

## Built-From-Scratch Walk-In “Freezer Building”

When his CSA and farmers market meat sales outgrew 2 conventional walk-in freezers, Forrest Pritchard decided to put up a “freezer building”. His Smith Meadows farm is a grass-finished livestock farm that markets beef, lamb, pork and chicken. Pritchard describes the project on his website blog and gave FARM SHOW permission to adapt it here.

“On a basic level, a standard 18-cu. ft. refrigerator and a 3,200-cu. ft. walk-in freezer are remarkably similar,” says Pritchard. “They both depend on insulation, compressors, refrigerant and blowers to function.”

Essentially it is an interior box surrounded by an insulated box and an exterior. Pritchard did much of the work himself using 2 by 4 construction, and help from 2 sets of specialists.

Footings were laid out, excavated and poured. Once the concrete block was laid, the first variation on standard construction occurred.

“We laid out 4-in. pipe spaced at 4-ft. intervals under the area to be covered by the concrete pad,” says Pritchard.

The tubes protrude through the block walls to exterior breather caps that allow warm air to flow down the tubes and beneath the slab. This keeps the penetrating cold from the freezer above from heaving the subsoil and cracking the concrete.

A layer of gravel was laid over the pipes to drain water away. It also provided a level area for the insulating foam subsurface laid

down by his first set of specialists. Made partially of soy, the insulation was blown in a 4-in. thick sheet, several inches above the footings.

“Once cured (2 days at 70°F), it became very firm, extremely rigid,” says Pritchard. “We poured the 22 by 20-ft. concrete slab over it. The slab is the floor of the freezer and was treated with an anti-slip epoxy sealer.”

Two sets of stud walls were built spaced 6 in. apart. One sets on the slab and makes up the inside box. The other, directly above the footings, formed the outside box with the roof set on it.

Once the interior sheathing was installed, foam was sprayed against it from the outside. It filled both sets of stud walls, covered the ceiling and tied into the exposed foam beneath the slab. The combination of offset walls and exposed foam ensures that a solid sheet of insulation with no conductive breaks enclose the interior box.

With the addition of exterior sheathing and glass board for a sanitary surface on the inside, Pritchard brought in his second set of specialists. They installed the wiring, compressors and evaporators to make the freezer something more than a well-insulated box.

“We built it with a 60-in. door to accommodate a pallet jack,” says Pritchard. “If everything goes as planned, it should serve our farm for many decades.”

The 3,200-cu. ft. freezer was designed to house thousands of pounds of beef, pork, lamb and chicken raised at Smith Meadows.



**Forrest Pritchard needed more space for his CSA and farmers market meat sales, so he put up this walk-in “freezer building”.**

Pritchard says the entire project cost \$45,000 in labor and materials and was funded entirely through sales at farmers markets.

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**Warm air pipes keep the cold from heaving the subsoil below the freezer and cracking its concrete floor.**



**Gro-Mor’s battery-operated Vibro Hand Seeder (left) and Wand Seeder let you quickly seed starter flats.**



### How To Plant Flats Fast And Easy

Seeding flats to start plants is slow and painstaking work when done by hand. Seeding tools from Gro-Mor make the job easy and accurate. Seeding tools run the gamut from the Vibro Hand Seeder with optional magnifying glass to air-powered units that drop individual seeds into entire flats in seconds.

“When we started running my in-law’s greenhouse business in addition to my full-time job, we needed tools to reduce our labor,” explains Tom Morin, Gro-Mor. “We started selling the wand in 1995 and the Vibro Hand Seeder in 1996. Since then we’ve sold tens of thousands all over the world.”

The battery-operated Vibro Hand Seeder (\$69.95) includes a long seed holding spatula. With the spatula held level over the flat or tray to be seeded, the vibrator is turned on and the speed adjusted. The faster the speed or the steeper the angle the spatula is held at, the faster the seed falls off the end. The optional tip magnifier makes it easy to see even the smallest seeds.

Morin also designed a variety of tools for small and large growers alike. The vacuum bulb Mini Wand models (\$30 to \$52) are designed for home gardeners and greenhouses. They use a hand activated vacuum bulb to create the seed-holding vacuum.

The MWS-1 comes with a vacuum bulb, tip storage and seed tray, 5 tip sizes, a magnifier attachment and a bulb sleeve. The MWS-2 TH also includes a hand trigger with wand extension for faster seeding. The MWS-3 THF adds a 4-ft. hose, allowing the bulb to be pressed by the foot as well as the hand.

The Wand Seeder is designed to quickly seed an entire starter flat. It can be ordered with different wand configurations. Each of the 32 wands in stock is designed to match spacing and cell rows in a particular flat size. Interchangeable tips are available to match 5 different seed sizes. When connected to a compressor, the wand picks up seeds, holding them until placed over the row of the flat to be seeded. When the operator presses the Venturi release, the seeds drop onto the starter mix.

Wands can be ordered with a heavy-duty vacuum pump (\$599), with an adapter for use with a shop vac/home vacuum (\$283) or with a Venturi pump powered by an air compressor (\$399).

Gro-Mor seeders are available in North America from Johnny’s Seeds, Harris Garden Trends, and International Greenhouse Co.

Contact: FARM SHOW Followup, Gro-Mor, Inc., 281 West Mountain Rd., P.O. Box 44, Adams, Mass. 01220 (ph 413 743-2064; gromor@verizon.net; www.gro-morent.com).



**Bob Young uses trained Border Collie dogs to scare nuisance geese from golf courses and other properties where they don’t belong.**

### He Uses Trained Dogs To Scare Off Geese

If you like dogs and you’re looking for a sideline business, Geese Chasers™ might be for you. Bob Young, Mount Laurel, N.J., started the business, which eliminates nuisance geese from golf courses and other properties where they don’t belong.

Young’s technique is simple, but effective. Patrol the area with a properly trained Border Collie dog. Within a month of random walks, Young and his dog, Boomer, “inspired” 500 geese to relocate away from Ramblewood Country Club in New Jersey. That was back in 1998, after the golf course owner invited Young and his dog to the course after seeing the pair play Frisbee in a local park.

“The golf club members were very happy about it. They gave Boomer burgers,” Young recalls. A golf course member who was part of a homeowners association offered to pay Young to have Boomer chase geese away from his neighborhood, and Young became an entrepreneur. In 2002, Geese Chasers incorporated. To date Young has sold \$20,000 franchises (plus royalty payments) to entrepreneurs in New Jersey, New York, Colorado, Pennsylvania and Delaware, and has had inquiries from several other states. Successful businesses are located near

high population areas with commercial, residential and municipal clients plagued with nuisance geese that leave droppings that cause health issues. Geese Chasers clients choose from 3 packages: Initial clearing local geese with multiple daily visits for one to three months, maintenance to discourage migrating Canadian geese from staying, and on-call for ongoing services.

“They (Border Collies) mimic an arctic fox, which is a true goose predator,” Young says. “We train the right dogs and break the herding instinct to a chasing mode.”

Boomer was a natural, but Young says he developed a secret training technique he shares with franchise owners setting up their own businesses. He also provides detailed marketing information about finding clients, advertising, social media, etc.

Contact Young for information about Geese Chasers services in New Jersey, or to set up a business.

Contact: FARM SHOW Followup, Bob Young, Geese Chasers, 42 Broadacre Dr., Mount Laurel, N.J. 08054 (ph 866 984-3373; www.geesechasers.com).