Dubois fills the 35-ft. wide, 60-ft. long shed with 200 4 by 4-ft. round bales, stacked two high. Cattle feed through a 4-ft. high gate which Dubois keeps moving forward as needed.

Self-Feeding Hay Shed Saves Labor, Time

"My self feeding hay shed saves a lot of time and labor. It's especially great in cold weather because I don't have to start a tractor to feed cattle," says cow-calf operator Phil Dubois, Madawaska, Maine.

Dubois fills the 35-ft. wide, 60-ft. long shed with 200 4 by 4-ft. round bales, stacked two high. Cattle feed through a 4-ft. high gate built from 1 by 2-in. rectangular steel tubing. The feed gate stands on four steel T-shaped legs. The top of the gate is tied with rope in four places to the building's wooden trusses to keep it from being pushed over.

Dubois cuts the strings off the bales before placing them inside the shed. To feed the bales he moves the gate up against them. Then he just keeps moving the gate forward as needed.

Open side of shed faces south and serves as a shelter for calves born in spring.

"The bale feeding shed also serves as a shelter for calves born in April and May - they can slip under the gate and into the bale storage area. The open side of the shed faces south so they stay warm. In the summer I remove the rack and clean out the manure and hay," says Dubois.

Contact: FARM SHOW Followup, Phil Dubois, Rt. 2, Box 381, Madawaska, Maine 04756 (ph 207 728-4291).

Pump Truck Gets Water To Fires Fast

"We converted a 1967 Chevy 4-WD truck into a fast-working pump truck that lets us pump water out of a pond, creek, or lake at up to 2,000 gpm so we can get it to a fire faster," says Lawrence Wood of Peshtigo, Wis., who's a member of his local volunteer fire department.

He mounted a low pressure, high volume pump on back of the truck. A length of aluminum pipe runs from the pump up over the cab to a big swing boom on front of the pickup. The boom is used to fill a tanker truck. The boom rotates back and forth and moves up and down, controlled by hydraulics off a pto-driven hydraulic pump. To drive the water pump, Wood mounted a transfer case out of an old International 3/4-ton 4-WD pickup between the transmission and rear end, turning the transfer case backward so that it can drive either the rear wheels or the pump (one shaft goes to the truck's rear wheels and the other one to the pump). The control lever for the transfer case, which would normally be used to switch the pickup in or out of 4-WD, is located in the cab, just to the left of the gearshift lever.

"It works great, but operating it does take a while to get used to," says Wood. "We spent less than $10,000. We had been using 250-gpm portable pumps to fill the tanker from ponds or creeks, manually lifting the hoses up onto a truck. It was a slow job and required a lot of labor.

"There are three 20-ft. aluminum pipes carried on the right side of the truck and three 10-ft. long rubber hoses on the left side, for a total of 90 ft. of suction pipe that can be hooked up to the pump. There's also a screen and float on the end of the pipe in the water. We alternate the rubber and aluminum pipes to better follow the ground contour. After connecting the pipes together we use vacuum from the truck intake manifold to prime the pump. Then we fill the tank. Once we arrive at the fill site with the truck we put the emergency brake on and shift the transfer case. Then we shift into third gear and let the clutch out to operate the pump and fill the truck.

"The swing boom mounts on a big steel pipe which is welded onto a 2 1/2-ft. sq. steel plate that's welded onto the front of the truck."

Contact: FARM SHOW Followup, Lawrence Wood, W4575 Woodland Rd., Peshtigo, Wis. 54157 (ph 715 789-2156).

Wood converted a 1967 Chevy 4-WD truck into a pump truck equipped with a swing boom on front that fills a tanker truck.

Boom rotates back and forth and moves up and down, controlled by hydraulics off a pto-driven hydraulic pump.

A length of aluminum pipe runs from a pump on back of truck over the cab and up to the boom.

New-Style Scoop Shovels

This scoop shovel and scoop fork were originally designed for sifting through livestock bedding when cleaning barns but they have many other uses as well.

Thunderbolt's "sifter shovel" is made out of aluminum and weighs only 2 lbs. The same size as a regular scoop shovel, it features a scoop made of 3/4-in. diamond-shaped expanded metal that allows you to "sift" material. It's fitted with a steel cutting edge for longer wear.

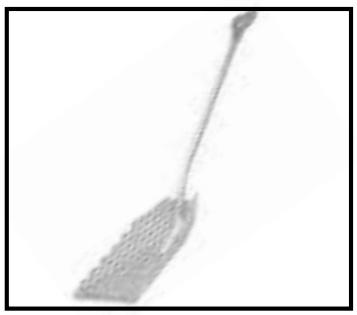
Available with 36 or 42 in. handle. Sells for $24.95 plus $3.95 S&H.

Contact: FARM SHOW Followup, W.F. Valentine Company, 7633 Quackenbush Rd., Reading, Mich. 49274 (ph 800 331-6728 or 517 283-3143).

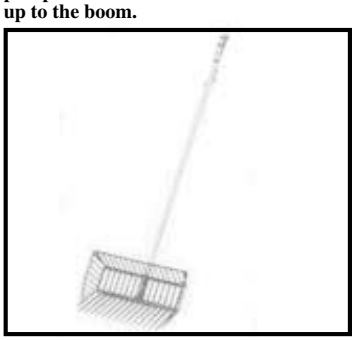
Farnam Companies' "Wonder Fork" features a 6-in. deep by 15-in. wide basket. The front is fitted with 8 1/2-in. long Lexan tines spaced 6 1/2-in. apart that allow bedding and manure to drop through simply by tapping the fork a couple of times. Has a 54-in. coated hardwood handle.

Sells for $29.23.

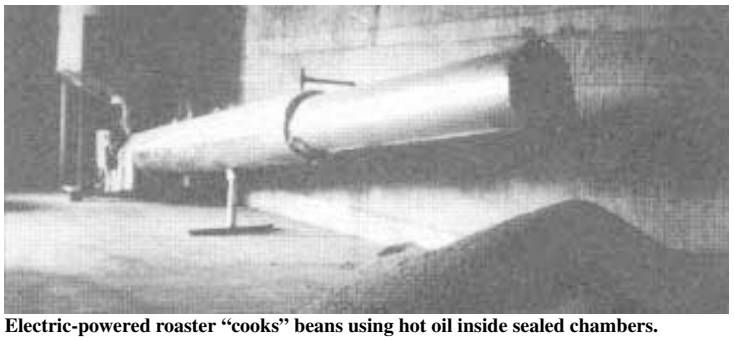
Contact: FARM SHOW Followup, Farnam Companies Inc., P.O. Box 24820, Phoenix, Ariz. 85067-4820 (ph 888 241-9546; Web site: www.farnam.com/articles/wonderfork_article.html).



"Sifter shovel" is made out of 3/4-in. diamond-shaped expanded metal that allows you to "sift". material.



"Wonder Fork" has a 6-in. deep by 15-in. wide basket. Fitted with 8 1/2-in. long Lexan tines on front spaced 6 1/2 in. apart.



Electric-powered roaster "cooks" beans using hot oil inside sealed chambers.

Flameless Soybean Roaster "Makes Better Feed"

Conventional soybean roasters have open flames that can scorch the beans, reducing feed value or even catching fire. A Michigan inventor says his new electric-powered roaster "cooks" beans using hot oil inside sealed chambers.

"It's a totally new concept in roasting soybeans that's automatic and fireproof," says Clifford Wetzel, of Ithaca.

The 32-ft. long, stainless steel machine consists of a Teflon-coated auger inside a 14-in. dia. tube. The first 20 ft. of the tube is surrounded by a 20-in. dia. "heating chamber" that holds 165 gal. of oil, heated by four electric heating elements. A 4-in. thick layer of fiberglass around the heating chamber keeps heat in as beans are augered through.

Beans feed into the roaster from a hopper at one end. It takes 1 1/2 hours to pass through. Beans are cooled in the top 12 ft. of the unit. The auger drops them into a pile at the far end of the machine.

"It sells for about $23,000 which is comparable to other soybean roasters. But it cooks much more evenly and there's no danger of fire so you don't have to watch it at all," says Wetzel. "It'll run by itself for 24 hours a day, seven days a week. Conventional roasters can cook more beans per day but not of the same quality.

"Roasting soybeans increases their nutritional value because the fat is left in the beans. The University of Wisconsin has been testing my machine for more than a year with good results. They've found that it'll roast 5,000 lbs. every 24 hours which is enough for a herd of 1,000 to 2,000 milk cows. It can be equipped with a crusher that'll crush the beans as they come out of the machine."

According to Wetzel, the auger flighting is covered by Teflon to provide a smooth flow of beans and to eliminate steel shavings in the feed. The unit is also equipped with an adjustable temperature control.

Contact: FARM SHOW Followup, Clifford Wetzel, 2575 W. Washington Rd., Ithaca, Mich. 48847 (ph 517 875-4868).