2001 PROGRAM WORK TEAM ANNUAL REPORT

Integrated Nutrient Management PWT (PWT 2001-03)

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Major PWT programs or activities planned as listed in the proposal, and Accomplishments in 2001:

1. **Complete, distribute, support and evaluate on farms the Cornell University Nutrient Management Planning System (cuNMPS)** that is designed for use by CCE educators, NRCS and S&WCD planners, and private consultants in developing Comprehensive Nutrient Management Plans for livestock farms in New York State. The cuNMPS contains the Cornell Net Carbohydrate and Protein System (CNCPS) for developing herd nutrient management plans, and Cornell Cropware for developing crop, soil, and manure nutrient management plans to meet federal and state guidelines and regulations. The CNCPS was released in Sept. 2000; Cropware was completed in August 2001, and was distributed free to more than 158 users including all NYS CCE educators, NRCS and S&WCD field offices and made available for download on the Internet. Nearly 100 from this group attended 7 Cropware training sessions. Telephone, web and email support for the cuNMPS was established.

2. **Identify gaps in knowledge and design research to improve the cuNMP usefulness and accuracy.** The NYS Phosphorus Index and conversion equations to allow producers with non-Cornell soil analyses to use Cornell Nutrient Recommendations as specified by NYS 590 regulations were developed and incorporated into Cornell Cropware. The NY-Phosphorus Index is a rating system designed to assist producers and planners in identifying fields or portions of fields that are at highest risk of contributing phosphorus (P) to lakes and streams, considering transport (soil drainage class, flooding frequency, distance to the stream and stream type) and source factors (soil test P, fertilizer and manure P application rate, timing and method). A Phosphorus Starter Project was initiated to evaluate Cropware P starter recommendations. Priorities for the next versions of the cuNMPS have been identified. Cornell Cropware was moved to the Nutrient Management Program of Quirine Ketterings, and her Cropware team is working on priorities for the next version of Cropware, including vegetable nutrient recommendations, and manure and fertilizer optimization procedures.

3. **Identify key investigators, collaborators within the broader AEM community (such as NYSSWCC, SWCD, CCE, NRCS, DEC, private consultants), farmers, and other stakeholders.** Collaborators will be added to the PWT as program projects evolve and input and expertise is needed.

4. **Develop a forum (e.g. a website, newsletter and/or seminar/field day series) for information exchange and discussion among CALS faculty, staff and other stakeholders whose research, extension and/or teaching programs relate to nutrient management and those who are impacted by these efforts.** The PWT meets biweekly for this purpose. Two web sites act as forums for information exchange and discussion among CALS faculty, staff and other stakeholders interested in nutrient management planning: [http://www.css.cornell.edu/nutmgmt/index.html](http://www.css.cornell.edu/nutmgmt/index.html) and [http://128.253.135.170](http://128.253.135.170) The PWT is currently planning two Integrated Nutrient Management Modeling Workshops for December 2001 and January 2002.

5. **To identify program (research, extension and teaching) priorities, potential collaborators and funding opportunities based on feedback from major stakeholders.** The PWT meeting agenda for this fall will review team members current and planned nutrient management research and extension programs to facilitate collaboration and program integration. The course, “Livestock and the Environment”, will be expanded to include more agronomic nutrient management content. The PWT is actively pursuing several areas of funding with project proposals, including New York State Environmental Bond Act, New York City Watershed, and Federal Safe Drinking Water Act funds.