

Farmer-Designed Automatic Oilers

Everyone knows lubricated chains and gears work better and last longer, but it's sometimes hard to get yourself to run around a machine with an oil can, especially at peak times like planting, irrigating and harvesting.

After a series of irrigator breakdowns caused by poor lubrication on his family's farm near Idaho Falls, Idaho, John Hoff decided there had to be a way to automate the needed maintenance.

"We had 36 wheel lines and each had two or three transmissions. The combination of soil and water causes real problems on the drive chains and every time we moved lines, we had a breakdown," says Hoff.

He says the manufacturers recommended using grease to lubricate the chains, but the result was caked-on grease and dirt that caused even more problems.

After a little time in the shop, Hoff designed an automatic oiler that mounts right on the irrigation rig. The oiler consists of a rectangular gallon tank made out of a piece of square tubing that mounts on the transmission and rotates with it. There are no moving parts.

Each wheel line has two transmissions, so each line gets two oilers. Hoff says installing oilers on the irrigation lines solved most of the breakdown problems. And because the transmission and chains are adequately lubricated, the lines move more freely and track better through the field.

Soon word of his "Oil 'er Up" oilers spread and he was making them for friends and neighbors. He now designs and makes five

different types of oilers that can be used on a number of types of equipment, including chain-unload semi trailers, beet pilers, potato diggers, forage choppers, manure spreaders and combines. Some use needle valves, while others rely on gravity-flow drip tubes to distribute oil. He's sold more than 3,500 oilers since he started making them in 1991. He says his oilers can be checked and adjusted with the machine turned off. "They adjust remotely and you can check flow from the operator's seat or from work stations on the machine, so they're safe to use. Continuous oiling, even with very low flow, cleans, quiets, cools and protects the machine from corrosion. By reducing friction, it saves fuel and prolongs the life of the machine.

"You can use vegetable oil in them, too," he says. "We use canola oil in most of ours. It doesn't pollute like petroleum and it's okay to use in equipment that's used to handle food crops."

He says the price is determined by the application. "A Deere combine has 16 chains to lubricate, while a Case combine has only 10," he says. "A sugar beet piler has 40 points that need lubrication and requires about 300 ft. of hose to get to them all. For semi-trailers, we make them look more showy, so they dress up the equipment. Each oiler is priced accordingly."

For example, an oiler for a Deere combine sells for \$625, plus shipping. "I also make them for headers. For a six-row Deere corn head, the oiler would be \$450," he says.

For more information, contact: FARM



Oiler can be used on a number of types of equipment, including combines. You can check flow from the operator's seat or from work stations on the machine.



Oil flow can be checked from the operator's seat.



Continuous oiling reduces friction to prolong life of machine.

SHOW Follow, John Hoff, Oil 'er Up, Inc., 990 Jenkins Creek Road Weiser, Idaho

83672 (ph 208 549-1232; Website: www.buyidaho.org/oilerup.htm).

Machinery Co-Op Lowers Costs By More Than Half

By Pat Rediger

Four Canadian farmers have decided the best way to deal with the ongoing cost-price squeeze in agriculture is to take a lesson from history and form a machinery co-operative. Their decision has led to lower costs and higher profit margins.

In the winter of 1995, Kipling, Sask., farmer Gordon Sproat approached three local farmers with the idea of forming a machinery co-op as a way to deal with the challenges of updating and increasing the use of the latest technology on their farms.

"Technology comes with a price," says Sproat. "Sometimes the only way to justify the cost is to spread it out over more acres of land. Allocating our acres to a co-operative was the best way to do it."

Sproat admits the idea is not new. "Farmers have been doing these kinds of things for a long time. Sharing equipment is what brothers and sisters and families have been doing for years. But we're not related."

Sproat says prospective members for the co-op were chosen carefully. "We wanted people who were interested in farming progressively, and were open-minded people who could get along together."

Gordon Sproat, Lorne Rych, Russell Robertson, and Fred Cunningham worked out the details of their arrangement in the winter of 1995, putting their plan into action in the 1996 crop year.

Equipment from the four farms was pooled together and used as equity to leverage a loan at the local credit union. They used the loan to upgrade the equipment that was needed to more effectively manage their collective 7,000 acres.

"Between the four of us we were able to justify owning a high-clearance sprayer, which none of us had. That has been one of

the biggest benefits we've had out of it," says Sproat.

"As individuals we've dropped our costs to the point where most people find it hard to believe. In my case, I lowered my total costs from about \$35 per acre down to about \$15," says Lorne Rych. "As smaller farmers, we'd never have had access to the sort of equipment we have as a group: large, effective, new and the latest technology," he adds.

The farmers are quick to note that independent decision-making and management of the farms isn't hindered by this partnership. "We share machinery and machinery only," explains Sproat. "Individually, we provide the fuel for the equipment when it's on our farm. It's full when it arrives on your farm and full when it leaves. It's our responsibility as individuals. The machinery co-op handles the maintenance."

Since not all four co-op members have the same amount of acreage, maintenance costs are shared on an acre-by-acre basis.

"Since I have 40 to 45 percent of the acreage, I pay 40 to 45 percent of the costs. That's also the way the capital cost was handled. It's simple and straightforward. It's pretty tough to hammer it out to a fine line because there's nothing that is a fine line in farming, but it works quite well," says Sproat. "The question is always asked at the meetings I speak at - who gets to do their work first, and how do you address the fellow who has to wait?" says Rych. "Well, the equipment is large enough that relative to what you would have on your own farm, you accomplish the task so much quicker that time isn't a major factor. It used to take me about three weeks to do my own seeding, but now I'm done in



Two members of the co-operative, Gordon Sproat and Lorne Rych, go over facts and figures.

only about six days. Those six days may occur over the same 21-day period, but in the meantime we have seeded two other farms.

"Generally, the idea is that when you're at your own place you operate the equipment and the other fellows may fill in for an hour or two while you go and get seed, or they may bring out a load of fertilizer for you. So, in the spring it isn't steady at everybody's place like it is at harvest. We just fill in a couple of hours now and again to keep things going. Because, of course, the more we help out there, the quicker we get the machine back."

During harvest, co-op members work more closely together. The equipment goes to

whichever crop is ready first. The person whose farm they are at hauls his own grain and the other individuals drive the harvesting equipment. This way co-op members are able to make their own decisions as to what grain goes where and how they want things done. While it's relatively easy to determine an equitable way to divide maintenance costs, exchanging labor has proven to be a more difficult task.

Two of the members have off-farm jobs so they're unable to put in as much labor and sometimes don't even have the necessary time to do their own harvesting," says Rych, who is quick to note that they've managed to work out good solutions.