

Swiveling Crane Makes Log Handling Easy

"I use an outdoor wood burning furnace to heat my home, so I split a lot of wood. My home-built swivel crane makes the job a lot easier," says Norman Bennett, Newport Vt.

Bennett has logs delivered to his home where they're dumped into a big pile. Separating them out with a Peavey hook was a dangerous, difficult job. So he built a 30-ft. tall swiveling crane with an electric winch. A 28-ft. long gib pins onto the base of a 30-ft. high pole. The gib is free to swivel on an underground base made from a modified pickup axle and has a 5,000-lb. electric winch mounted about halfway up it.

Bennett uses a remote control to lift the log off the pile, then manually rotates the gib and lowers the log onto a conveyor located next to his shed. From there he saws the logs into 2-ft. blocks, splits them, and stacks them by hand in the shed.

"It really works slick. The gib is strong enough to lift logs up to 30 in. dia. and 16 ft. long," says Bennett. "It's patterned after the kind of cranes granite quarries in our area use to raise huge rocks weighing up to 100 tons. The pole is supported by 3 guide wires at the top. It swivels where the guide wires attach to it.

"I use a foot-operated switch to advance the conveyor. I stand at the end of the conveyor and move the log about 3 ft. at a time as I cut the log into 2-ft. blocks, which then slide down on rollers toward the splitter. I fill the shed from one end to the other, and as I go along I reposition the conveyor. If I want I can

even use the crane to move the conveyor. I use a hand-operated winch to raise and lower the gib."

He used I-beams off an old mobile home's frame to make both the pole and gib.

To make the underground swivel from the 3/4-ton pickup axle, Bennett cut the axle off where it curves upward, leaving the spindle and wheel hub intact. He then welded 2 channel irons on top of the wheel hub, one on each side of the hub, and welded the axle kingpins solid so the spindle can't turn. Then he used a torch to sharpen the other end of the axle and used a heavy crowbar to drive it into the ground, with the spindle and wheel hub facing up.

The gib pins onto a pair of channel irons welded to either side of the pole's base. He drilled 2 holes in each channel iron and bolted the pole and gib together. He also welded on a pair of 1/4-in. thick steel plates behind the channel irons for reinforcement.

The leftover part of the spindle, including the wheel hub and bearing, was mounted upside down on top of the pole to form a swivel point. He cut off the lug nuts and then welded a steel plate to the hub, cut holes in it, and attached the guide wires.

"It works fantastic and has speeded up the entire log splitting process," says Bennett. "I built it last year and have already split 10 cords of wood with it. I've used the gib to lift logs weighing up to 2,500 lbs., although their average weight is closer to 1,500 lbs. The guide wires are anchored to 2 large trees



Home-built 30-ft. tall crane is fitted with a 28-ft. gib that's free to swivel on an underground base and is fitted with a 5,000-lb. electric winch. Bennett uses a remote control to lift log off pile, then manually rotates the gib and lowers the log onto a conveyor for splitting.

in my yard and to a rafter in the shed."

He says the system has other advantages. "It's a lot less labor intensive because I don't have to carry the blocks or split wood very far. Also, I don't risk running the saw's chain down into the ground and ruining the chain."

Bennett needed something to safely raise the pole and set it in the ground, so he used steel pipe to build a 12-ft. long, A-framed structure and chained it to his tractor's front-end loader. A pulley on the A-frame

supports a cable with a loop that catches a corresponding tab welded onto the middle of the pole.

"My loader reaches about 20 ft. high and the A-frame adds another 12 ft., so I was able to get the pole upright and set it down into the underground swivel base," notes Bennett.

Contact: FARM SHOW Followup, Norman Bennett, 188 Drown Mill Road, Newport, Vt. 05855 (ph 802 624-0720; bigtrukr@icloud.com).



Rondle Mathis says his ATV-mounted brush hauler is small enough to maneuver in wooded areas. It uses the ATV's electric winch and lifts up to 18 in. off the ground.

Handy Brush Hauler Mounts On ATV

Rondle Mathis wanted an easy way to clean up small limbs and sticks on his small acreage near Blairsville, Ga. His tractor was too big to maneuver in wooded areas so he built an attachment for an ATV instead.

"It's on the front winch. I can slide the forks under brush, and it lifts 18 in. off the ground," Mathis says.

He welded the attachment out of 1-in. angle iron and added hinges to tilt the forks forward to empty the load. A roller on the inside of an I-beam lets him slide the forks up and down. He loops a rope over bulky loads to keep

everything in place when transporting.

The hauler weighs 155 lbs. so Mathis strengthened the ATV's front suspension springs. The hauler is braced to the ATV at the top and attached to the front bumper. When not in use the forks fold up for storing in a small space.

Mathis says he spent about \$150 to build the hauler, and it has worked well.

Contact: FARM SHOW Followup, Rondle Mathis, 441 Foxfire Rd., Blairsville, Ga. 30512 rondle@tds.net).



Mathis used 1-in. angle iron to build the attachment, adding hinges to tilt the forks forward to empty the load. When not in use the forks fold up for easy storage.



Norman Bennett modified a 7-ft. belly-mounted cutterbar to fit the front of a track-type Sno-Cat. "It's an easy way to mow brush along snowmobile trails," he says.

Sno-Cat Mounted Mower Makes Trail Trimming Easy

Mowing brush along snowmobile trails is not a problem for Norman Bennett, Newport, Vt., who modified a 7-ft. belly-mounted cutterbar to fit the front of a track-type Sno-Cat.

"Our snowmobile club maintains about 65 miles of trails, and we needed an easier way to get rid of brush growing out into the trails than cutting it by hand. We already were using the Sno-Cat to pull a trail groomer, so I adapted a used mower to replace the front-mounted blade," says Bennett.

He removed the mower's original mounting brackets, leaving just the cutterbar and hydraulic motor and its casting. He used a 5-ft. length of steel I-beam to make a new mounting frame. He welded 4 metal tabs with holes in them onto the I-beam and then pinned it on in place of the Sno-Cat blade. Two of the tabs connect the hydraulic motor's casting to the I-beam, one supports a hydraulic cylinder that swings the cutterbar

45 degrees to the left or right, and one is used to pin the I-beam onto the Sno-Cat's frame.

He also welded angle iron brackets onto the I-beam, allowing him to bolt the mower onto the Sno-Cat's blade mounting brackets.

"I built it last summer and used it to clear brush on about 1/4 mile of trail. It worked even better than I could have hoped," says Bennett. "Our North Country Mountaineers snowmobile club owns the machine. We paid \$700 for the cutterbar. It only takes about 10 min. to switch from the brush cutter to the blade. I just remove 2 bolts from the tabs on the I-beam, remove a bolt from the top link that holds the hydraulic cylinder, and disconnect 4 hoses."

Contact: FARM SHOW Followup, Norman Bennett, 188 Drown Mill Road, Newport, Vt. 05855 (ph 802 624-0720; bigtrukr@icloud.com).