CENTER FOR INTEGRATED AGRICULTURAL SYSTEMS

Wisconsin Couple Converts to Organic Farming

By Kathleen Duffy

In the wake of growing interest around organic farming, more people are asking questions about the risks involved in changing over from a conventional system. This year the CIAS has funded a project that plans to collect data in an effort that will help answer these types of questions.

To analyze the conversion process from conventional to organic farming, a CIAS project team of 17 researchers has started monitoring the biology, finance and decision-making processes in a new dairy/cash crop farming system. Ultimately, team members want to collect these data over five to eight years.

While much of the research done on alternative farming approaches looks at organic farming from the standpoint of well-established operations, this study's unique focus is on how farmers, just getting started, weather the transition period. Funded by the CIAS in conjunction with federal LISA (Low-Input, Sustainable Agriculture) program funding, the common hope of this project is to learn what's involved in the successful transition from a conventional to an organic dairy operation by a new farmer.

This case study takes place at Sue and Altfrid Krusenbaum's 240acre farm in Walworth County near Elkhorn. In beginning this new farm operation, the young couple has strong interest in bringing in as few off-farm inputs as possible, while operating in an economically, socially, and environmentally sound manner. Altfrid, a German native, wants to "show organic farming can be done through a functioning example, not just preach it." Some of Sue's enthusiasm for developing an organic farm stems from growing up in the

nearby Zinniker family, owners and operators of the oldest bio-dynamic farm in the country. The Krusenbaum's main objective is to support other farmers in converting from conventional to organic systems.

"I want to show organic farming can be done through a functioning example, not just preach it." Altfrid Krusenbaum

Another unique aspect of this research is the interdisciplinary nature of the team in monitoring biological, financial and managerial components of the farm. The team includes farmers, researchers and extension agents and specialists. This interdisciplinary process will also be monitored through journals and interviews in order to learn how researchers from different disciplines and farmers can work together more effectively.

The long-term, whole-farm approach of the study will permit in-depth analysis of conversion process complexities that Josh Posner, principal investigator from the UW agronomy department, hopes will "better position researchers and extension staff in advising Wisconsin farmers interested in trying organic systems." Posner explains that no equations will come from the conversion analysis, but hopefully becoming more practiced in thinking through things like rotations, land conditions, cattle feed systems, and how these factors relate to each other will contribute to a bank of useful information for forming systems strategies.

Several research team subcommittees are working with the Krusenbaums to develop a transition phase cropping plan, a multiphase crop rotation, a mechanical weed control calendar, a conservation plan, and a manure management strategy. Purchasing the herd, upgrading the dairy barn, and redefining field boundaries are also in the works.

With these designed strategies. the research team members hope to see a marked reduction in soil erosion to less than 2 tons per acre per year. They would also like to see the farm achieve an average milk production level of at least 16,000 lbs per year, while earning an annual net income of \$14,000-18,000. In addition, they hope to obtain county average crop yields and to reduce weed pressure. A gradual reduction in chemical and off-farm inputs to zero is another priority.

From his university experiences in Germany, Altfrid became aware of the importance of an interdisciplinary approach in agriculture. He "would like to see this project play a small part in changing the foundation of university research here toward more interdisciplinary thinking that will benefit farmers in the end."

Other project team members include: Jon Baldock (private crop consultant); Lee Cunningham (Walworth County Agriculture Extension Agent); Jerry Doll (agronomy department, UW-Madison); Gary Frank (agricultural economics department, UW-Madison); John Hall (Michael Fields Institute); Jan Harrison (agronomy department graduate student, UW-Madison); Bernie Kleiber (farmer, Whitewater); Christopher Mann (Michael Fields Institute founder): Leonard Massie (agricultural engineering department, UW-Madison); Kevin McSweeney (soil science department, UW-Madison); Ron Schuler (agricultural engineering department, UW-Madison); Terry Smith (Dairy Profitability Center, UW-Madison); Steve Stevenson (CIAS, UW-Madison); Peter Urich (Michael Fields Institute); Alan Wood (Walworth County Farm Superintendent); Dick Zinniker (farmer, Elkhorn), +