

fertilizer made it cheaper for large purchasers to apply nitrogen in the fall or early spring at a rate 50 percent above the crop's needs, rather than applying just the needed amount later in the spring. Moreover, although the usual practice is to use nitrification inhibitors to prevent loss of nitrogen applied in the fall or early spring, last year it was cheaper simply to apply extra nitrogen. Unfortunately, this approach does not take account of where the nitrogen goes.

Future needs

The agricultural boom of the 1970s was an unparalleled period in our agricultural history. Unfortunately, the bubble has burst, and with lower demand, commodity prices and land values have dropped sharply.

In the past, American agriculture responded to economic pressures by pro-

ducing more. Today, however, this strategy is no longer appropriate. We need to improve efficiency by reducing inputs rather than increasing output.

One encouraging prospect is the availability of microcomputer software that lets farmers "fine tune" their operations and pinpoint weaknesses using field by field data. This will permit more careful selection of practices, including more carefully targeted and less wasteful fertilizer and pesticide applications. Pines Farms is already using computerized record keeping. We will soon be instituting a much more comprehensive interactive system that covers every aspect of crop management, including planting population and varieties, tillage, fertilizer and pesticide applications, machinery use, soil and weather data, tissue analysis, and yields.

Government farm programs also offer a significant opportunity. The current

program allows farmers to grow their own nitrogen for next year's corn crop and to experiment with alternative crops and cropping systems.

Most important is the opportunity provided by the Agricultural Productivity section of the 1985 Food Security Act. In the past, those who set university research policy have not been able to respond sufficiently quickly to farmers' new needs for input-reducing rather than output-increasing techniques. The Agricultural Productivity section specifically calls for research on low input agriculture in real farm settings. This could lead to a new alliance among land grant universities, the Extension Service, and the farm community that will result in production methods that are more efficient and economical while also enhancing the quality of the environment.



UPCOMING EVENTS

September 12-15. International Association of Fish and Wildlife Agencies' 77th Annual Meeting, Winston-Salem, North Carolina. Contact the International Association of Fish and Wildlife Agencies, 1412 16th Street, NW, Washington, DC 20036.

September 29-October 1. Agricultural Impacts on Ground Water Conference, Des Moines, Iowa. Contact Agricultural Impacts Conference, NWWA, P.O. Box 182039, Dept. #017, Columbus, OH 43218.

October 7-10. Conference on Value Issues in Agricultural Research and Technology sponsored by the Humanities and Agriculture Program at the University of Florida and held in Orlando, Florida. Contact Richard Haynes, University of Florida, Dept. of Philosophy, 370 Arts & Sciences Building, Gainesville, FL 32611.

October 8-11. Workshop on Inter-cropping and Agroforestry Strategies

to Conserve Biotic Resources in Arid Lands hosted by the Desert Botanical Garden, Phoenix, Arizona. Contact Gary Nabhan, Desert Botanical Garden, 1201 N Galvin Parkway, Phoenix, AZ 85008.

October 18-21. Farming Systems Research and Extension Symposium sponsored by the University of Arkansas and Winrock International Institute for Agricultural Development, at the University of Arkansas, Fayetteville. Contact Farming Systems Research Symposium, P.O. Box 2100, University of Arkansas, Fayetteville, AR 72702.

October 28-30. Second National Agricultural Forum: Sustainable Agriculture and National Progress, Washington, DC, sponsored by the Charles V. Riley Memorial Foundation. For information write David Chancey, Executive Director, 25 West 43rd Street, Suite 907, New York, NY 10036, 212-869-8639.

November 17-19. Alternative Uses of Highly Erodible Agricultural Land, a regional agricultural development conference, in Memphis, Tennessee. Contact the Southern Rural Development Center, P.O. Box 5446, Mississippi State University, Mississippi State, MS 39762.

October 20-22. New Directions for Rural Communities: A Conference on Practical Alternatives for Sustaining Farms and Towns, Bozeman, Montana. Sponsored by the National Center for Appropriate Technology.

November 19-21. New Directions for Rural Communities: A Conference on Practical Alternatives for Sustaining Farms and Towns, Agricenter International, Memphis, Tennessee. Sponsored by the National Center for Appropriate Technology, 815 15th Street, NW, Suite 938, Washington, DC 20005. For information write or call Steve Thomas at NCAT, 202-347-9193.