## **Featherless Chickens Can Take The Heat**

Featherless chickens simplify the butchering process and they're a lot more efficient in hot climate locations. Professor Avigdor Cahaner at Hebrew University in Israel believes that in the heat, they could reach market weight one week sooner compared to standard feathered broilers.

"This is not a different breed, rather an option that allows us to get featherless broilers from any existing breed," Cahaner explains. "We develop a stock, which is similar to contemporary commercial broiler breeds, except that it carries the featherless gene. By mating males from our stock to females from any standard breed, featherless broilers of that breed can be produced. We are already at the point that we can offer such featherless males." (Rates of chicks born featherless vary from 25 to 50 percent depending on the genotype of the breeders.)

Work started at the university in Rehovot, Israel, in 2000, when researchers imported chickens with a natural, spontaneous mutation called "Scaleless" found at the University of California in the mid 1950's. The mutation was found in a breed of egg production chickens named New Hampshire. Tapping into the gene for raising broilers is all about efficiency. Feathers make it more difficult to dissipate excess internal heat, which reduces appetite. Growth rate slows, increasing the number of days to marketing body weight, which adds to the cost of raising birds.

In addition, eliminating the need to grow feathers saves about 10 percent in feed costs. The birds are meant for intensive production – raised inside – so sunburn and other weather conditions are not an issue. In fact, without feather holes, the chickens are less prone to skin infections. Without feather follicles, there's no fat in the skin. Cahaner says the meat is redder, moister and has a better taste and consistency than feathered chickens, especially those reared under hot conditions. The breast meat yield is 2 to 3 percent higher because amino acids aren't wasted on growing feathers.

Cahaner notes that the biggest challenge is to convince producers and consumers that featherless is better for broilers raised in hot broiler houses. They fit best when temperatures are more than 86 degrees Fahrenheit and there is no cooling system



Researchers have tapped into an existing gene to breed featherless chickens, which can take the heat and therefore grow more efficiently.

or the producer wants to save cooling costs. Growers in emerging countries have the option to build simple, inexpensive broiler houses, compared to expensive climatecontrolled buildings.

Anyone interested in more information, can contact him through email. Contact: FARM SHOW Followup, Avigdor

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Cahaner, PhD, Professor of Quantitative

## Pop-Up Camper Converted Into Mobile Chicken Coop

After looking at several different mobile chicken tractors, Jerry Knowlton decided to build his own out of an old 2-wheeled pop-up camper frame.

The 3-wheeled chicken tractor is complete with a 10-ft. sq. wire cage that's built on top of the trailer frame and open at the bottom. A 4 1/2-ft. wide, 3-ft. high poly box mounts on front of the trailer where it serves as a roost and nest box area. The box has a snap-on lid and 2 doors on front. Knowlton cut plexiglass windows into the doors and added vents and a self-closing sliding door on back where chickens enter from the cage.

The bottom sides of the cage are equipped so he pulled most of the floor planks back off with 8-in. high hinged wire panels that can and then built the cage out of 2 by 2's and

be swung up against the cage for storage or for transport.

Knowlton also added a small third wheel on front of the camper frame. To move the trailer he simply lifts the tongue jack and pulls the unit forward.

"Every day I pull the unit ahead one trailer length and the chickens get a new patch of grass to scratch around in. My lawn benefits as well," says Knowlton.

He already had the pop-up camper, which he had previously converted into a small utility trailer fitted with a wooden floor. However, he wasn't using the trailer any more so he pulled most of the floor planks back off and then built the case out of 2 by 2's and



some chicken wire left over from another project. Contact: FARM SHOW Followup, Jerry

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## "Stay Clean" Chicken Waterers

"It keeps your chickens' drinking water clean at all times and takes the mess out of changing the water," says Leonard Wogsland, Pensacola, Fla., about his new "Chicken Kooler" watering system for backyard chicken producers.

The CK3 Chicken Kooler is a totally contained system that includes a 3 1/2-gal. see-through, blue plastic bucket with an "EZ Access Lid" and 4 specially designed drinker valves on the bottom, which allow multiple chickens to drink at one time. The bucket hangs 18 in. above the ground in your coop or run, allowing the chickens to drink from under the pail.

The lid has a 1 1/2-in. dia. hole with a stopper. This allows for easy refilling of water, adding vitamins, or electrolytes for the chickens. An optional lid with a garden hose attachment allows you to refill the pail by simply turning on your outside water faucet. An optional heater lid element can be placed in the bottom of the pail, to keep the water at a constant 35 to 40 degrees even in subzero temperatures.

"Commercial chicken houses have been using drinker valves for years. I've just adapted the technology by modifying a gravity fed drinker valve to a different application. When the chicken moves the stem on the bottom of the ball, the valve gets pushed up and water flows down to the bottom of the stem. It takes only about 90 seconds for chickens to learn to drink from the valves. The system also works with ducks and guinea hens, too."



Four drinker valves fit into bottom of plastic bucket, which hangs 18 in. above ground.

Several other models are also available. The CK1 is made for small flocks of 5 or less. It comes with a 1-gal. pail and 2 drinker valves and sells for \$22.90.

The CK2 comes with a 3 1/2-gal. pail and 3 drinker valves and sells for \$29.90.

Contact: FARM SHOW Followup, Leonard Wogsland, 217 Saint Eusebia St., Pensacola, Fla. 32503 (ph 850 221-7077; lwogsland@ cox.net; www.cheerychicks.com).

## Chicken Nest Box Kit Uses 5-Gal. Plastic Pail

This new easy-to-assemble chicken nest box kit makes use of a 5-gal. plastic pail.

A plastic perch and cover snap onto a pail, which mounts securely horizontally to any wooden wall using screws and washers. No additional bracing or supports are required.

According to inventor John Blehm, the nest box design offers several advantages. "It won't rot, rust, dent or corrode. It's easy to clean and sanitize and resistant to lice and mites. The rounded design discourages roosting on top, keeping the boxes cleaner than flat top boxes. The boxes can be mounted in any configuration to fit your coop. And the shape and size of the entry hole in the cover helps prevent wood shavings from being scratched out by the chickens, resulting in cleaner eggs and fewer broken eggs."

The 6-in. opening in the cover is large enough for most chickens and can be increased to 8 in. for extra heavy breeds, says Blehm. "Ribbing on the inside of the cover reveals the outline of the area that's specially designed to be cut out for this purpose."

You can buy the cover and perch separately and use your own 5-gal. pail. But there are some pails that don't work so Blehm also sells the pail.

Two complete nest boxes – with pails – sell for right at \$50.

Contact: FARM SHOW Followup, John W. con



Plastic perch and cover snap onto any 5-gal. plastic pail.



"The plastic won't rot, rust, dent or corrode," says inventor John Blehm.

Blehm, 4599 Lange Rd., Birch Run, Mich. 48415 (john@fowlstuff.com; www.fowlstuff. com).