



Penn State's Russell E. Larson Agricultural Research Center farm becomes a large tent city of exhibitors and educational demonstrations for the annual Ag Progress Days. The theme this year, "Conserving Our

Resources Through Science," highlights the efforts of agricultural scientists and farmers to preserve water and soil quality while providing a safe and abundant supply of food.

Field Machinery Demonstrations At Ag Progress

ROCKSPRING (Centre Co.)— Along with heat and humidity, late summer brings Pennsylvania farmers a chance to evaluate the latest tractors, harvesters and other machinery. Farm equipment and agricultural products worth more than \$20 million will be demonstrated and displayed at this year's Penn State's AG Progress Days, August 17-19.

"Equipment demonstrations are a central part of this event," said James Garthe, instructor in Penn State's agricultural and biological engineering department. "They give farmers the opportunity to see two or three competitive brands of farm equipment in operation under the same field conditions."

Demonstrations this year include spraying, mowing, cultivation, deep and secondary tillage, land application of manure, round silage baling, and round bale handling. College of Agricultural

Sciences faculty and staff will be on hand to describe machinery operations and principles and answer questions about the equipment being demonstrated.

At a new demonstration this year, producers concerned about manure management can see how different application rates affect land application of manure.

"We'll use a calibrated spreader to apply 10, 20 and 40 tons of manure to an acre of land, giving visitors a chance to see what the different rates look like on the ground," said Garthe.

"We'll be spreading composted manure to reduce odor problems while still giving spectators a good idea of how land application of manure might suit their situation."

The cultivation demonstrations also are new at this year's event. "We'll be using new cultivating equipment on six- to eight-inch

high soybeans," said Garthe. "Some of the new cultivators use electronic guidance systems that sense the position of the crop and move the machine to reduce crop damage and driver error."

Another new demonstration involves deep tillage machinery. "We'll be evaluating machines that till the soil deeper than 12 inches," Garthe said. "This breaks up compacted soil that blocks root growth and also improves the soil's ability to hold water."

Demonstrations are scheduled as follows: 10 a.m. mowing; 11 a.m. spraying; 11:45 a.m. cultivation; 12:30 p.m. deep tillage; 1:30 p.m. secondary tillage; 2 p.m. land application of manure; 3 p.m. round silage baling; and 3:30 p.m. round bale handling.

The location of each demonstration will be published in the free Ag Progress Days program available at the event. All demonstrations will be held at the same

time each day, subject to weather and field conditions.

Penn State's Ag Progress Days features more than 500 acres of displays, tours and demonstrations to interest young and old alike. It is held at the Russell E. Larson

Agricultural Research Center at Rockspring, nine miles southwest of State College on Route 45. Hours are 9 a.m. to 5 p.m. Tuesday and Thursday, with extended hours until 8 p.m. on Wednesday. Admission and parking are free.

Machinery Demonstration Schedule

More than \$20 million worth of machinery is on display at Ag Progress Days. This is your chance to see what it can do. Industry representatives will be on hand to answer questions. The machinery demonstrations are subject to change due to weather conditions.

10:00 a.m.	<i>Mowing</i>
11:00 a.m.	<i>Spraying</i>
11:45 a.m.	<i>Cultivation</i>
12:30 p.m.	<i>Deep Tillage</i>
1:30 p.m.	<i>Secondary Tillage</i>
2:00 p.m.	<i>Land Application of Manure</i>
3:00 p.m.	<i>Round Silage Baling</i>
3:30 p.m.	<i>Round Bale Handling</i>

Ag Progress Information To Make Your Visit Profitable

Tours

Tickets are required. Get free tickets for research tours at the corn crib at the top of Main Street. Free tickets for conservation-related tours are available at the Conservation Education Tent.

General Research

Leave from the corn crib at the top of Main Street
This 30-minute tour gives you an overview of research conducted by Penn State's Departments of Agronomy, Entomology, Horticulture, Plant Pathology and the USDA Pasture Research Lab. Buses leave every 20 minutes from 10:00 to 4:00, with tours until 7:00 on Wednesday.

Special Topics Research

Leave from the corn crib at the top of Main Street
These tours give you an in-depth look at a particular topic. Tuesday's 90-minute tour examines current research in tree fruit production. A two-hour tour on Wednesday takes you to the University Park Campus, where you'll see Penn State's innovative dairy beef and grazing research programs. Thursday's 90-minute tour highlights the latest research on water quality. All tours are offered at 10:00 and 2:00. Seating is limited.

General Conservation

Leave from the Conservation Education Tent
Learn more about soil and water conservation prac-

tices during this 40-minute tour of the conservation area. See agricultural practices such as a vegetated basin and contour stripcropping. Learn how to construct a waterway and cropland terrace using a moldboard plow. New features include urban conservation practices, such as a sediment basin and composting site. Buses leave daily at 11:00, 1:00 and 3:00.

Forest Stewardship

Leave from the Conservation Education Tent
This walking tour highlights small woodlot stewardship in action: harvesting to generate income and benefit wildlife, forest regeneration, road and trail

(Turn to Page E25)