Oregon Logger Makes His Own Chainsaws

Terry Brannon has been an Oregon logger since the early 1980's, and for the past 20 years he's built his own chainsaws. "There's not a piece of plastic anywhere on the saws I build," says Brannon. "They're all metal and they'll run for 50 years. They'll run in 10 ft. of snow, in 10 ft. of water, and even if you drop them 10 ft. from a tree."

Brannon's claims are reinforced by the fact he owns and regularly uses more than 100 working McCulloch and other brand saws. "I don't build shelf queens, garage queens or show saws," says Brannon. "They're all made to work for a living, not sit around for a pretty picture." Brannon uses different saws for different jobs and carries about 20 with him every time he heads into the woods, which is almost every day.

"When a logger's on the job, the saw has to work, because there's no time to run for parts," he says. "I can be 10, 20 or 50 miles into the timber, so I build every one of my saws to operate in tough conditions. I seldom if ever have a saw quit."

Brannon has that iron-clad assurance because he builds all his saws from the base of the handle to the tip of the bar. He says he's built and rebuilt every model of McCulloch and Homelite saws that the companies have made since 1980. His stable of saws also includes a few Stihls, Homelites and a classic Pioneer. "Most guys will need 4 days just to take a saw apart because they don't have the tools or the know-how," Brannon says. "I've been doing this so long I can build an entirely new saw in about 3 days." Before building saws he spent several years building car engines.

The saw models he builds are usually 125cc's and larger, the size needed to power through large timber in the Pacific Northwest. Says Brannon, "Out here we need that power because trees can be 2 to 3 ft. in diameter. Old growth deadfall, which I'm called to cut away from power lines or roads, can be 52 in. or more in diameter. I have bars ranging from 28 in. to 48 in. for my saws."

Although he doesn't often use a computer, Brannon does use Facebook (Cascade Saw Restoration) to show and describe the saws he builds. A few examples include a Super 797 McCulloch with the SDC kit and a CP muffler with a 42-in. Oregon roller bar and 404 63 guage chain; A rebuilt Homelite 2100-S with a 114cc upgrade. He used an oversized piston and rod, and fabbed a new muffler; A rebuilt Stihl 056 Magnum II. It had a bad ignition and with no SEM/Bosch ignition on the market, he gutted a Husky 2100 for the SEM.

Terry Brannon customized this McCulloch chainsaw for his own use. Many of his saws are powerful models with extra long bars that can cut big timber in the Pacific Northwest.

Brannon gets his parts from old saws that he buys from retired loggers or finds at garage and yard sales. Most of those have been sitting for months or years and they're a good bargain. If he buys a running saw, he pays a good price if the piston and cylinder walls are in good condition. He sells custom-built saws for prices ranging from $800 to $1,200. The higher priced ones are completely re-painted with Zolonite direct-to-metal paint, have 3 coats of clear-coat sealer and look brand new.

"People from across the country contact me to fix saws, but I don't do any of that type work," Brannon says. "My customer is the guy who wants a saw that will outlive him, his house and his family."

Brannon's personal saw collection includes about 100 machines that he's built himself using parts gleaned from various models.

Contact: FARM SHOW Followup, Terry Brannon, Cascade Saw Restoration, 52880 Wayside Loop, La Pine, Ore. 97739 (ph 541 771-1962).

Kerry Kligora used the 3-pt. hitch frame from a scrapped-out Deutz rotary rake to build his heavy-duty log grapple. It quick-taches to his Bobcat skid loader.

Rake's 3-Pt. Hitch Used To Build Log Grapple

A Wisconsin farmer came up with his own inexpensive, heavy-duty log grapple that quick-taches to his Bobcat 753G skid loader.

Kerry Kligora used the 3-pt. hitch frame from a scrapped-out Deutz rotary rake to build the log grapple. He welded angle iron and a steel plate on the 3-pt.'s arched frame to build a quick-tach hitch system.

"I saved a lot of money and it's a great log grapple. It's built strong so it'll stand up to a lot of tough use," says Kligora.

The log grapple has a pair of 3-ft. long curved, movable jaws spaced about 12 in. apart, and 2 fixed shanks. A single 2-in. dia., 12-in. long, 3,000 psi hydraulic cylinder is used to raise or lower the jaws, which swivel up and down on a 1-in. hardened keyed shaft.

Kligora cut the rake assembly off and shortened it. He made the jaws from 2 1/4-in. steel tubing and bent them to the same curve as the leaf spring from a Chevy 3/4-ton pickup, which he welded to the inside of the arch for strength and spring. The fixed shanks are made from 3 1/2-in. channel iron, bent to a similar curve.

"A welded-on tip at the end of each jaw provides log gripping power," says Kligora. "The tip is made from 1/2-in. rebar ground to a point and is supported by the leaf spring assembly. The bushings for the 1-in. hardened keyed shaft that forms the hinge assembly are made from two 1-in. shaft couplers, which were plug-welded into a length of 2-in. square tubing and then tapped for grease zerks.

Grapple uses a pair of 3-ft. long curved, movable jaws spaced 12 in. apart, and 2 fixed shanks.

"I use it to stockpile logs for firewood and also to cut the logs to size. I'm amazed at how well it works," says Kligora. "I cut my firewood to 18 in. long and the jaw assembly is only 14 in. wide, so I can use the grapple to hold the log up in the air while cutting. It keeps my saw's chain off the ground and also saves on my back."

The movable shanks can accommodate a 36-in. dia. log; however, most of the logs Kligora handles are 32 in. or less. "I've also used my grapple to pick up and place large rocks. However, I have to be careful how I grab the rocks so they don't slip off the jaws' rebar points. I plan to make a bolt-on adapter fitted with rubber tire pads so the grapple will do a better job of handling rocks."

Contact: FARM SHOW Followup, Kerry Kligora, 2138 CTH E, Mineral Point, Wis. 53565 (ph 608 553-2062; kerry.kligora@gmail.com).

When Thomas Schraufnagel built this towable stump grinder, he designed the frame and pulley drive so it could do double duty as a tiller.

Stump Grinder Doubles As A Garden Tiller

Thomas Schraufnagel built himself a towable stump grinder so he could take out stumps when he wanted. Though he built it for his own use, neighbors are after him to do theirs, too.

"I'm about 4 stumps behind now," says Schraufnagel. "It works great."

Schraufnagel made the dual-purpose machine with a side purpose in mind. He wanted to use up as much of the junk he had laying around as he could. The tow bar was made out of old awning parts from a motor home. It is pinned inside a sleeve at the mainframe, making it easy to remove.

"The mainframe is made out of angle iron from bed frames and other sources," says Schraufnagel. "I did buy an engine, and I ordered stump grinder teeth from a forestry supply company. Bearings came from a farm supply store. Cutting teeth mount to a disc brake from an old Cadillac."

He also used salvaged steel tubing, square and round, for axle, pulley mounts and the stump grinder shaft. Wheels and tires were also found in his salvage pile.

The grinder without tow bar in place is about 3 ft. long and 3 ft. high at the handlebar. Width is about 28 in. wheel to wheel.

Schraufnagel designed the frame and pulley drive so he could get double duty as a tiller. The stump grinder shaft rides in bearings mounted to the open end of the frame. He built a tiller head sized to fit the same bearings.

"I bought 3 sets of tiller teeth and mounted them to a 6-in. square piece of 1/4-in. steel," says Schraufnagel. "These are mounted on a shaft with a belt drive pulley. To swap heads, I just open the bearings, remove the shaft from them and the belt, and replace it with the other head."

Contact: FARM SHOW Followup, Thomas Schraufnagel, 3901 River Dr., Plover, Wis. 54467 (ph 715 341-2969).