

ILLINOIS FARMER TEACHES "PLANNED PREVENTIVE MAINTENANCE"

Class Helps Cut Farm Repair Costs

"If our students don't save at least \$500 in parts the first year, we give them their money back," says R.B. Klein, Fulst, Ill., a farmer and mechanic who teaches the basics of "planned preventive maintenance" to farmers throughout the Midwest. He's never had to make a refund.

"Most farmers are good mechanics and can take care of problems if they detect them. We simply teach a logical approach to maintaining equipment and finding problems early," says Klein.

Klein, who worked as a fighter jet mechanic in the Navy, began teaching preventive maintenance to farmers on an individual basis out of his farm shop in 1969. The program became so popular he branched out and last year taught classes in eight states. This year he hopes to expand to 24 with the help of several recently trained teachers.

Klein assumes his farmer students already know how to handle most routine maintenance of farm equipment. He simply teaches them his

system of setting up comprehensive maintenance checklists that help maintain top operating efficiency and detect problems before they get serious. Klein says there's no other course like it available anywhere, even for cars or trucks.

"We break each machine down into systems and then walk through each system step by step, logically and thoroughly. Once a farmer learns the process of setting up a preventive maintenance schedule, he can do it for any equipment," says Klein. "You can save thousands of dollars by learning how to logically detect problems before they need service. Once you find the problem, we help you decide which maintenance jobs you can handle and which could be better handled by a dealer."

The 2-day course includes 12 hours of training with no hands-on work. Everything is covered in an instruction manual.

"We spend 1/3 of the time on 2-wheel drive tractors since virtually every farmer owns at least one. We

first break it down into systems such as the engine, hydraulics, electrical, heat and air conditioner, instrument and controls, and drive train. Each system then breaks down into sub-systems. Sub-systems of an engine are cooling, fuel, air, ignition, lubrication, and exhaust. Finally, each of these sub-systems breaks down into several components. The cooling sub-system consists of the coolant, radiator, hoses, water pump and bearings, fan and bearings, and drive belts. Our procedure is to set up a schedule of daily, weekly, monthly or yearly checks of each of these specific components. When you follow a properly designed maintenance checklist, and know what to look for, it's nearly impossible for serious problems to develop without your knowledge."

Klein's course covers all major farm equipment — 2-WD and 4-WD tractors, combines, forage harvesters, mowers, swathers, rakes, round balers, grain dryers, and so on — as well as cars and trucks. If you own equip-

ment that isn't covered, you'll learn how to set up your own preventive maintenance schedule. The course doesn't get into specific makes and models of equipment.

An important part of preventive maintenance is learning how to set up maintenance checklist boards that let you visually keep track of steps that should be taken and when. These maintenance boards, which are also used by the Navy to maintain aircraft, help document problems as they occur so you can keep running histories of each machine, which may help pinpoint the cause of later problems.

Klein has trained several vo-ag instructors to teach his course and put together a comprehensive training manual. The course costs \$250 for two days, including meals and all course materials. Klein says implementation dealers have been very supportive of his education effort and have supplied many of the names of farmers who've enrolled in the course. "Most dealers want farmers to learn how to detect problems before they get so bad the equipment is ruined. It's better for business," he notes.

For more information, contact: FARM SHOW Followup, Rudy Klein, KFS Int'l Inc., Rt. 1, Fulst, Ill. 62244 (ph 618 458-6591).

"Deer Whistle" Keeps Animals Off The Road

Horses, deer and other wildlife flee from approaching cars or trucks fitted with a new ultrasonic "beeper" that fits to the front bumper or grill and emits a high-pitched sound that some animals hear up to ¼ mile away.

Developed in Austria and tested extensively throughout Europe, the new warning device is already catching on in the U.S. with companies

that operate large truck fleets, and among law enforcement agencies. A law has even been introduced in Delaware that would require it to be fitted to all state vehicles.

The Sav-A-Life, as it's called, is a 2-in. long bullet-shaped device that sticks to the car with an adhesive backing. At about 30 mph, air rushing over and through it creates an ul-

trasonic sound heard by some animals up to ¼ miles away. At the high pitch of 16,000 to 20,000 Hertz, however, humans can't hear it and inside the car it can't be heard by either humans or animals.

The only animals among those tested so far that don't respond are cattle, sheep and camels. The Sav-A-Life sells for \$24.95 plus \$2 postage and handling.

For more information, contact: FARM SHOW Followup, Sav-A-Life Inc., P.O. Box 1226, New York, N.Y. 10025 (ph 212 316-0307).



Air rushing over and through whistle creates ultrasonic warning sound.

HAULS UP TO A 15-TON LOAD

"World's Largest" Forage Wagon

The "world's largest" forage wagon is now hauling silage across Canadian prairies in British Columbia.

Custom-built by Ty-Crop Welding and Mfg., Ltd., Chilliwack, the huge hydra-dump wagon holds a whopping 15 tons. It dumps its load to the side at a height of about 14 ft.

Wheels on the king-sized dump wagon are 5 ft., 6 in. tall and 43 in. wide so that, even when full, the wagon exerts less than 12 pounds per sq. in. pressure on the ground. The wagon features hydraulic balancing for weight transfer front to back and adjustable axles for cornering. To dump, the wagon raises to a 22° angle and silage is unloaded by a three-chained unloader.

The wagon was built for Gracemar

Farms, near Chilliwack, for use behind a New Holland 2100 chopper. Hydraulic capacity on the chopper had to be boosted to handle operation of the wagon.

Ty-Crop's standard line of hydra-dump wagons have capacities up to 10 tons. The firm also recently began building the world's widest self-propelled and tractor-mounted swathers, designed by the Honey Brothers in Bracken, Sask. Production models of the swathers are 63-ft. wide.

For more information, contact: FARM SHOW Followup, Ty-Crop Welding & Mfg. Ltd., 48945 Yale Road East, Chilliwack, B.C. V2P 6H4 (ph 604 794-7078).



Huge wagon teams up with a New Holland 2100 chopper.