



Hanson says his front-mount pickup loader works great for moving snow.

## Front-End Loader For Pickups

(Continued from cover page)

stands without support on the ground. To mount, you drive in between the lift arms, driving over the bottom support bar. Then you hook up the two pins on the bumper, connect the hydraulics, and activate the lift cylinders to force the bottom support bar up against the pickup frame just behind the front wheels. Two pins hold the bottom bar in place.

Hanson says the loader mounts so solidly it feels like it becomes part of the pickup frame. "It lets you apply the full force of the pickup to the bucket when moving snow, hauling manure, scraping dirt or doing any other chore."

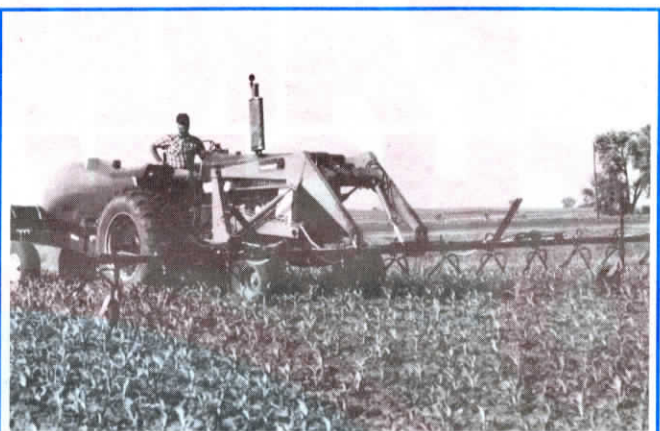
The loader frame was designed to leverage the weight it lifts so it wouldn't cause the rear end of the truck to raise up. Hanson has no trouble keeping the rear end on the ground but notes that the loader works best with 4-WD because it gives you drive wheels under the load.

Hanson powers the loader with hydraulics salvaged from a junked 100 hp. Case tractor. The slant 4 engine in the Scout left plenty of room to mount the pump and reservoir, but Hanson adds that much more compact commercial pumps are available. "This pump was cheap and gives me plenty of capacity for the loader. I also use the pump to run my log splitter."

The loader doesn't affect the truck for over-the-road travel. "I drive down the highway at 50 mph. People drive by and then turn around and because they can't believe their eyes," says Hanson, noting that the loader doesn't block the operator's view when it's in the down position.

He's willing to custom-build the pickup loader but would like to sell the idea to a manufacturer.

For more information, contact: FARM SHOW Followup, Grant Hanson, 200 14th Ave. N.E., Glenwood, Minn. 56334 (ph 612 634-4681).



## Loader-Mounted Spray Boom

"It offers great visibility and works like a charm," says Johnny Coder, Ames, Iowa, who mounted a home-built 12-row, 30-ft. wide spray boom equipped with banding nozzles on his front-end loader.

The spray boom is built in three sections with a 6-row section in the middle. The boom simply mounts in place of the bucket with four pins. The loader's bucket-tilt cylinders change the boom pitch. Adjustable 4.00 by 12 castor dolly wheels support the boom ends.

"The front-mount view lets me do a better job of centering 15-in. herbicide bands on the row," says Coder. "I had been using a 3-pt. 30 ft. wide spray boom, but it was hard to keep it on the row and the ends flopped around a lot. With this up-front boom I can follow contour rows perfectly.

On corn I usually band Buctril/Atrazine following a planting time treatment of Dual. I normally use only the two directed nozzles that spray from the sides to keep herbicide out of the corn whorls. I use all three nozzles to apply Basagran on soybeans."

The sprayer is equipped with two cylinders to fold the wings. The outside three rows fold up to provide a 15-ft. transport width. "If I could build it again I'd make all three sections four rows wide for a narrower transport width," says Coder, who pulls an 800-gal. spray tank mounted on tandem axles behind the tractor.

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## SELF-PROPELLED HAY MAKER

### New One-Pass Machine Cuts, Dries & Bales Hay

A new hay machine that cuts, dries and bales hay in a single pass "will revolutionize the haying industry," according to South Carolinian Steve Wingard who recently received a patent for the first-of-its-kind machine.

Wingard has been testing a stationary prototype on his commercial hay farm for the past couple years and recently completed the first self-propelled prototype to take to the field. "We've already proven that the concept works. Our goal now is to perfect the prototype and then turn it over to a manufacturer. Since our patent was issued in April, we've heard from all the major manufacturers and at least a half dozen foreign countries," says Wingard.

Key to success of the new one-pass baler is the drying system that gets fresh-cut hay down to 20 to 23% moisture for baling in a trail-behind round baler. Wingard's idea is a little like the "forage mat" making machine recently developed at the University of Wisconsin that uses high pressure to squeeze moisture out of bales, dumping hay back onto the field in flat, compressed "mats" that can then be baled. Two commercial mat-making "maceration machines" are said to be almost ready for market.

Wingard's idea is similar but with a new twist. He compresses hay with high-temperature rollers that are so hot they vaporize the juice squeezed out of the wet hay. There

are two sets of electrically-heated 8-in. dia. steel rollers. The first set runs at a temperature of about 500 degrees. The second set runs somewhat cooler, depending on the moisture content of the hay. The rollers squeeze moisture out of the hay like a ring washer. Steam from the vaporized juice is vented out the top of the machine. Unvaporized juice drains out the bottom. Moisture detectors are positioned before and after the rollers. They send readings to an electronic controller that varies roller temperature or changes speed of hay through machine in order to get hay down to the desired moisture content. Wingard says he

aims for 20 to 23% moisture.

Hay is cut by a conventional sickle bar and baled at the rear by a baler that's unmodified except for the lack of a pickup. "It takes less than a minute for hay to travel from the cutterbar to the baler. You'll have to travel slowly in the field but you're eliminating two or even three trips through the field to cut, rake, and bale hay. It produces extremely high quality forage with all the leaves of the plant intact. Dairy cows love it. They'll choose it over conventionally produced hay," says Wingard, noting that some protein is lost in the high-temperature drying process but that the quality of hay more than makes up for the loss.

Wingard's prototype will undergo extensive testing this summer.

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