

Sheep Barn Layout

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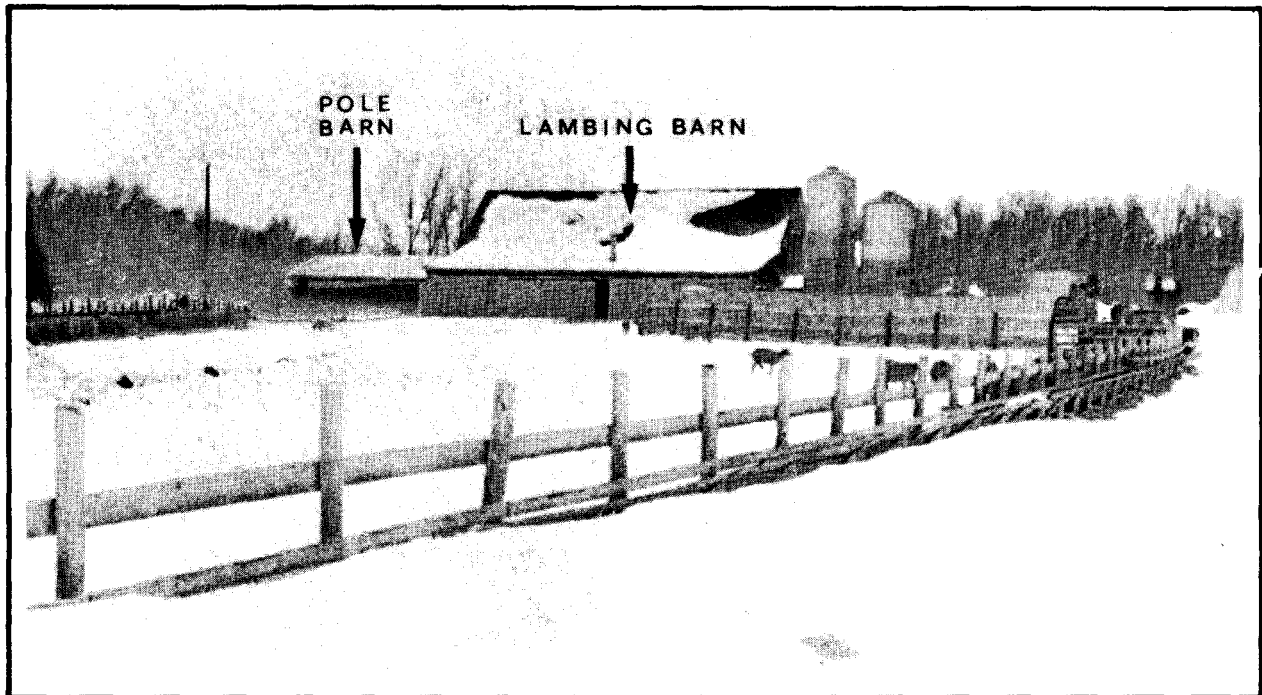


SHEEP BARN LAYOUTS

There is interest in layout plans and ideas for sheep production using total confinement or drylot pen facilities. Advantages include: reduced predator problem, lowered energy requirement, less parasite problem, opportunity for optimum production and extending the ewe's production life span. Land is more productive too when feed is harvested and fed than when animals graze the land. Disadvantages include higher initial investment (approximately \$30 to \$60 per feeder lamb capacity), reduced opportunity to use submarginal land and need for high management ability (sheep in confinement must be fed everything).

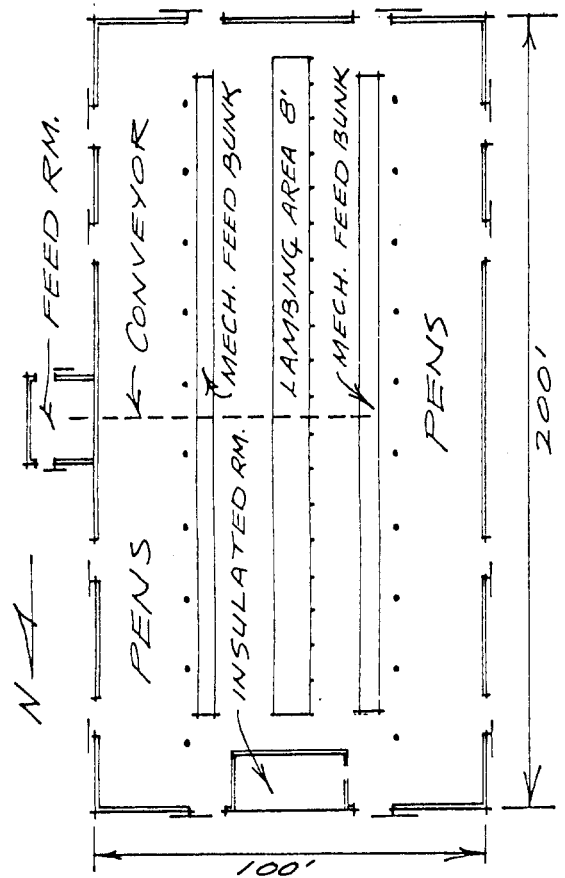
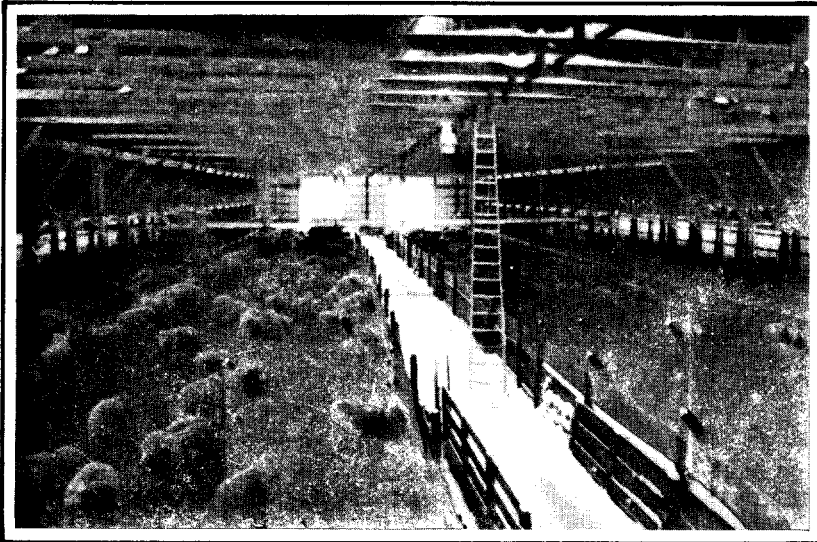
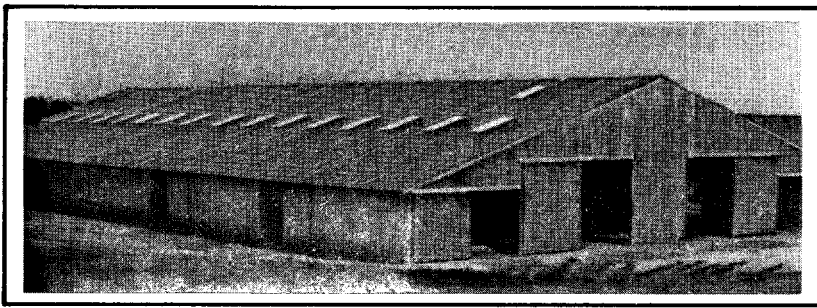
A farm tour was sponsored by Extension in March 1979 to observe four confinement type or drylot sheep set-ups in actual operation. These were typical of results of recent developments in building sheep facilities. There are an estimated 25 or so similar systems in operation around North Dakota. Research will be done starting in 1980 on confinement sheep production using a new facility at the Hettinger Branch Experiment Station, Hettinger, North Dakota.

These layouts are explained here to provide some planning assistance to others who are considering a confinement or drylot sheep set-up. More detailed planning help is available in the publications listed on the last page.



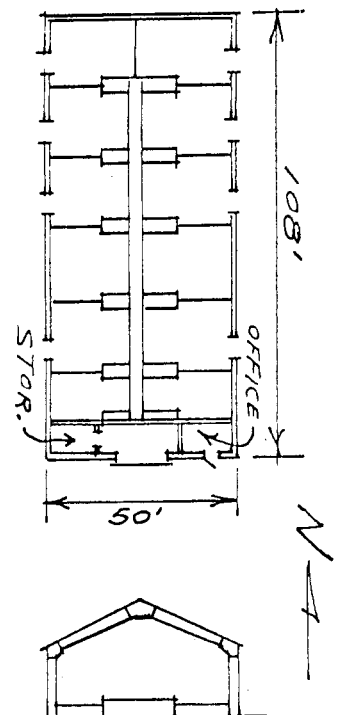
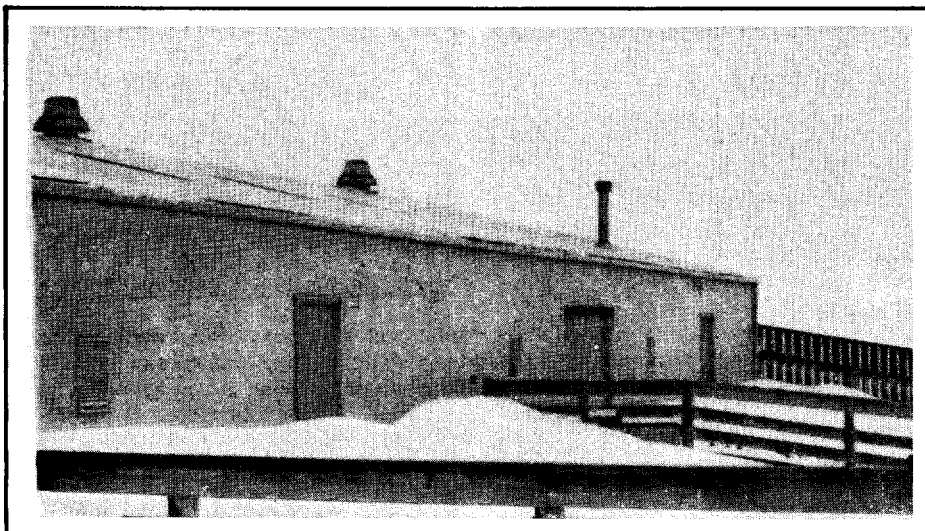
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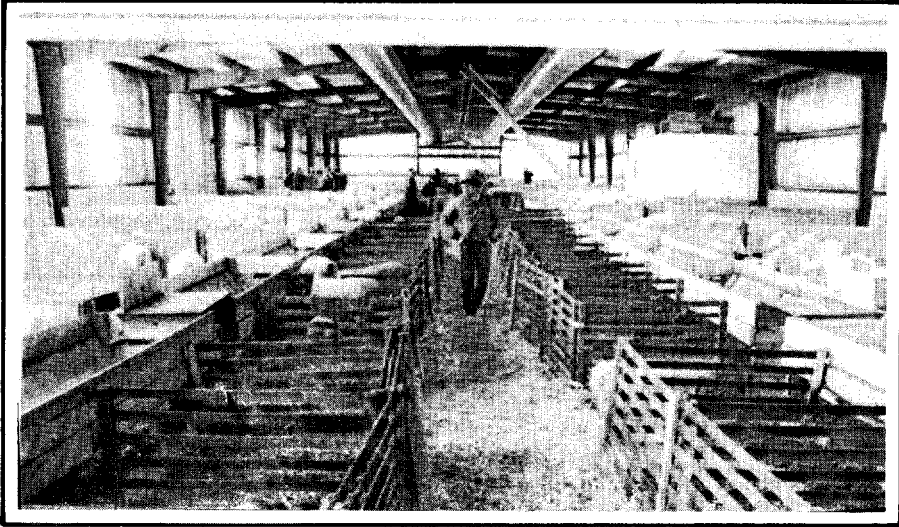
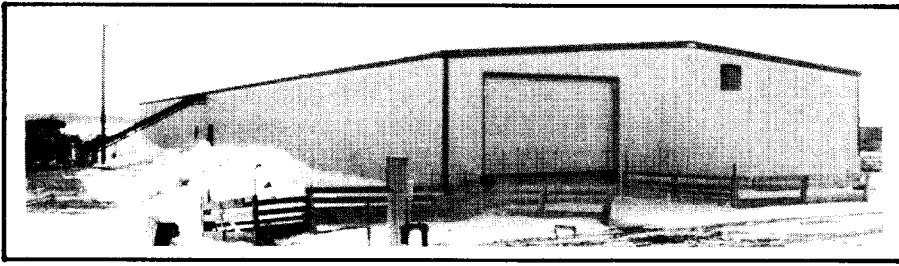
RICHARD MARTIN 1/2E, 5N, BOWDON, NORTH DAKOTA — 350 commercial ewe flock, feeds out lambs in drylot. Lambing is done in older, 64' x 64' two-story barn with indoor sorting and loading. Ewes with older lambs housed in 40' x 104' pole frame barn. Another pole type barn used with lamb feeding yards. Uses fenceline feedbunks, dry hay and grain ration ground through mixer grinder.



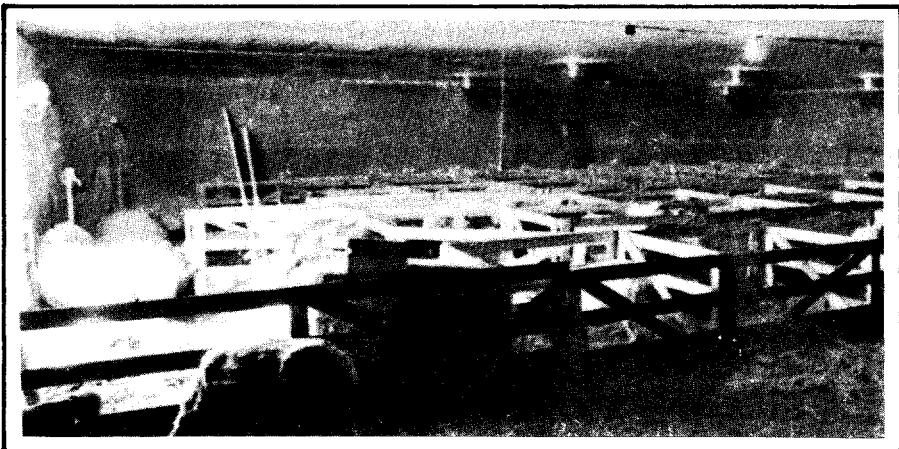
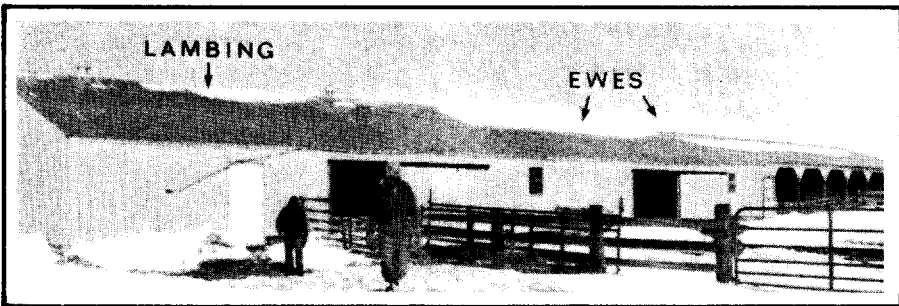
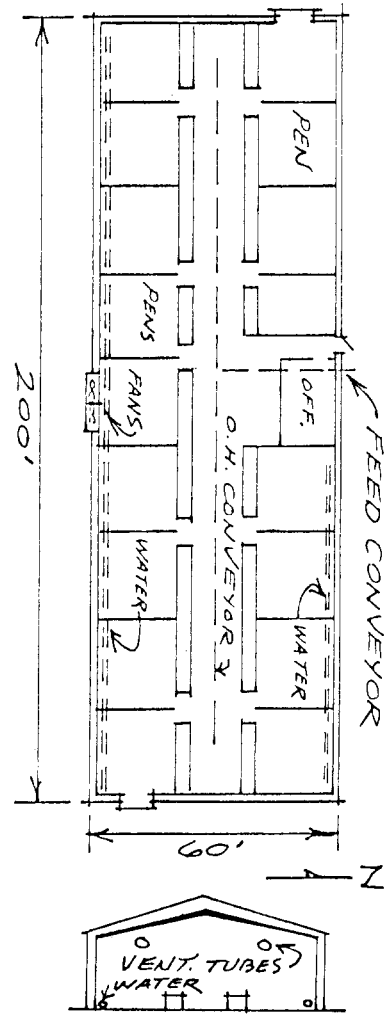
ROD HICKLE, 6S OF RIVER RAT SALOON, HENSLER, NORTH DAKOTA — New 100' x 200' pole frame barn with insulated roof and ventilated by open ridge and eaves, used for ewe lambing and for feeding out lambs. Ration of corn silage, ground hay and grain hauled in wagon and fed in conveyor or bunks. Automatic heated waterers.

DON ULFERS, 3N ON HIGHWAY #16 FROM EXIT #1 ON I-94, BEACH, NORTH DAKOTA — Lambs in 50' x 108' commercial, wood rigid frame building (Lam Frame). Building is fully insulated, heated and fan ventilated (4 years old). This is a 220 head commercial ewe flock. Ewes and lambs are then pastured. Baled hay and grain are hand fed in the barn.





MARLIN NORBY, SOUTH END OF MAIN STREET THEN 1/2E, 1S, 3E, FAIRVIEW, MONTANA (NORTH DAKOTA SIDE) — New 60' x 200' commercial steel frame barn for about 700 ewes. High insulated ceiling with plastic tube fan ventilation system. Feeds a dry chopped ration in Badger conveyor feeding system. A 4" plastic pipe with continuous flowing water and drinking holes is located around the outside walls.



OSTEROOS FARM, 12S, DES LACS, NORTH DAKOTA — Over 500 ewe set-up using an existing 40' x 100' pole frame barn for winter shelter for ewes with a 48' x 60' new extension that can be used with separate outside pen for dividing the flock.

A 48' x 40' lambing barn at end (lower photo) has insulated ceiling, walls, inside plywood lining and fan ventilation. Ground hay and grain is fed outside in self feeder and in movable feedbunks.

A special thanks is given to the cooperators for use of their plans in this publication.

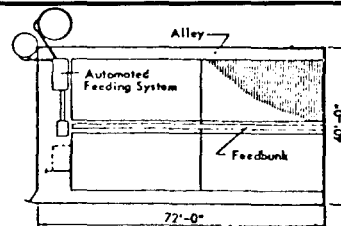
NEW SHEEP BARN PLANS

In April 1979 the Midwest Plans Service prepared five different plans for sheep barns. The plans show construction details for sheep barns ranging in sizes from 24 to 500 head capacity. The Midwest Plan Service is an association of Agricultural Engineers from the twelve Land Grant Universities in the Midwest. The plans are based on University research and on-farm experiences and are briefly described here.

A "Sheep Housing and Equipment Handbook", MWPS-3 has been available. It explains planning data and yard arrangements for sheep facilities plus it has plans for equipment used in a sheep operation. Cost is \$2.50. The Plans and booklet are available from the Extension Agricultural Engineer at North Dakota State University, Fargo, North Dakota.

Plan MW-72505 "40' x 72' Feeder Lamb Confinement Barn With Slatted Floor"

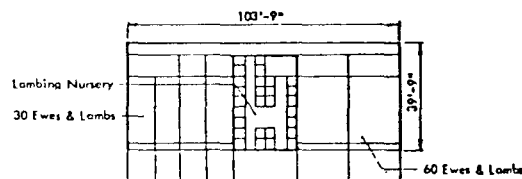
(\$2.00) For feeding 500 lambs in a clearspan, truss rafter, pole frame barn. Either natural or fan ventilation can be used. Manure is tractor scraped or scraped with a cable scraper from beneath expanded metal, slotted floors. Mechanized feeding is done through the center of the barn with a conveyor feeder.



Floor plan of a 40' x 72' feeder lamb confinement barn. (mwps - 72505)

Plan MW-72506 "240 Ewe and Lambing Barn"

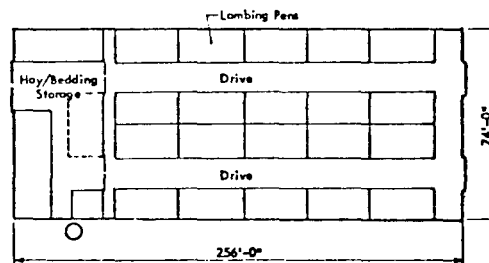
(\$2.00) For a conventional set-up that houses ewes and/or feeder lambs in a 40' x 104' naturally ventilated truss rafter, pole frame barn. An insulated 24' x 36' lambing room is included. Fenceline feedbunks with wagon feeding are located along the edges of outside pens.



Floor plan of ewe and lambing barn. Group pens open to outside lot. Lambing area is fully insulated and fan ventilated. (mwps - 72506)

Plan MW-72507 "500 Ewe and Lamb Feeding Barn"

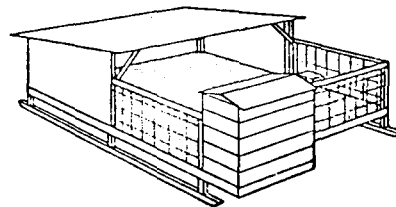
(\$2.00) Shows construction for a 74' x 256' naturally ventilated barn for lambing and for feeding out lambs. The barn is divided into 20, 12' x 24' group pens (14-18 ewes per pen) with two drive-through alleys and fenceline bunks on each side for wagon feeding. A feed storage area is included at one end of the barn.



Floor plan of a 500 ewe and lamb feeding barn. (mwps - 72507)

Plan MW-72508 "12' x 16' Portable Lamb Feeding Shed for 24 Feeder Lambs"

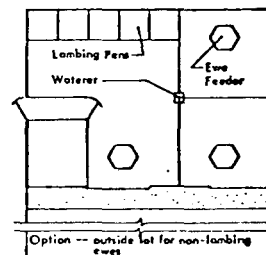
(\$1.00) Is a small, wood frame shed with expanded metal type slotted floor and an outside self-feeder.



A 12' x 16' portable shed for lambing or for feeder lambs. (mwps - 72508)

Plan MW-72509 "40 Ewe Lambing Shed"

(\$1.00) Shows construction for a 24' x 32' pole frame barn with shed roof or a clearspan roof with trussed rafters natural ventilation with some insulation is used. Feeding and cleaning is done by hand. Barn is used for lambing and for growing lambs.



Floor plan of the 40 ewe lambing shed. (mwps - 72509)