

**COST ONLY \$400
FOR MATERIALS**

Low-Cost Solar Livestock Nursery

By Diane L. Beetler

Last winter, Don Rogers, of Altona, Ill., used what may be the state's first solar lamb nursery, a structure he believes can be easily adapted for use by other livestock.

Rogers, a self-employed carpenter who also farms 80 acres and has a herd of 200 ewes, became interested in a solar building for his lambs when he read about solar experiments conducted by Purdue University several years ago.

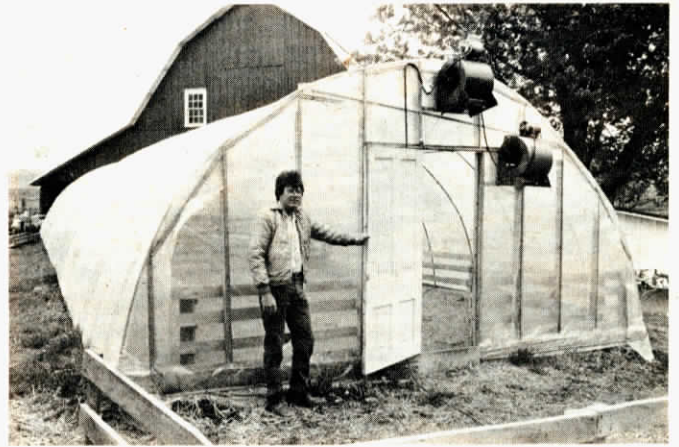
In the fall of 1982, he had the opportunity to buy a greenhouse frame constructed of steel conduit and covered with plastic. He took the greenhouse apart and moved the pieces to his farm where he erected the structure at one end of his barn. He built a conventional wood frame for one end and attached the other end to the barn, which allowed the sheep to wander back and forth between the two buildings.

The 20 ft. by 80 ft. structure was bolted to a frame along the ground and anchored into the ground with stakes. Rogers covered the frame with a double layer of heavy greenhouse plastic.

A small fan constantly blows air between the two layers to provide insulation, and to prevent the plastic from rubbing together and developing holes.

Although the nursery does give with the wind, it has never collapsed. Rogers' only fear is a severe hailstorm and, even then, he probably would have to replace only the plastic.

He built gates to line the interior of the nursery and also constructed 10 pens, a creep area and feeders. After lambing in a nearby shed, the ewes and lambs are transferred to one of the ten pens for one or two days. Then, the lambs are allowed access to the creep area.



Rogers uses the 20 by 80 ft. building, made with greenhouse plastic, as a nursery for lambs.

Two used furnace fans at one end of the nursery bring cool air inside and force warm air into the barn.

Rogers notes that ventilation was his biggest problem: "I used only one fan at first but, as the days lengthened, I found it necessary to install another fan. Overall, I've been well pleased with performance of the solar unit. Last winter, we had a 40° heat rise on sunny days," he points out.

"Another nice thing about the nursery is its low cost. I only have \$400

invested in the whole unit, including cost of the gates and feeders."

Rogers believes the solar structure can be easily adapted for other livestock. "You could make portable walls of wood panels which could be removed to open the sides on hot days," he points out. "You'd also probably want a cement block foundation, or poured cement walls. You want the walls high enough so animals can't reach over."

FOR COMBINES, SWATHERS

"Half Moon" Lifters For Lodged Crops

"Last year, when grain harvesting conditions got bad, farmers started buying our lifters as fast as we could make them. We sold 3,500," says Fred Staples, Oakville, Man., manufacturer of new "half moon" shaped lifters which fit onto combine or swather cutterbars for harvesting lodged crops.

In tests by the Prairie Agricultural Machinery Institute of Western Canada, the new-style lifters did a superior job of salvaging lodged crops when compared with conventional or skid-type lifter guards in common use today. They outperformed other lifters in green or mature crops, and on wet or dry soil. They had almost no mud buildup and

no bunching at the cutterbar, according to Staples.

"Key to the success of these new half-moon lifters is their simple design," he points out. "Their narrow profile (1/4 in.) and rigid design minimize crop hairpinning and mud buildup, compared to wider, spring-operated conventional lifters."

The new-style lifters are easily attached to combine or swather cutterbars at every fourth guard, which places them about a foot apart. They can be permanently left in place since they don't interfere with harvesting of crops where lodging isn't a problem.

The special shaped lifters, originally designed for pea and lentil

growers, have since proven to be better than conventional lifters in these and other lodged crops, including small grains and soybeans, says Staples.

"Key to the success of these new half-moon lifters is their simple design," he points out. "Their narrow profile (1/4 in.) and rigid design minimize crop hairpinning and mud buildup, compared to wider, spring-operated conventional lifters."

The new style lifters are easily attached to combine or swather cutterbars at every fourth guard, which places them about a foot apart. They can be permanently left in place since they don't interfere with harvesting of crops where lodging isn't a problem.

The special shaped lifters, originally designed for pea and lentil growers, have since proven to be better than conventional lifters in these and other lodged crops, including small grains and soybeans, says Staples.

The guards, which are not interchangeable to different makes of



Mounted on every fourth guard, the lifters minimize mud buildup and crop hairpinning on the cutterbar.

machinery but must be custom made for each specific brand, are priced at \$10.50 each.

For more information, contact: FARM SHOW Followup, Fred Staples Welding, Box 221, Oakville, Man. ROH OYO (ph 204 267-2203).

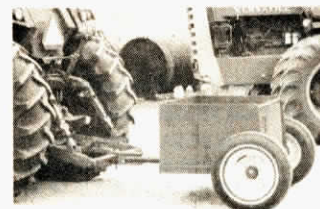
"Rock Chariot" Tows Behind Tractor

The new Rock Chariot, introduced by Morehouse Welding & Sales, Dassel, Minn., attaches to your tractor's 3-pt. hitch arms. When the trailer is full, you simply unlatch the endgate, raise the 3-pt. arms and the rocks roll out.

The trailer's wheel tread is adjustable from 30 to 38 in. allowing you to

tow the "chariot" in row crops without damaging the crop. To adjust the tread width, you pull two pins and set the wheels at the desired width.

You can also use the Chariot for other chores, such as hauling dirt, gravel, hay bales and fencing supplies.



You can also use the Rock Chariot to handle dirt or other heavy loads.

The 3/16 in. thick box is 50 in. wide, 3 ft. long and has 1/4 in. steel plate on the floor.

Sells for \$595.



For more information, contact: FARM SHOW Followup, Morehouse Welding & Sales, Box 127, Dassel, Minn. 55325 (ph 612 275-2593).