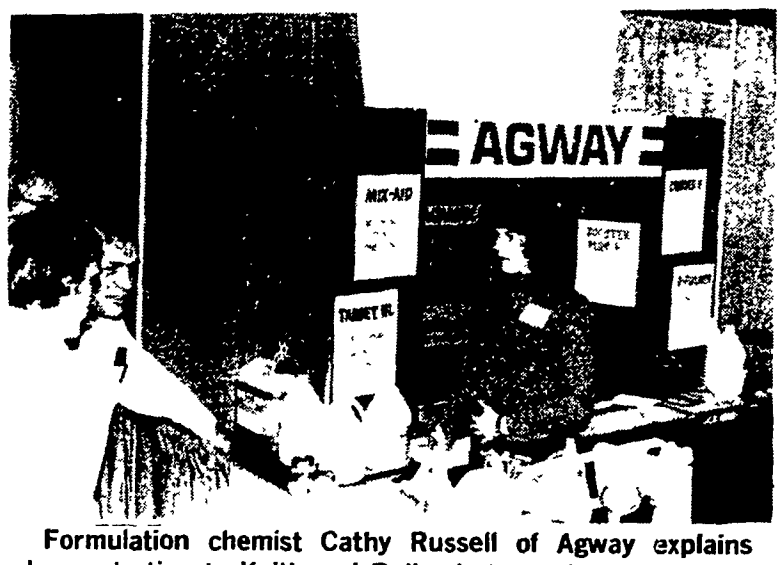
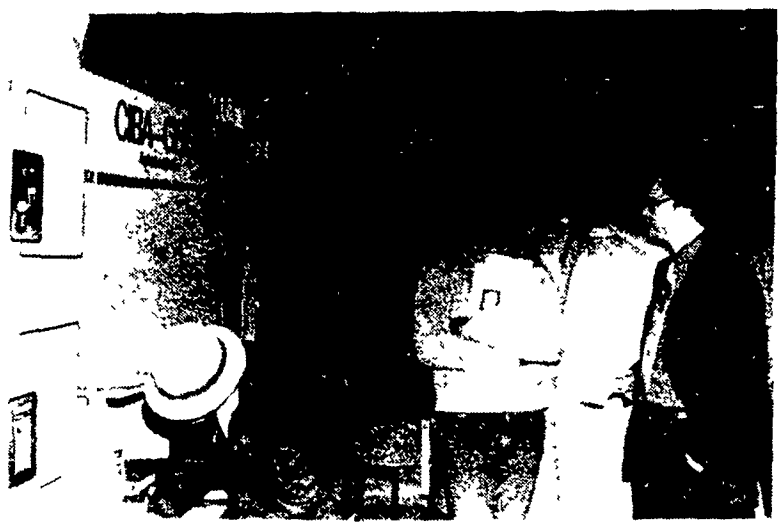
Exhibits at no-till conference draw crowd of visitors before program begins.



Formulation chemist Cathy Russell of Agway explains demonstration to Keith and Dallas Lutz, grain and hog farmers from Sinking Springs.

Russell Schantz, R1 Emmaus, and Tim Lichtenwalner, R2 Macungie, examine Great Plains drill in C. B. Hoober exhibit.



Ciba-Geigy sales rep Steve Reed, right, discusses herbicides with John Klausmeier, of Baltimore County.

Lancaster Farming booth at no-till conference is busy.

Exhibitors display their no-till wares

(Continued from Page A1)

In his discussion of problems with no-till equipment, safety expert Smith from Maryland explained that one of the major improvements in no-till planters in recent years has been depth-control packer wheels to permit uniform planting depth.

"Most problems with no-till equipment can be corrected," he said.

"Nothing beats getting off your tractor seat occasionally to check actual seed spacing and planter depth performance."

Smith gave this important advice:

"It takes an excellent conventional tillage farmer to make a good no-till farmer."

White discussed the no-till establishment of alfalfa.

Since one of the primary concerns in establishing new stands of alfalfa is the threat of soil erosion, no-till seeding is doubly important, he said.

"In addition to saving soil lost to erosion, no-till seedings conserve moisture already present in the seedbed," White emphasized.

"Less time and fuel are needed to seed using no-till methods and rocks remain below the soil surface."

Wells of Kentucky discussed nitrogen fertilization for no-till corn.

"In consideration of some of the nitrogen management practices which have shown benefit for use on no-till corn," he said, "don't forget that the likely routes of inefficiency are the same as for conventionally grown corn.

"These include leaching, volatilization, denitrification and immobilization."

It was popinted out at the conference that it is estimated that two-thirds of Pennsylvania's corn acreage is now planted with some form of conservation or no-till method.

Meade of Rutgers covered "Weed Control Systems for Full-Season No-Tillage Soybeans."

"The problems associated with weeds in full-season versus double-cropped no-till soybeans are similar in nature," he said.

"Both cropping systems tend to increase the population of perennial weeds and require increased rates of herbicides to overcome the problem of microclimate at the soil surface. These include localized pH, compacted surface with less water penetration and an increased organic matter.

Many of the university presentations were illustrated with slides of various research plots and areas.

Frank Welch, left, of Beachley-Hardy Seed Company, talks with Peter Kuziak, R2 Bloomsburg.

Manure management

(Continued from Page A24)

The combination of frozen ground and hilly terrain caused the manure to cascade downhill where it ultimately was discharged into a creek and killed fish. Enter the DER and the Pennsylvania Fish Commission. The farmer, consequently violated the Clean Streams Act as well as the PFC fish law.

The Clean Streams Act, which has the most impact on state farmers, declares that clean and unpolluted streams are essential to Pennsylvania and that it is the objective of the Act not only to prevent further pollution but also to reclaim any streams that are now polluted.

The laws states that discharge of sewage or industrial waste to the waters of the state is not a natural or reasonable use of the waters and is a public nuisance. Animal manures are defined as sewage in the law and are subject to the same regulations as other sewage.

"Waters of the Commonwealth" are defined as, "any and all rivers, streams, creeks, rivulets, impoundments, ditches, water courses, storm sewers, lakes, dammed water, ponds, springs and all other bodies or channels of conveyance of surface and underground water.."

The DER watchdogs were called in several times in the past few years to monitor and eventually rectify stream contamination caused by a large Lancaster County dairy with no storage facilities.

The farmer consulted conservationists and had a earthen bank holding area designed but delayed construction by a couple years.

Meanwhile, manure was allowed to freely enter a stream which finally discharged into the Susquehanna River. Over time, a noticable delta of manure appeared in the river at point of entry.

Water samples taken from the stream at points above manure entry and at heavy manure deposition provided a marked contrast after analysis.

According to DER officials, a clean unpolluted stream registers a biochemical oxygen demand of about one part per million and raw domestic sewage carries a count of about 200 ppm. However, the stream contaminated by the large dairy registered a much inflated count of 2,300 ppm.

Virtually all life was wiped from the stream. Randy King points out that about the only life the stream could sustain was sludge worms.

Finally, after much delay, the farmer was fined and incurred a guilty verdict from the district magistrate. The manure storage facility soon followed.

Occasionnaly, severe run-off can result in ground water contamination. Yohn, Dale and King recall the case of a Franklin County businessman who built a 60,000-layer poultry house. The house was erected on porous limestone soil, while the rest of the farm contained very little land for spreading.

A pit beneath the layer house was designed to hold manure, but inadequate disposal space resulted in an overload. To make matters worse, the situation was compounded by the lack of roof drains and leaky drinking cups.

The heavy influence of excess water caused the manure to leak from the pit and spill out on the surroundings. The farmer devised a crude but temporary facility by pushing back soil to form a wall around the spill-over. However, no thought was given to seeding the banks and strengthening the impoundment. Then the rains came.

Water and manure breached heavily from the sides and eventually found an outlet in the ground water. Three private wells were contaminated, which cost homeowners approximately $3,000 each to repair the damage. A law suit was out of the question because prior to the damage, the farmer claimed bankruptcy.

These three examples of improper manure management are not uncommon and all resulted from lack of planning.

The DER officials admit they would much rather act as consultants than watch dogs.

"I'd like farmers to put us out of business," laughs Randy King.

But until farmers decide to study "the whole elephant," King, Yohn and Dale will continue to blow the proverbial whistle.

SCSA sets 1983 meeting

ANKENY, Iowa — "Resource Information for Conservation Decisions" will be the theme of the Soil Conservation Society of America's 38th annual meeting, July 31-Aug. 3, 1983, at the Parkview Hilton Hotel in Hartford, Connecticut.

Speakers at the meeting will discuss information requirements for making conservation decisions. There will be presentations on date acquisition, information extraction, and the effective communication of information to the people who make conservation decisions.

Chairman of the program committee for the meeting is Marion F. Baumgardner, director of the Laboratory for Applications of Remote Sensing, Purdue University, West Lafayette, Indiana. Local arrangements chairman is Sherman Lewis, state conservationist for the Soil Conservation Service in Massachusetts.

A preliminary program and registration information will be available in March.