

Finch is shown here with mature citrus trees grown in his greenhouse.



Plans and components for Russ Finch's "underground" greenhouse, first featured in FARM SHOW 3 years ago, are now for sale.



Greenhouse is buried 5 ft. below ground. There are now 17 full-size units in place across 6 states and Canadian provinces.

He Helps Others Build "Underground" Greenhouses

Russ Finch has plans and components available for his in-ground, heated greenhouse first featured in FARM SHOW'S Vol. 37, No. 2. Finch calls it the "Greenhouse in the Snow" and there are now 17 full-size units in place across 6 states and Canadian provinces. A full-size unit is at least 54 ft. in length; however, units as big as 96 ft. are in use to grow fruits and vegetables year-round.

"Our 78-ft. long and 17-ft. wide design is the most popular," says Finch. "If you have access to a backhoe and furnish the labor, a full-size unit should come in at around \$22,000, fully automated."

That price includes the cost of fans and 250 ft. of 4-in. diameter plastic tubing required to keep temperatures in the greenhouse above 28 degrees. A 78-ft. greenhouse requires 13 of the 250-ft. tubes buried 8 ft. deep to tap the year-round 52-degree temperature of the earth. The dirt floor of the greenhouse is 5 ft. below the surrounding ground surface.

"Only about 200 ft. of tubing is actually in the ground," says Finch. "The rest of the closed loop system is used entering and leaving the greenhouse."

Finch offers the twin-wall, Lexan polycarbonate panels and the framing for the south sides of his greenhouse design. Materials to erect in-ground walls and the "back" side of the structure are available at any home supply store, as is the 4-in. diameter tubing.

"Our materials cost about \$122 per linear foot (available in 6-ft. increments)," says Finch. "The construction and fabrication plan package is available for \$49."

Finch also sells his Citrus in the Snow digital report on the geo-air energy system and how it works. The report includes color graphics, notes and comments. It can be downloaded online for \$24.

Check out a video of Finch's greenhouse at www.farmshow.com.

Contact: FARM SHOW Followup, Russ Finch, 1750 County Rd. 59, Alliance, Neb. 69301 (ph 308 762-3042; snowkist@hotmail.com; greenhouseinthesnow.com).



Cylinder Services, Inc., says it rebuilds everything from the smallest diameter cylinders to huge industrial cylinders measuring up to 24 in. in diameter. Their state-of-the-art shop can take on almost any hydraulic job.

Where To Get Hydraulic Parts, Repairs

If you need hydraulic components for a machine you're building, or if you just need repair parts for an existing machine, here's a company that specializes in everything hydraulic.

Cylinder Services in Rochester, N.Y., runs a booming mail order business and also handles repairs of hydraulic motors, cylinders, pumps, and other components. Their state-of-the-art shop can handle everything from the smallest 1/2-in. dia. cylinders up to huge industrial cylinders measuring 24 in. in dia.

Owned by Don Welch, Scot Anderson, and Marty Lathan, Cylinder Services has been in business since 1974. The three owners get involved in every aspect of the business, maintaining a high level of quality.

They are a stocking Master Distributor of Prince Hydraulics and carry components from many other manufacturers too. Cylinders, pumps, valves, motors - you name it, they carry it, and they'll help you choose the part you need for your application. They also stock hydraulic fittings, gauges, meters, and accessories for hydraulic systems.

Cylinder Services' website at <u>www.</u> <u>CylinderServices.net</u> has more information about the company and hundreds of hydraulic components it carries in stock. Or you can contact them at FARM SHOW Followup, Cylinder Services, Inc., 900 Maple St., Rochester, N.Y. 14611 (ph 585-328-0670).

Reader Inquiry No. 111