

Grazing Gazette

PENN STATE
College of Agricultural Sciences
in cooperation with USDA/ARS



land parlors do not have outside walls or heating/cooling systems. There is no insulation in the ceiling and construction is often steel pipe supports for galvanized roofing material.

In addition, the climate in New Zealand is conducive to growing grass. There is not much argument that grass pastures provide a low-cost feeding system. In the U.S., the weather is more variable. In the northern dairy areas, winters are cold and the summers sometimes hot and dry.

In the major dairy areas of southwest U.S., most dairy animals have never seen a blade of grass in their lifetime. In short, the majority of the U.S. is on a stored or processed feeding system, although this has changed in recent years as pasture use has increased.

The second major difference

between the U.S. and New Zealand is markets. New Zealand has about 3 million people and 2.5 million cows. Thus, they produce milk for the world market at a lower price. Lower pricing forces the dairy farmer to economize in every possible manner. Most U.S. dairy farmers would argue that margins are low to nonexistent in the U.S. That may be true today, but it has not always been. Contrast this to the U.S., which has less than 10 million cows and more than 260 million people.

The combination of markets and climate lends itself to seasonal dairy farming in New Zealand. Most herds calve their cows in the spring and dry them off in the winter when feed supplies are short. This also relates to the type of construction in milking parlors since with seasonal calving, the parlors are not operated during the winter months when the weather is cool. (Remember that the seasons in New Zealand are just the opposite of those in the U.S.)

Milking Parlor

Back to the milking parlor. We have mentioned a major construction difference between milking parlors in New Zealand and the U.S. Milking parlors in the southern climates could do without walls, but usually have them anyway. In some of those areas, the walls may be there because of wind. This can be a problem, especially in dry, sandy conditions.

The next area of difference between the U.S. and New Zealand parlors is the milking system. Typically, the New Zealand parlor is of the herringbone type and has the milking units mounted in the center. Generally, these are referred to as "swinging" units, that is, they are swung from one side of the parlor to the other side. Thus, there is one milking unit to every two stalls. Milking parlors in the U.S. were like this until the 1960s. Prior to the 1960s, many milking parlors that had been built were too small so there was an attempt to speed up the cow throughput. While doubling the number of units only increases cow throughput by 15 to 20 percent, the investment in units and a slightly larger vacuum pump is a one-time investment. In terms of vacuum supply, many U.S. parlors are far oversized while many New Zealand systems are marginal in this respect. This also accounts for a cost difference.

Additionally, there was a desire for low pipelines in the U.S. since high lines were thought to be associated with mastitis because of greater vacuum fluctuation. This is

still not documented by controlled research, but the idea persists. It is very inconvenient to milk in a parlor and have to move the milk hose from side to side and to milk into a low line. This fact is documented and installing a low line to minimize the risk of rancid milk has merit.

Another interesting sidelight is that it appears that cows fed stored feed may have a tendency for their milk to be more susceptible to rancidity development than the milk from cows on grass. We have noted many times that a rancid milk problem disappears when cows are turned out to grass in the U.S.

In summary, the following advantages of New Zealand type and U.S. types of milking parlors are as follows:

Advantages of a New Zealand-style parlor:

1. Installing one unit per two stalls reduces the cost of the milking system.
2. Omission of ancillary equipment such as power gates, detachers, and meters makes a milking parlor more affordable.
3. Climate affords the opportunity to have a less expensive building.
4. Seasonal calving reduces milking time variability and milking times are shorter and more consistent.

Advantages of a U.S.-style parlor:

1. A milking unit per stall increases cow throughput by 15-20 percent. This is a one-time cost and this additional cost is not excessive since the basic expensive equipment is already in place.
2. A unit per stall permits the installation of a lowline pipeline. Thus, vacuum is more stable and the risk of rancid milk is reduced.
3. A unit at each stall permits the immediate placement of a unit on a slow milking cow which otherwise may hold up the entire group of cows in the herringbone stalls.
4. Construction methods permit the year-round use of the milking parlor.

In the building of a milking parlor, there are many decisions to make. Choosing the proper equipment for the individual needs is paramount. Choosing some features of a New Zealand parlor is another choice in the shopping basket.

in the U.S. come from New Zealand? The answer to the latter question is "yes," but with some modifications along the way.

The New Zealand parlor does have some different characteristics than those in the U.S., for some obvious and not so obvious reasons. First and foremost there is a difference in climate. The climate is very moderate in New Zealand and the temperature seldom gets below freezing. Thus, New Zealand

Public Auction Register

Closing Date Monday 5:00 P.M.
of each week's publication

NOVEMBER

FRI. NOV. 17 & SAT. NOV. 18 - 9AM Martins Fall Auction of Carriages, Sleighs & Antiques. Lebanon Area Fairgrounds. 2 miles S. of Leb., Pa. approx. 30 miles E. of Harrisburg, approx. 15 miles E. of Hershey, approx. 20 miles N. of Lanc. South of interstate Rt. 81 and 25 miles W. of Reading, Pa. Martin Aucts.

FRI. NOV. 17 & SAT. NOV. 18 - 10AM Complete Dispersal Auction, top registered Jersey cattle, great machinery, real estate. From Binghamton take 17 W. to exit 63 (Lounsbury) left off exit then right on Hunt Creek Rd. across from truck stop. Deppoliti's Northeast Auction Center.

SAT. NOV. 18 - 9AM Nicholas Hardware Store, Park Ave., Quakertown, Pa. Inventory, store fixtures, trucks, forklifts. Joseph P. Smalley, auct.

SAT. NOV. 18 - 9AM November Consignment Auction, Tools and Equipment. Isenock Auctions, New Park, Pa. Isenock,

aucts.

SAT. NOV. 18 - 9AM Lebanon Valley Livestock Lumber and Building Supply Sale. 1 mile E. of Fredericksburg, Pa. More info call Dave 717-866-5783.

SAT. NOV. 18 - 9:45 AM Repossession Sale. Approx. 225 repos. & off lease vehicles. Keystone Public Auto Exchange.

FRI. NOV. 24 - 5PM Held at Kenny's Auction, 4 miles N. of Chambersburg along Rt. 11. Furniture, paintings, guns, misc. Mildred E. Oyster. Carl E. Ocker, auct.

FRI. NOV. 24 - 9AM At Wotring Auction center, Lehigh Co., Pa. on Rt. 873, 4.1 miles N. of the Y with 309 at Schnecksville, N. of Allentown, Just S. of Slatington. Horse sleighs, vehicles, tack, primitives, farm equip. Tim Wotring, auct.

SAT. NOV. 25 - 9AM Antiques, elect. organ, collectibles & household goods. Estate of Ruth H. Blizzard, 17 Kemper Ave. in the city of Westminster, Md. Calvin L. Amos, auct.

NEW ZEALAND MILKING PARLORS

Stephen B. Spencer
Professor Emeritus
Dairy Science

Penn State University

The subject of the New Zealand milking parlor is being debated. Generally, these parlors are considered low-cost facilities compared to the more expensive types in the United States. Let's examine some of the differences and compare the costs.

First of all, just what is a New Zealand parlor? Didn't the designs



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