

2014-15 Integrated Research and Extension Planning Grants Program

Project Report, March 16, 2015

Project Title: Mobile platform and virtual weather stations to improve fruit and vegetable industry access to IPM and crop management tools in the Network for Environment and Weather Applications (NEWA)

Team Leader: Juliet Carroll, Leader, Network for Environment and Weather Applications (NEWA), Cornell University

Our planning group met in Geneva, NY on January 20-21 to develop plans for meeting the goals for improving the NEWA system for our specialty crops grower audiences.

Planning Meeting Attendees

Tuesday, January 20, 2015		
Name	Email	Institution
Juliet Carroll (PD)	jec3@cornell.edu	Cornell University
Art DeGaetano	atd2@cornell.edu	Cornell University
Mary Concklin	mary.concklin@uconn.edu	University of Connecticut
Keith Eggleston	KLE1@cornell.edu	Cornell University
John Gibbons	jpg10@cornell.edu	Cornell Cooperative Extension
Timothy Weigle	thw4@cornell.edu	Cornell University
Abby Seaman	ajs32@cornell.edu	Cornell University
Katie Campbell-Nelson	kcampbel@umass.edu	University of Massachusetts Amherst
Steve Valentino	sav58@cornell.edu	Cornell University
<i>Conference call link 8:30 to 10:00 AM</i>		
David Robinson	david.robinson@rutgers.edu	Rutgers, The State University of New Jersey
Robert Crassweller	rnc7@psu.edu	Pennsylvania State University
Wednesday, January 21, 2015		
Name	Email	Institution
Juliet Carroll (PD)	jec3@cornell.edu	Cornell University
Mary Concklin	mary.concklin@uconn.edu	University of Connecticut
Keith Eggleston	KLE1@cornell.edu	Cornell University
Timothy Weigle	thw4@cornell.edu	Cornell University
Abby Seaman	ajs32@cornell.edu	Cornell University
Katie Campbell-Nelson	kcampbel@umass.edu	University of Massachusetts Amherst
Steve Valentino	sav58@cornell.edu	Cornell University
Paul Schmidt	pschmidt@itx.com	ITX, Rochester, NY
Mike Leshner	mlesher@itx.com	ITX, Rochester, NY
<i>Conference call link 8:30 to 10:00 AM</i>		
Robert Crassweller	rnc7@psu.edu	Pennsylvania State University

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Justification for new attendees not listed on the planning grant application:

Steve Valentino is a Temporary Technician in Carroll's program who has been working on NEWA. He attended in order to provide input on weather stations in the network and perspectives on web usage from the NY apple growers he has been working with.

Katie Campbell-Nelson, Vegetable Extension Educator, University of Massachusetts, attended as an alternate for Jon Clements who was unable to attend.

Mike Leshner, ITX, Director of Software, attended in the capacity of web architect to lead us through the discussions on January 21st on mobile website development, user profiles, and customization of the NEWA website applications.

NEWA Planning Meeting Agenda

Staff Room, Jordan Hall, Geneva, NY

Day one, Tuesday, January 20

8:30 Welcome, introductions and announcements (order box lunch for Wednesday)

8:40 Grant objectives to be discussed

(2) Implement freely available climate and forecast digital data into a NEWA map layer on which to create virtual weather station locations, allowing for efficient and fast network expansion.

(3) Build a subscription portal for products, apps, and virtual stations to support NEWA sustainability.

8:45 Grant logistics. Led by Julie Carroll. Agency & rfa, writers, authorship volunteers, letters of support, budget needs, general ideas and thoughts, required documents.

9:45 Virtual weather stations locations. Led by Art DeGaetano and Keith Eggleston. Review the sources of data. How will the virtual stations function within NEWA? What are the timeframe and needs for development? How can a subscription portal for these be built?

Lunch 12:00, provided

1:00 Virtual weather stations locations (cont'd)

3:30 The NEWA subscription portal. Led by Julie Carroll

4:30 Review NEWA website to prepare for RWD discussions on January 21

Day two, Wednesday, January 21

8:30 Welcome, introductions and announcements

8:40 Grant objectives to be discussed

(1) Develop and implement a mobile application with Responsive Web Design (RWD) to improve user experience and accessibility.

(3) Build a subscription portal for products, apps, and virtual stations to support NEWA sustainability.

8:45 RWD mobile web technology discussion. Led by Paul Schmidt and Mike Leshner, ITX. Can a website as complex as NEWA become mobile? Information, weather database, NEWA products, NEWA forecast models, data entry, data query, results pages, etc.

Lunch 12:00, provided

1:00 RWD mobile web technology discussion (cont'd)

2:00 The NEWA subscription portal. Led by Julie Carroll. eNEWA subscriptions, virtual station subscription & metadata, real weather station registration & metadata, NEWA apps.

End at 3:00 PM For those needing time to travel.

3:00 to 4:30 Continue website architecture discussions with ITX, Cornell scientists & others welcome.

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We arrived at consensus for our project objectives during the planning meeting and prioritized the needs for NEWA. Our objectives going forward are:

- (1) Develop and implement a mobile application NEWA with Responsive Web Design (RWD) to improve user experience and accessibility.
- (2) Implement freely available climate and forecast digital data into a NEWA map layer on which to create virtual weather station locations, allowing for efficient and fast network expansion.
- (3) Investigate and build a “You’re NEWA” site for caching user data and subscribing to alerts, apps, and virtual stations to support NEWA sustainability.

Our project may include two new objectives:

- (4?) Create a developer website that allows researchers to validate and investigate the utility of new IPM and crop production tools that emerge from basic and applied research.
- (5?) Enhance the IPM tools in NEWA, based on stakeholder focus group input, by bringing new models online and incorporating models implemented on partner institution websites.

We plan to recruit a social scientist to the project to conduct surveys, focus groups, and determine end-user preferences and an economist to conduct market research, surveys, and revenue projections.

Immediate priorities for NEWA were identified. These included placing Google Analytics on all the NEWA web pages; developing a NEWA blog, Facebook page, and Twitter account; consulting with Extension educators and growers about NEWA; and developing a survey for NEWA users. A Google Analytics account was set up. A blog, *You’re NEWA*, was created at <http://blogs.cornell.edu/yourenewa/>. A Facebook page and Twitter account were set up, though no content has been added yet.

We targeted the USDA Specialty Crops Research Initiative, Standard Research and Extension Project proposals. The rfa was published March 3rd, Funding Opportunity Number: USDA-NIFA-SCRI-004959. The pre-proposal Stakeholder Relevancy Statement is due March 30th. We are currently developing our pre-proposal under this project title, *Mobile platform and virtual weather stations to improve fruit and vegetable industry access to IPM and crop management tools in the Network for Environment and Weather Applications (NEWA)*. As of today, our estimated budget is \$2,551,280.

We continue to hold monthly conference calls to support our work on the grant proposal.

