## **Lancaster Conservation District tours**

## BY TRISH WILLIAMS

WAKEFIELD — The rolling farmland of southern Lancaster County was spotlighted Monday on the annual conservation tour sponsored by the Lancaster Conservation District. Forty-five participants rode in the tour bus that wound around the hilly back roads of southern Lancaster County to learn how improved conservation practices are helping to hold valuable top soil in place.

Participants in the tour were able to see new installations of conservation practices approved by the tripartite conservation group consisting of ASCS, SCS, and the Lancaster Conservation District.

Nine stops were scheduled on the tour. Conservation practices viewed covered a wide variety of functions ranging from no-till corn plantings to pipe outlet terraces to sod crop rotations. Also included in the tour were visits to the Herr's Potato Chip Company at Nottingham, and the filter and control system of the Chester Water Authority at the Octoraro Reservoir. All the stops had one common theme... efficient utilization and conservation of the earth's natural resources.

An earthen bank manure storage system was examined at the Robert Kauffman farm. The system has a concrete bottom and earthen walls. Solids are retained in the first storage area by means of a separator similar to a picket fence. The liquids pass on to a separate storage area and are used for irrigation. Compared to other ecologically sound manure handling systems the earthen bank system requires less capitol investment and creates very little odor problems.

Cedar Fringe Farm, home of Mr. and Mrs. Francis Kirk, winners of the 1963 Conservationist of the Year award was also toured. The Kirk's were using conservation terraces for 20 years. Recently they installed slow release piped outlet terraces. The pipe outlet terraces enable them to farm on the contour, growing crops on areas that were formerly grass waterways because the water is diverted underground.

Pipe outlet terraces were also viewed at the farm of Robert Wagner, as were grassed waterways, and sod crop rotations. Wagner is a director of the Conservation District.

A comparison of no-till corn plantings was seen near Wakefield. A planting on Red Knob Farm into a field formerly planted in hay, was compared to an adjoining field owned by Wilmer Kreider that was planted into rye stuble.

Aaron Stauffer, chairman of the Conservation District Directors, explained how no-till corn plantings retain more moisture and are less subject to soil erosion than conventional corn plantings. Stauffer said when a rain drop hits the surface in a conventionally tilled field it is like a tiny explosion. No-till plantings have a mulch over the field that prevents rain drops from hitting the surface and carrying away precious top soil.

The planting on Kreider's farm

was put in by one of the no-till planters operated by the Conservation District. The Conservation District has four no-till planters that are available to farmers for planting corn and soybeans for a fee of \$5 and \$7 per acre, respectively. This year through the District's no-till planter program 1020 acres of corn have been planted, and there is a waiting list of 200 acres corn remaining.

Conservation of natural resources is also of great importance at the Herr's Potato Chip Company at Nottingham. The plant has a heat recovery system that uses the steam, generated from water removal from the potatoes to heat water.

Herr's tour guide Lew Gehman, explained how the water wastes from processing potatoes are pumped into a lagoon and used to irrigate 100 acres of adjoining property owned by Herr's. Carnary grass is grown on the acreage because of its ability to tolerate the starches contained in the water. In the summer neighboring farmers graze their cattle on the property.

Scrap paper from the packaging process is sold to another company for recycling. Raw potato scraps are sold to a nearby compost company and used for compost extender. Finished product scraps are sold to a feed company for use in animal feeds. The employee cafeteria even has a separate trash can for aluminum cans to be recycled.

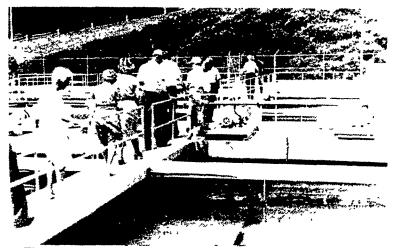
Gehman said the plant manufactures five products, potato chips, corn chips, tortilla chips, pop corn, and pretzels. Whenever possible Herr's uses Pennsylvania potatoes and corn to make their products, said Gehman. Presently new potatoes are being shipped up from the South.

The last stop on the tour was the Chester Water Authority, Octoraro Reservoir. Here the group was taken through the plant by Ken Lawrence and Pat Stapler of the Authority. The group followed the water purification process from the time the water comes in the plant until it leaves for transport to Chester.

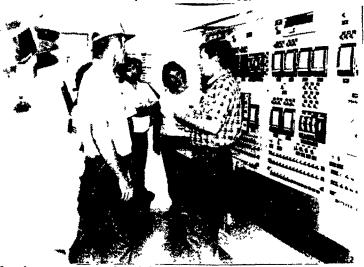
Lawrence said because the watershed for the reservoir is primarily in dairy farm country they have very little problem with carcenogenic agents, but sometimes nitrates run high.

Lawrence said sediment is normally much higher in the spring when there are heavy rains, but added that sediment from soil erosion was much less this year.

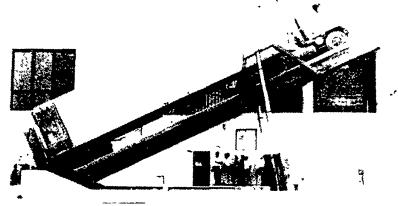
About 30 million gallons of water are purified at the water works each day. The process takes about six hours, then water is pumped to Oxford. From Oxford the water flows by gravity to Chester, traveling over 40 miles. Learning about the purification process brought out the importance good conservation practices in farming has on water quality.



The group was taken through the water works of the Chester Water Authority, following the purification process from the time enters the plant until it leaves.



Ken Lawrence, on the right, is plant manager at the water works. Here he is explaining how water quality is closely monitored electronically.

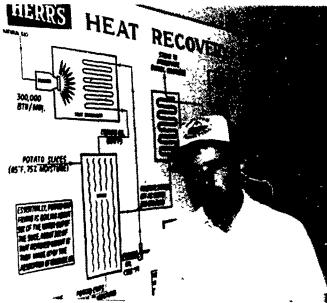


Potatoes are unloaded from tractor trailers at Herr's by raising the front end with a hydrolic lift.



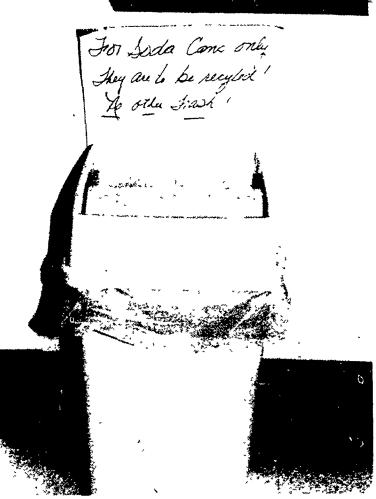


Abner Houseknecht, Aaron Stauffer, Robert Wagner, and Bob Gregory of the Conservation District inspect a field of notill corn.



Conservation of natural resources is important to Herr's too. Daniel Stoltzfus enjoys a free sample of potato chips after reading about Herr's heat recovery system.





A great idea! Even in the employee cafeteria resource are conserved by recycling soda cans.