

**The 1080 Pesticide Use Reporting Database:
A Tool for Research and Extension Program Evaluation and Improvement
2006 IPM Proposal**

Project Leader: Al Fournier (Arizona Pest Management Center / Maricopa Agricultural Center)

Project Team Members: Peter Ellsworth (Maricopa Agricultural Center / Entomology), John Palumbo (Yuma Agricultural Center / Entomology), Mary Olsen (Plant Sciences), Mike Matheron (Plant Sciences), Bruce Tabashnik (Entomology), Rob Leonard (Plant Science and Plant Pathology), Jeff Silvertooth (Soil, Water & Environmental Science), Pat Clay (Area Ag Agent, Maricopa county), Kurt Nolte (Area Ag Agent, Yuma Co.), Eric Norton (Ag Agent, LaPaz & Mohave Co.), Randy Norton (Director, Safford Ag. Center), Kai Umeda (Area Agent, Agriculture and Natural Resources/Turf, Maricopa), Steve Manheimer (Arizona-National Agricultural Statistics Service), Jack Peterson (Arizona Dept. of Agriculture), Gary Christian (Arizona Dept. of Agriculture)

Location: Statewide effort, with impact on campus, county, and experiment station personnel.

Situation and Need

In years past, a Cooperative Agreement between the College of Agriculture and Life Sciences (CALs) and the Arizona office of the National Agricultural Statistics Service (AZ-NASS) provided a mechanism for a Federal-State partnership that allowed both organizations to share resources, avoid duplicative efforts, establish a state-specific statistical program and provide better products and services to our Arizona clientele. This agreement covered printing costs for the annual Arizona Agricultural Statistics Bulletin and provided support for a technical position (Senior Office Assistant) at AZ-NASS responsible for, among other things, maintaining and providing access to the 1080 pesticide use reporting (PUR) database. This database is compiled from agricultural pesticide reporting forms that commercial applicators in Arizona are legally required to submit to ADA for all pesticide applications (including aerial applications) and required use reporting by private applicators for pesticide applications involving pesticides on Arizona's groundwater protection list. These data are extremely useful to CALs research and extension personnel and our statewide and county outreach programs, particularly for measuring the impact of agricultural extension programs and adoption of Integrated Pest Management, as well as to regulators, policy makers, politicians, commodity and environmental organizations, and the agrochemical industry.

Budget cuts implemented in the 2002-03 fiscal year at CALs resulted in a drastic reduction in the Cooperative Agreement, reducing it to approximately \$5,000 per year to support printing of the annual Arizona Agricultural Statistics Bulletin. Since that time, the Senior Office Specialist position at AZ-NASS has been funded through federal grants and reimbursable projects that put other demands on this position, are ephemeral in nature (i.e., year-to-year) and are now threatened by this instable arrangement. A stable source of funds (about \$32k/year) is necessary to continue support for this position, to provide data entry, analysis, survey work and related functions to service CALs ongoing research and outreach needs related to agriculture. Although AZ-NASS Director Steve Manheimer continues to seek external support for this position, we believe that a re-establishment of the CALs-NASS relationship, including partial support for this

position, would yield great benefits to CALS agricultural extension faculty and programs, and to statewide and county-based outreach programs.

Relevance to Priorities

This project specifically addresses the Arizona Pest Management Center (APMC) priority of developing measures and indicators of IPM program adoption and impact, which is also a national and regional IPM priority. IPM assessment is also a major focal area of the APMC. The APMC provides coordination and resources to enhance the effectiveness and efficiency of extension pest management programs statewide, by supporting strategic planning, needs assessment, program evaluation, and resource development within and across all programs. As part of this charge, the IPM Program Manager (Al Fournier) is responsible for developing means to measure and document IPM program adoption and impact. He also coordinates responses to federal information requests regarding pesticide use patterns and pest management needs of stakeholders statewide. The 1080 database and other statistical services offered by AZ-NASS are vital to accomplishing these goals. *This database provides an objective and quantitative tool for measuring pest management practices and pesticide use patterns in agricultural crops statewide. When integrated with GIS maps available through commodity groups, these data have enormous potential: to measure adoption of extension pest management recommendations (and IPM specifically) across multiple crops; respond quickly and accurately to federal information requests; and to help identify and prioritize critical pest management needs of stakeholders statewide.* These data also form the core set of information so important in developing educational outreach programs that reach hundreds of growers and applicators, with the potential to impact thousands of homeowners and other citizens around the state.

Outputs

Activities: The funds provided will help to stabilize a position at AZ-NASS that will maintain the 1080 database (see impacts), perform queries and interface with CALS research and extension personnel statewide to provide ag statistics related services (surveys, etc.). As IPM Program Manager, Al Fournier will coordinate with AZ-NASS and ensure faculty access to these services.

Products: Ready access to the 1080 database for CALS research and extension faculty; plus “at cost” survey consulting, sampling, implementation and analysis.

Participation: Although many functions of this position occur “behind the scenes,” data provided will be used to measure and document program impacts, identify stakeholder needs, and communicate with state and federal agencies on pesticide use patterns and program adoption. End users include statewide Extension personnel, other CALS faculty, department heads and administrators, federal agencies, stakeholder groups and other citizens around the state concerned about pesticide use.

Expected Outcomes and Impacts

Short-term: These funds will help to stabilize the cooperative relationship between CALS and AZ-NASS, ensure continued entry of and access to 1080 data, sampling and survey services, and data analysis “at cost” for CALS faculty.

Medium-term: The data services provided to CALS and the Arizona Pest Management Center (APMC) will increase our ability to measure program impacts, including adoption of IPM; increase the quality of our responses to federal requests for pesticide use data; and help us to identify priority pest management needs of stakeholders and increase the quality and relevance of our outreach and other educational programs for the citizens of Arizona.

Long-term: By improving measurement and documentation of program impacts, we expect to increase our ability to obtain extramural funding for IPM and related programs. Through identification of priority pest management needs, we will better direct UA-CALS pest management programs to meet the needs of stakeholders statewide. With increased access to pesticide use data, we will support our clientele through better support for the registration process (e.g., Section 18s and 24c) and for EPA inquiries regarding re-registrations of key active ingredients in the state of Arizona. Further, we will improve our communication with federal agencies and raise the profile of our programs within the Western region.

Plan for Evaluation

Realization of the full benefits of this proposed arrangement will depend upon a long-term stabilization of the AZ-NASS position and a long-term relationship between AZ-NASS and UA. The funds requested here are a step in that direction, and will be leveraged with other sources (as described below) to achieve these ends. Outcome Indicators for this short-term project:

- 1080 data for 2006 will be entered into the database, cross-checked for errors, and made available through the APMC. Availability of these data is a measurable short-term outcome.
- 1080 data queries, sampling and survey services available to faculty will be advertised through the APMC. We can measure the extent to which faculty take advantage of these services and will also conduct a “level of satisfaction” survey of participating faculty.

More long-term measures of success and achievement of long-term goals are dependent on our success in securing a stable, long-term source of funding for this position.

Inputs/Budget

Approximately \$32k is needed annually to support a Senior Office Specialist position at AZ-NASS. Through this proposal, we are requesting \$8k in the coming year to partially support the position. This will be leveraged with other funding sources, including \$7.5k that the ADA currently provides to AZ-NASS through a cooperative agreement. In a separate proposal to the CALS Executive Council (still pending), we have requested an additional \$8k, and we anticipate similar contributions from industry and stakeholder groups. Key representatives from the agricultural industry have expressed a willingness to contribute partial support, provided that the university has shown a financial commitment to supporting these activities. Coordination between UA faculty and AZ-NASS, will be handled by Al Fournier as part of his duties as IPM Program Manager. No additional funds are being requested for this time commitment.

Proposed Budget

AZ-NASS Senior Office Specialist

Salary Support	<u>\$8,000</u>
Total	\$8,000