

“Grabber” Captures Wasted Chimney Heat

Anders McGriff says his “stack enhancer” grabs heat that would otherwise go up the chimney on his wood-fired boiler. The water jacket simply wraps around the flue and is plumbed into the boiler.

“I was running such a high flue temperature that I was having chimney problems,” says McGriff. “I ran the furnace hot to keep an old 3,000-sq. ft. farmhouse heated plus my 40 by 70-ft. shop with its 19-ft. ceiling. With the two forced air fans on the firebox, it was like a blast furnace, and the 8-in. pipe going to the chimney would turn red several times a day.”

McGriff figured his stack was running 700° and higher and was rarely below 500° even when the fans were turned off. He used an 8-in. dia. piece of well casing to replace the flue and fitted a 10-in. dia. piece of 10-gauge pipe over it, giving him 1 in. of water around the pipe.

“I ran cold water return lines from the house into the bottom of the stack enhancer and out the top and then into the stove’s water jacket,” says McGriff. “Normally the hot water going to the house runs about 170° and comes back cool. The water comes out of the stack enhancer at about that 170° temperature.”

After using the unit for a year, McGriff disassembled it and found very little creosote, even though he often burns waste wood, not premium dry firewood.

“I disassembled my entire chimney as well, and in 15 ft. I only had enough creosote to fill a cigarette pack.”

McGriff built a similar unit for Dave Devito, a nearby plumbing and heating contractor. Devito reversed the water flow, running the cold water in the top of the jacket and out the bottom, seeking to capture additional heat gain, but doubts it matters. Unlike McGriff, Devito burns ear corn.

“Before I added the stack enhancer, the stack would reach 800 to 900 degrees F. on a peak burn,” says Devito. “With the enhancer, I never saw it above 500 degrees.”

Devito installed a pop-off pressure release valve on the stack enhancer. He also added temperature sensors to measure flue gas temperatures and incoming water.

“Before installing the stack enhancer, I had to fire my boiler three times a day on ear corn,” says Devito. “Now I get the same amount of heat with a 12-hour burn, at least until it gets below zero. I figure it costs me about \$100 a month to heat my farm house and provide enough hot water



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for my family of seven.”

Devito agrees that maintaining sufficient flue temperatures to prevent creosote buildup is important. “A flue temperature of 400 to 500° or even 300 to 500° with dry wood, is plenty to keep the stack clean,” he says. “Most wood boilers are still pretty crude, and you lose a lot of operating efficiency. This gets some of it back.”

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Instead of backing into drifts with a tractor-mounted snowblower, Eric Jones drives into them, thanks to the snowblower he mounted on front of his Ford pickup.

Front-Mount Pickup Snowblower

Why back into drifts with a tractor-mounted snowblower when you can drive into them instead? Eric Jones mounted his snowblower on front of his 2004 Ford Super Duty pickup. He says it clears snow faster than a snowplow and even with its own engine, the modified snowblower is no heavier than a standard snowplow.

“A V-plow for the truck would have weighed 960 lbs., and the snowblower is around 900 lbs.,” he says. “It doesn’t bottom out, hasn’t needed rear end weights, and handles well traveling down the road.”

Jones built a subframe for the snowblower to hold the Geo Tracker 4-cylinder engine and gearbox that powers the blower. Fittings on the subframe connect to the 3-pt. hitch arm fittings, and a hydraulic cylinder mounted to the subframe attaches to the fitting for the top link. When the snowblower is mounted, extending the cylinder lowers the blower. Dismounted, extending the cylinder raises the subframe.

Power is transferred from the 80 hp engine to the 1,000-rpm impeller with the aid of a homemade gearbox. “I needed a strong and inexpensive gearbox, so I used a drive axle from an older Ford pickup and welded the spider gears together,” explains Jones. “I put a plug where the one axle was and connected the impeller drive to the other axle. It has a



When blower is removed, truck-mounted subframe looks like a heavy duty push bar.

3:55 gear ratio, so I run the engine at 3,500 rpm’s to get 1,000 rpm’s for the impeller.”

Jones bolted 16-in. long steel plates to the truck frame as the base for the truck portion of the mount. The plates extend out and below the front bumper. He then welded a framework of 3 by 2-in., 1/4-in. thick rectangular tubing uprights to the steel plates. Cross members are 2-in. steel pipe. When the blower is not in place, the frame looks like a heavy-duty push bar.

The subframe of the blower consists of 2 by 3-in. angle iron uprights with flood lights mounted on a top cross bar. To connect the subframe to the frame on the pickup, Jones split a 32-in. length of 2 1/2-in. iron pipe lengthwise and welded one half across the subframe uprights that face the pickup frame.

“To mount the snowblower, I just drive

“Honeysuckle Popper” Rips Out Plants By The Roots

If you’ve got a problem with honeysuckle bushes, you’ll like this new tool that lets you quickly and easily pop the entire plant right out of the ground.

The “Honeysuckle Popper” is designed to work on most honeysuckles up to 6 in. dia. at the base and up to 15 ft. tall, depending on the weight and strength of the operator. It pulls the roots and all.

The unit comes with a 6 1/2-ft. long handle, made from high carbon rectangular steel tubing, and is equipped with a 4-in. long hook at the bottom. The handle pivots on a bolt that goes through a pair of metal brackets and through a short length of pipe that’s welded to the handle. A wood base braces the tool on the ground without sinking in.

To remove a shrub, insert the hook under the shrub’s crown-type root system, then step down on the platform and pull back on the handle at the same time to rip it out.

If the honeysuckle’s roots are too deep or too big to be removed in one pop, the hook can be lowered 3 in. allowing you to break the roots one at a time.

“It works a lot better than using a shovel or axe. In most cases you can rip out the entire plant in one motion,” says Chris Grenner, Mister Honeysuckle, Ltd., Hamilton, Ohio. “It’s built strong and is guaranteed not to bend or break for as long as you own the tool. Honeysuckle bushes are taking over many areas of the eastern U.S. and have become a



To remove a shrub, you insert the hook under shrub’s root system, then step down on platform and pull back on handle at the same time.

real problem. It’ll work on any shrub with a crown root system that’s similar to honeysuckle. For example, it works good on privet. It won’t work on shrubs with a deep tap root.”

Sells for \$129 plus \$10 S&H.
Contact: FARM SHOW Followup, Mister Honeysuckle, Ltd., 283 Gates Rd., Hamilton, Ohio 45013 (ph 877 767-6688 or 513 756-0489; chris@misterhoneysuckle.com; www.honeysucklepopper.com).

up to it, matching uprights and drop the subframe split pipe onto the top pipe cross member on the pickup frame,” explains Jones. “Spring-loaded pins at either end of the pipe lock the subframe in place.”

An electric-over-hydraulic pump raises and lowers the blower via the 3-pt. hitch when it’s mounted. To detach the blower, Jones releases the spring-loaded pins and engages the hydraulics to lift the subframe free.

All controls for the snowblower and the Geo engine, except for lift and lower, are placed in a modified console in the truck. Jones took the cover off the original console

and built a new one to accommodate a full set of gauges and controls. The lift and lower control are mounted to the truck’s standard transmission stick shift. I can adjust the blower height without ever taking my hand off the shift,” says Jones. “The front-mounted snowblower is ideal for clearing snow right up to a building or other obstacle. And if I want to use it on a tractor, I just disconnect the 3-pt. hitch from the subframe, and it’s ready to go.”

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