

## Inexpensive Egg Washer, Candler Built For Small Farmers

"It was designed with small farmers in mind but has enough capacity for larger farms, too," says William Burkholder, Dayton, Va., about the powered egg washer he recently started selling.

His self-contained Power Scrub II operates on 3 DC electric motors and has a frame and body made entirely of stainless steel. Eggs roll down a runway at one end of the machine and pass over a powerful LED candler. The eggs then pass onto a chain-type track located inside a long metal cabinet. There the eggs are washed and scrubbed with brushes as they pass through, and then dried. The eggs continue to track around the other end of the machine to be packed. An optional side conveyor and drop-down table allow for convenient handling.

"It's the ultimate egg washer for anyone

who raises chickens on pasture," says Burkholder. "I came up with the idea because I raise about 700 free range chickens and decided the egg washers I saw on the market were too expensive. Other comparable size egg washers on the market cost \$12,000, whereas mine sells for a little over \$5,000 and has some extra features that other models don't have. It's a quality made machine and requires very little maintenance.

"It works fast – it takes my wife and I only about 20 min. to wash 50 dozen eggs. The DC motors allow variable speed so you can run the track faster if you have clean eggs or slower if you have dirty eggs."

Contact: FARM SHOW Followup, William Burkholder, 3319 Hilltop Acres Drive, Dayton, Va. 22821 (ph 540 879-3575; fax 540 879-9591).



"It's the ultimate egg washer for anyone who raises chickens on pasture," says William Burkholder about his self-contained Power Scrub II egg washer.

## Lightweight Chicken House Made From PVC Pipe

By Klaire Howerton

When Caleb Howerton of Green Thicket Farm in Springfield, Missouri, started creating designs for pastured chicken housing, he knew it would need to be lightweight for ease of movement but sturdy enough to withstand a lot of handling and a variety of weather. He ended up using pvc pipe, poultry netting, furrowing strips, and heavy-duty tarps.

The chicken "tractors" are 10 ft. wide, 20 ft. long and 6 ft. high. Caleb used 1-in. pvc pipe, along with T and right angle pvc pipe connectors to assemble the 10 by 20-ft. rectangular base; the T connectors were then used to bend seven 15-ft. long sections of the 1-in. pvc across the frame into 6-ft. high hoops, creating a hoop house-like shape.

To stabilize the frame, two 10-ft. pvc crossbars were screwed into the top of the bottom frame – this raised the crossbars just high enough off the ground to support the structure without catching on the ground during a move. Four 4-ft. furrowing strips were attached from the sides of the structure to the bottom crossbars at an angle to provide additional support – two more 4-ft. furrowing strips were attached lengthwise to the angled strips to create roosting bars for the chickens.

The front end of the tractor frames are 3 in. higher than the side runners of the frame to prevent the tractor from catching on anything when it is pulled, and a 5-in. canvas tarpaulin is attached with self-tapping screws to close the gap and prevent

chickens from escaping, while still allowing for easy movement.

Once the frame of the chicken tractor was in place, a 4-ft. tall, 2-ft. wide door was built into one end of the tractor with poultry netting, furrowing strips, and a barrel latch. To close in the structure, 4-ft. of poultry netting was stretched around the base and was secured with wire ties. The remaining open roof and side areas were covered with a 10 by 25-ft. tarp that was stretched across the frame and secured with lightweight rope that runs through the tarp grommets. A second rope was run in a zigzag pattern across the top of the coop and down through the poultry netting to keep the tarp from flapping and potentially tearing in strong winds. For nest boxes, Caleb used 5-gal. buckets attached to a 3-ft. board that was then mounted to the frame on either side of the door.

The whole assembly can be moved to fresh pasture daily via a 20-ft. section of lightweight rope with some pieces of old garden hose that serve as handles, and 2 carabiners attached to each end. The rope is clipped to 2 out of 4 eyebolts with 1 1/2-in. long thread and 5/8-in. eyes, and then the whole structure can be moved by a single person to the desired area. Once it is in place, 2-ft. long and 1/2-in. thick rebar stakes can be driven through the eyebolts (one set in each corner) into the ground to keep the structure from shifting in high winds.

Contact: FARM SHOW Followup, Caleb Howerton, 1008 E. Farm Road 54, Springfield, Mo. 65803.



Caleb Howerton uses pvc pipe, poultry netting, furrowing strips, and heavy-duty tarps to make lightweight chicken houses.



Each chicken house measures 10 ft. wide, 20 ft. long and 6 ft. high. One person can easily move the whole structure around.



To make nest boxes, Howerton uses 5-gal. buckets attached to a 3-ft. board that's mounted to the frame of a door at one end of house.

## Simple Chicken Waterer

Needing an efficient way to keep water available to a flock of 120 chickens, Caleb Howerton of Green Thicket Farm in Springfield, Mo., made 2 easy automatic waterers from 5-gal. buckets with lids and mortar mixing trays he had in his garage.

Using a 3/4-in. paddle bit, Caleb drilled a hole in the side of the bucket roughly 1 in. up from the bottom. He then placed a lid with an airtight seal onto the bucket after filling it with water and immediately set the bucket into the mortar tray. The result

is that the water in the bucket will create a vacuum and only fills the tray to the height of the hole in the bucket. The remaining water will drain into the tray only after the chickens have drank enough for the water level to go below the hole. To refill the waterer, the bucket can be set on its side and refilled with a hose, and then set back upright in the tray.

Contact: FARM SHOW Followup, Caleb Howerton, 1008 E. Farm Road 54, Springfield, Mo. 65803.



Howerton made this automatic waterer using a 5-gal. bucket with lid and a mortar mixing tray. Water in bucket creates a vacuum and only fills tray to the height of a hole drilled into side of bucket.