



**Boaz Mini Combine is designed to harvest grain from small plots. It's ideal for small landholders who want to raise an acre or two of grain.**



**Mini combine has twin cutter bars - one mounted on the gathering reel to clip the grain heads, and the other mounted near ground level for cutting straw.**

## Mini Combine Harvests Smaller Farm Fields

You can harvest grain from small plots for your family's personal needs with a Boaz Mini Combine. It's easy to plant small plots of grain and seeds for personal use. However, commercial combines are too big, and harvesting by hand is slow and hard. One of the few alternatives to large commercial combines or refurbished old, smaller combines has been research plot harvesters.

"Research combines are very expensive, but the Boaz is reasonably priced and designed for small grain plots," says Eddie Qi, EQ Machinery. "It's made in China and assembled here in the U.S. Most of the parts can be found off-the-shelf if repairs are needed. Other parts will be available by order."

Qi heard about the Boaz from a friend and began importing them. He says reaction to the small combine has been positive with small farms, religious communities and local groups buying and sharing the combines.

"It's ideal for the small landholder who

wants to raise an acre or two of grain for a few animals or his family, a baker who wants to raise his own grain for making flour, or for those who simply want to control their food supply," says Qi. "It's popular with people who want organic, non-GMO grain."

The Boaz has a very simple, yet unique design with twin cutter bars. The forward cutting bar is mounted on the gathering reel to clip the grain head. The height is controlled by a hand-operated hydraulic lift. A second cutter bar with mechanical height control is mounted near ground level ahead of the drive wheels for cutting straw. A threshing system mounts over the front drive wheels.

The operator sits on an open-air seat over the rear dolly wheel. The engine mounts ahead of the operator's legs and between the front and rear wheels. Controls are similar to a two-wheel, walk behind tractor. The Boaz features a 3-speed forward plus reverse transmission. Steering is accomplished with the aid of brakes on the front wheels and foot pedals on the dolly wheel.

The grain and straw heads are augured to the feeder housing and then into an axial flow threshing chamber where the grain is separated from the straw. Grain and non-grain materials fall through a sieve. A manually damped vacuum on the cyclone separator pulls the chaff off. The grain falls into a bag on a platform beneath the separator.

"The grain needs additional cleaning for storage or sale," says Qi. "We suggest running it through a stationary seed cleaner."

The combine weighs only 948 lbs. It's 11 ft. long, 5 1/2 ft. wide and 4 1/3 ft. tall. It has a rated cutting width of 2 1/2 ft. and a feeding capacity of less than a pound per second. It's powered by a 13 hp, EPA certified, gas engine.

"It has a loss rate of less than 2 percent for wheat and a crushing rate of less than 2 percent," says Qi. "It's intended for small plots and will harvest less than a sixth of an acre an hour."

The Boaz Mini Combine is priced at \$4,999. It's designed for wheat, oats, rye,

barley and other small grains, as well as sunflowers and other small oil seeds.

"It hasn't been tried on beans, but I hope to test it on them this year," says Qi.

Qi hopes to introduce a slightly larger combine, the Boaz 1.0. It runs on tracks and is nearly 3 times the weight with twice the cutting width and feed capacity of the Boaz Mini Combine. It claims significantly increased productivity of under 2/3 acre per hour, higher quality output and less grain loss.

"The Boaz 1.0 has a 22 hp diesel engine, but it didn't meet EPA certification," explains Qi. "I am looking for an affordable 25 hp diesel replacement and would appreciate any suggestions FARM SHOW readers might have."

To see the Boaz Mini Combine in action, check out the video at [www.farmshow.com](http://www.farmshow.com).

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## Simple Trap Catches Wasps In Wall

If you've ever had problems with wasps nesting inside a wall, you'll be interested in this wasp trap designed by Dick Johnson of White Bear Lake, Minn.

"It's for anyone who can't afford an exterminator or tolerate chemical sprays or powders," says Johnson. "It keeps wasps from entering the wall, and any wasps that are already inside the wall and want to leave will see daylight and think it's an exit. As they try to leave they get trapped and drown in soapy water."

The trap is designed to screw in place over the wasp's entrance/exit hole. It makes use of an ordinary plastic peanut butter jar, plastic pop bottle, and plastic electrical box. The upper part of the bottle is cut off to serve as a funnel. A large hole is cut into the peanut butter jar cover and then the cover is fastened to the electrical box. The funnel is held secure by two 5-in. long wires bent into a U shape and inserted up through holes in both the cover and electrical box. The funnel is then taped in place.

Pour about 2 in. of water into the jar and add some liquid dish soap and then screw the jar into the cover.

"Wasps inside the wall enter the trap, thinking that they're exiting," says Johnson. "Also, returning wasps are prevented from entering the wall."

Johnson sells detailed plans at [www.gizmoplans.com](http://www.gizmoplans.com)

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**Trap screws in place over wasp's entrance/exit hole. It makes use of a plastic peanut butter jar, pop bottle, and electrical box.**



**Top of pop bottle and jar cover fasten to side of electrical junction box.**

## Modified Mower Makes It Easy To Gas Ground Squirrels

After losing his winter lettuce crop to ground squirrels, Jeff Hoard got serious about controlling them. The off-the-grid inventor made quick modifications to a walk-behind mower. Now it serves double duty as a ground squirrel gasser.

"They would come into the garden and dig up seeds or clip seedlings," says Hoard. "We grow lettuce under hoops with plastic over it all winter. I throw carpet scraps over it when it gets down below freezing. The ground squirrels got in and ate it all."

This past summer, Hoard decided to try gassing them. He mounted a pipe flange over the muffler exhaust of the old mower.

"I wanted the mower to work the way it always had," says Hoard. "The flange didn't interfere, but it let me channel the exhaust into the ground squirrel tunnels."

He first attached a 3-ft. length of copper pipe to the flange and a length of flexible hose to the pipe end. The copper pipe dissipated the exhaust heat, which otherwise would have melted the hose.

"I insert the hose end into the tunnel and step down the dirt around it to seal the exhaust in," explains Hoard. "The mower puts out enough exhaust pressure that it blasts any back fill out of the way; yet it doesn't seem to affect the engine any."

Hoard doesn't expect any problems with ground squirrels this winter. This past fall he treated tunnels within a 300-ft. radius of his winter garden bed. "I don't see any running



**Jeff Hoard's push mower serves double duty as a ground squirrel gasser. A length of flexible hose is inserted from mower's exhaust muffler into tunnel (above). Pipe flange attaches to exhaust.**



around," he says. "It seems to have cleaned them out."

Hoard shares his "creative scrounging" ideas and projects on his Hillbilly Heaven CD available at his website.

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