Applications will be reviewed on a rolling basis with a maximum 4-week review period for notification of awards. The review committee consists of Tim Elkner (chair), Hank Bissel, Carrie Koplinka-Loehr, and Andy Cavanagh. Administrative staff at UMass will be responsible for disseminating applications to the review committee, as well as communicating with applicants.

4d. Evaluation Plans.

Objective 1: Good turnout at meetings, active participation of members in our projects, and progress toward completing our projects are measures of success as a working group. The impact of our completed projects will be monitored in a time frame and a method appropriate to each project. For example, we will survey grower groups after the 2008 season to evaluate the impact of the *Pest Identification Guide*.

Objective 2. Participants will be asked to report on what they learned, how they shared the information, what new contacts were made, and other outcomes such as enrichment of educational programs in the home area.

II. Regional IPM Publications: Web-based Vegetable IPM Resource Database: Publicity and Upkeep

4a. Problem, Background and Justification

A wealth of information on vegetable and strawberry IPM has been published in the Northeast, but most of this was developed at the state level or within one part of the region (New England or Mid-Atlantic, for instance). Often these resources are not known and used in other parts of the region, despite the fact that that they likely to be highly relevant and useful to growers in other states. One of the first objectives of the Vegetable IPM Working Group was to centralize and provide access to vegetable IPM information by making it available through the Northeastern IPM Center website. The Vegetable IPM Resource Database was created in 2004 a as a joint project of the Vegetable IWG and the Northeastern IPM Center. The goal has been to house data on all of the available information resources about Vegetable IPM in the Northeast in one database that can be searched by type of information, by crop, by state, or by pest. Searches yield links to University websites where electronic publications are available, or to websites that tell where and how to order hard copy publications. Types of information on the website include Guides, Alert/Advisories, IPM Element/Protocol/Guidelines, Field Guides, Fact Sheets, Resource Indexes, IPM Curricula, and Videos. This database is designed to incorporate information on any commodity or type of IPM system, from specific crops to school and community IPM.

The vegetable component of the database has >900 entries from the Northeastern states, (http://www.nepmc.org/vege_all.cfm). As more and more farmers use the Internet to seek out information, this selected, high quality database will help them to find information that is research-based, derived from a public source, and appropriate for our bioregion and farming systems. It will also lead them to time-sensitive information such as pest alerts, disease forecasts, and newsletters. The web is, however, a constantly mutating entity with frequent web address changes and additions. A database that is not maintained can become detrimental to enhancing the use of IPM by frustrating information seekers or housing out-of date information.

For the Vegetable IPM Resource Database to maintain relevancy and usefulness links need to be reviewed to insure all are live and it must be reviewed at the state level to ensure that nothing important is left out and that all information is current. A network of state contributors and a system for regular updates should be established to enable ongoing updates. The capacity to search for specific pests of each crop, and access to good pest identification information needs to be further developed. Links to commonly used search engines need to be incorporated into the website as much as possible..

As part of our previous Partnership grant we are working with the Center to fix some programming problems in the database that limit its usefulness, and we are working with specialists in the region to update and proof the data. The content update is being coordinated out of the UMass Vegetable Program office while the programming changes are being handled by the Center. This process has been slower than anticipated, and the entry of new data has been delayed while website programming issues were addressed. However, significant progress has been made and we expect the update to be complete before the 2008 growing season. UMass has identified a vegetable specialist or IPM coordinator in each state, who has agreed to review the current data and update it in spreadsheet format. This will be loaded back into the database. When all the search procedures are functioning well, we will get the word out to vegetable growers and educators through all of the available Extension channels.

4b.Objectives and Anticipated Impacts.

Objective 1. Publicize the web-based Vegetable IPM Resource Database and ensure high quality data through 2009.

Our goal is to make sure that the information in the database is faultless and up-to-date throughout our next funding period, the end of 2009. This will require input from each state, because the knowledge of what vegetable IPM information has been changed is state-specific.

Anticipated impacts: Growers, researchers and educators will be more able to find useful information about vegetable IPM in the Northeast. They will become aware of timely alerts and newsletters published during the growing season. Use of the database and the associated state websites will increase. Using these resources will help growers to incorporate more IPM into their farming practices.

4c. Approach and Procedures.

Once the updates have been completed, we will publicize the website through Center and state Extension channels. The designated person in each state will review materials at approximately six month intervals through 2008 and 2009. However, we recognize that the task of updating the information in the database is time consuming. While we have the agreement of someone from each state to do this, we have not yet provided any financial support for their effort. At all levels of the Extension system, people are stretched thin and in need of resources. Funded projects tend to get better attention. We plan to offer the person in each state a stipend to compensate them for their time and effort. This approach worked very well with the Pest Identification Guide, in which each editor received a stipend and all work was completed on schedule. We will maintain

contact with each state and with the IPM Center to monitor the functionality and use of the database.

4d. Evaluation Plans.

We will document use of the database (hits per month, types of searches, etc). When we survey growers regarding priority needs, we will include a question about their knowledge and use of database. There is also a form for feedback on the website.

III. IPM Issues: Second Regional Workshop with the Natural Resources Conservation Service to Foster IPM as a Conservation Practice.

4a. Problem, Background and Justification

USDA NRCS programs are designed to help farmers adopt conservation practices, such as IPM techniques, that protect the environment and help to offset some of the costs of adopting new practices. One such program, NRCS Environmental Quality Incentive Program (EQIP), is an excellent fit for promoting greater adoption of IPM practices, especially 'cutting edge' practices that could be perceived as risky by farmers. The mission of the EQIP program and other NRCS technical assistance services is very much aligned with the goals of IPM, the NEIPM Center, and the National IPM Roadmap. However, numerous barriers have prevented this program from effectively helping vegetable growers make greater use of IPM.

In 2005 we initiated a project, in concordance with the 2005 Vegetable Working Group plan of work, to build collaborative partnerships between NRCS and other agricultural support organizations including Cooperative Extension, state agriculture departments, and independent crop advisors. Our goal was to improve delivery of IPM technical service, information, and incentives to Northeastern vegetable producers. This project addresses the following published priorities:

1. "Working with NRCS on programs that help growers benefit from addressing both IPM and NRCS goals" as stated by the Northeastern IPM Center in the 2007 IPM Partnerships RFP.

2. "Development of IPM packages that improve eligibility for NRCS program funds and satisfy the food industry" as stated in the Areas of Emphasis for IPM in the Northeastern Region of the United States, developed by the Northeast Research, Extension, and Academic Program Committee for IPM (NEREAP) (http://northeastipm.org/nereap/priority/2006.htm.)

The NRCS Environmental Quality Incentive Program (EQIP) is available in every county of every state, to farms of all sizes who qualify for and develop a farm conservation plan. Thus, this effort also addresses the following priority needs that have been identified by the Vegetable IPM Working group:

1. Serving the needs of small or isolated operations and highly diversified farms where monitoring services are not available, with the goal of growers being able to accomplish IPM independently (2005 Vegetable IWG Priorities);

agricultural best management practices as part of a sustainable approach to farm production.

4c. Approach and Procedures

This meeting will be held in Feb 25-26, 2009 immediately following the next meeting of the Vegetable IWG. In addition to members of the working group, we will invite field, state, and national level NRCS staff to participate. We will also invite others who have a vital stake or have made important contributions in this collaborative effort at the regional or national level. Like the Harrisburg meeting it will be 1 ½ days long.

4d. Evaluation Plans.

We will contact participants prior to and after the meeting and ask them several questions regarding their activities in this area and their assessment of the effectiveness of NRCS program support in helping growers to use IPM. We will identify future needs and discuss how to meet them. The impact of the overall NRCS/IPM collaboration can be measured in several ways, including the number of vegetable farms in each state with EQIP contracts that include the Pest Management Practice Standard, and which resource concerns are mitigated through IPM.

5. Cooperation and Institutional Units Involved.

This project will be directed by Ruth Hazzard at the University of Massachusetts Amherst. Only one institutional unit is formally involved: the University of Massachusetts Extension, Agriculture and Landscape Program.

6. Key Personnel.

Ruth Hazzard, University of Massachusetts Amherst, will serve as Project Director and coordinate all aspects of the project. She has been the Chair or Co-Chair of the Vegetable IPM Working Group since its inception in 2002 and the group has requested that she continue in a leadership role. She will facilitate meetings of the Vegetable IWG and the NRCS/IPM meeting in 2009, network on behalf of the Vegetable IWG, organize one or more NRCS/IPM farm tours, and supervise staff dedicated to each of the projects. Ruth has been working to develop and implement IPM programs in vegetable crops since 1986. See Attachment F, Curriculum Vitae.

Andy Cavanagh and Amanda Brown, University of Massachusetts Amherst, will serve as project administrators. Both have five years of experience with sweet corn, Brassica and cucurbit IPM field research and extension and have served as project administrators for the Vegetable IWG since September 2007. Currently the Educator Exchange and Resource Database are being managed by Andy Cavanagh, while meeting arrangements and the NRCS/IPM project are being management by Amanda Brown.

Joanne Whalen, Vegetable Entomologist, University of Delaware, is serving as co-chair of the working group. She is the IPM coordinator for Delaware and has been active in planning and developing IPM programs in the mid-Atlantic region for many years, and is recognized regionally as a leader in IPM. She is taking responsibility for membership and other tasks.

Kathy Murray, Maine Department of Agriculture, Food, and Rural Resources, will continue to work on coordinating the NRCS partnership, funded through the 2006 Vegetable Working Group Partnership grant. Kathy has 16 years experience in IPM research, demonstration and teaching. She coordinates IPM programs for the State of Maine Department of Agriculture.

7. Collaborative Arrangements.

Collaboration and shared leadership among members of the Vegetable IWG will be extensive, but does not involve financial arrangements except that the project will cover individual travel costs to working group meetings and stipends to individuals who work on updating the vegetable IPM resource database.