hand are a hardy grass based breed that produces high yields of milk on grass alone. Animals that can thrive on forage alone bring higher profits to their shepherd. Icelandic sheep are reliable twinners and have vigorous lambs that thrive. In addition their fleeces bring top dollar as specialty wool. Their meat is known world wide as the best lamb for flavor, texture and tenderness.

For this reason, dairy sheep folks are taking a serious look at the first Icelandic sheep dairy in the USA, True North Farm. [www.truenorthfarm.com](http://www.truenorthfarm.com) In their second year, they will be in full production with a very young flock this year. If you want sheep that milk for dairy purposes for yourself, for a home business or to raise market lambs, try Icelandic. This is the low cost, hardy vigorous productive and profitable breed.

Here on the Tongue River Farm our lambs gain at the rate of three quarters to one pound a day on mothers milk and grass/clover alone. No grain is fed to the ewe or lambs. Growth this fast is the product of an excellent milk supply. We can supply milky breeding stock from a diverse pool of bloodlines some of which are from semen imported from Iceland and include the best sires from that country. This breed is milky and have udders that dairy folks can fully appreciate.

This breed is milky and has udders that dairy folks appreciate. The sheep dairy industry is looking for genetics to improve the udder shape, teat placement and capacity of their dairy breeds. Most commercial sheep breeds have udders where the bottom of the udder floor is below the teats, making the complete emptying of the udder difficult without the intervention of lifting the udder by hand. The teat placement on these breeds is on the side of the udder, (which makes attaching the milking equipment difficult) and there is poor medial suspension. Media suspension ligaments support the udder and keep it from dragging and becoming injured when full. Icelandics have udders similar to good dairy goats with strong medial suspension, excellent teat placement, and wonderful capacious elastic udders. This is just what the dairy sheep industry is looking for and indicates milkiness.

#### Research from Iceland

The milk production of the ewes depends on many factors, the most important being the quantity and the quality of forage intake. Also the grazing ewes generally have a higher maintenance requirement than ewes fed indoors, especially under northern conditions, because of the greater variation in the environmental temperature, exposure to wind and rain and because of their greater mobility. (Icelandic ewes have to walk great distances to harvest the sparse forage in Iceland.)

The Icelandic ewes are noted for good milking ability and longevity. A very limited amount of information is, however, available on the milk production of the Icelandic ewe during grazing. Limited studies covering a 3 year period have been done in zero grazing experiments with ewes fed on grass from a cultivated mire, fertilized with different rates of nitrogen and or calcium. In the 2-year study, ewes that started with a production of 2700 grams at 10 days into lactation, decreased production by 11 to 15 grams for each day of the lactation period, which was 1500 at day 90. The difference in the quantity of milk produced in different years was great and has not been explained. The quantity difference is even greater than that found between ewes with singles and twins in earlier experiments when fed indoors on hay and concentrates for approximately two weeks after parturition.

Limited studies are also available on the chemical composition of the milk of the grazing ewe in Iceland. The average chemical composition in very limited samples from the zero grazing experiments is:

29 July - protein 5.56%; fat 4.26%; lactose 5.22%

12 August - protein 4.99%; fat 4.95%; lactose 4.95%

3 September - protein 6.21%; fat 6.20%; lactose 4.88%

A few samples have been collected from ewes grazing on a dry mountain shrub land and on lowland mire. There is not apparent difference in the samples except for the fat, which was relatively high in the mountain sample: 8.5%

It can be speculated using experimental results from other countries, that during early lactation, the milk production is relatively independent of the pasture condition, as the ewes can mobilize their body reserves for energy and protein. This of course depends on the condition of the ewes at parturition. After 4 to 6 weeks of lactation the ewes depend entirely on the available herbage for their milk production.

#### Homestead milk production

Whether you are interested in a full-fledged sheep dairy business, some milk for your own homestead cheese making, or genetics that will produce lambs (crossbred or purebred) that will achieve fast growth on good forage, consider Icelandic sheep. Icelandic sheep can turn grass into copious amounts of milk, lamb meat and high value naturally colored wool.

#### Small Dairy Publication/Resources

CreamLine is a voice for small dairies. This is excellent information for the small dairy producer or homesteader interested in producing their own dairy products at home. Subscriptions are \$22/year. Send to CreamLine, P.O. Box 186, Willis, VA 24380

<http://www.metalab.unc.edu/creamery> has a wonderful list of small dairy information and equipment sources.