

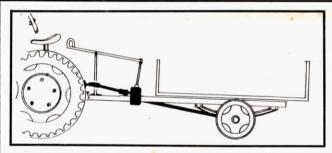
Earth Tubes Cut Heat Costs

Lowry McCord, Rushville, Ind., designed and built an "earth tube" system for his 12-crate farrowing house that cost only \$1,000, yet has reduced his heating and cooling costs. His idea was chosen as an award winner by Ciba-Geigy Corporation in a recent "money saving idea" contest the company sponsored.

"I buried 220 ft. of 12-in. plastic field tile 9 to 10 ft. deep. I installed two air intakes, one about halfway along the length of the pipe and one at the far end. My location slopes away from the building enough so that I was able to come off the far

end of the pipe with a 4-in. drain pipe that surfaces on the slope of the hill and use natural drainage for condensation that builds up in the pipe. I pull the air in through the pipes with conventional exhaust fans inside the building.

"Tve found that, during the coldest weather, incoming air has not been lower than 40°. In summer, air coming in is about 65° even on the hottest days. I have my own backhoe so the only installation expense I had was for material. I figure the system will pay for itself in two years in heat savings alone. The cooling is a nice bonus."



Powered Wood-Hauling Trailer

Arthur Seute lives on a solid rock, 100-ft. high bluff near Olathe, Kan. Down below the bluff he has 30 odd acres of timber that he harvests a little at a time for firewood. Climbing that steep, solid trail with a full load of wood was nearly impossible until he came up with his 2-WD powered trailer.

Seute cut the front end off an old 1-ton International milk-hauling truck and made a trailer hitch out of the frame. He mounted bigger tires on the rear end, and a box big enough to haul several cords of wood. He left the drive shaft and transmission in place.

Next he burned a hole in the stub shaft coming out the front end of the transmission and slipped a conventional pto shaft over it and bolted it on. He attached a remote control lever to the stick shift and extended it up behind the driver's seat.

"The pto runs the opposite di-

rection of the truck engine so I have to put the trailer transmission in reverse to run forward. The forward gear runs about the same speed as the low gear on my IH diesel tractor that I use to pull it. I mounted a bracket so the trailer can only be in neutral or reverse. But, if I get in a jam where I need the extra power for backing up, I just remove the bracket and put it in gear to go back," explains Seute.

Because the bluff is so steep, he mounts tire chains on both the tractor and trailer drive tires. Before building the powered trailer, he says he had to pull the loaded trailer up the bluff with a cable and winch from the top.

Seute thinks the idea would work for anyone hauling under tough conditions and might eliminate the need for a 4-WD tractor in some cases.

Contact: Arthur H. Seute, 13280 Kimberly Circle, Olathe, Kan. 66061 (ph 913 884-7926).

He Plants Corn And Beans At The Same Time

An Ohio dairy farmer plants his soybean crop right on top of his corn crop to get high-protein silage that also saves time and labor feeding his 700 head of Holsteins.

Bud Meyers, Zanesville, mounted seed boxes from an old Deere 1240 plateless planter between the seedboxes on his Deere Max-Emerge 7000 planter. The 1240 seed boxes drop soybean seed into tubes that deposit seed directly between the Max-Emerge V-openers, several inches behind the corn seed tube. This lets a small amount of dirt fall into the trench before each sovbean seed is planted so it's at a slightly shallower depth. He plants corn at a rate of 32,000 plants per acre and uses about a bushel of soybeans per acre.

Meyers has double-planted for three years. "In 1981 I planted 20 acres of corn and then went right back over it with soybeans. That worked so well I decided to build a planter that would do the job in one trip."

The add-on planter units are chain-driven off sprockets Meyers mounted on the Max-Emerge hex shaft. Seed drops out of the seed box into a small square box Meyers fabricated out of a short length of metal box beam. He rounded-up the corners of the inside of the box with gussets and drilled a hole in the bottom. A 45° elbow, inserted in the hole, angles a length of ¼-in. plastic seed tube over to the

V-openers on the Max-Emerge row units. Meyers designed brackets to support all the components of the add-on planter units.

The Max-Emerge was not modified in any way and Meyers still applies insecticides with the planter. When he wants to plant corn alone, he simply unhooks the add-on planter's drive chains.

"Cows really like corn-soy silage. There's lots of whole beans in it and, if you harvest it early, there's a good protein in the foliage. It adds about two ton per acre to the amount of forage harvested," Meyers told FARM SHOW.

He says his corn crop doesn't suffer at all in the doubled-up fields but that the beans are somewhat smaller due to the lack of sun in the 30-in. rows. He plans to try a "viney" soybean that'll climb up the corn stalks to get more light.

To harvest the crop, Meyers uses a Deere self-propelled chopper with a 4-row stalkhead which gets low enough to pick up the soybeans. He has not yet run extensive tests on his cornsoy silage but says that he no longer has to add protein meal to his corn. He also plans to run tests to see if planting soybeans in with corn cuts his fertilizer needs.

Contact: FARM SHOW Followup, Charles "Bud" Meyers, Zanesville, Ohio 43701 (ph 614 674-4366).



Home-Built Electric Pto

Richard Anderson, Claremont, S. Dak., built an electricpowered pto to power his grain elevators and augers.

"I mounted a 4-speed pickup transmission and a 5 hp. electric motor on a two-wheel trailer. The two V-belt pulleys that connect the motor and the transmission are sized so that the pto shaft connected to the transmission provides ap-

proximately 540 rpm's with the transmission in 4th gear.

"I made the pto primarily to power an auger used to take corn from a continuous flow dryer. Because the flow of corn from the dryer was small, I wanted a way to drive the auger slow to save wear on it. It also works good to reverse the auger for cleanout."