

Usefulness of Delivery Methods for Communicating Climate Change Issues: Perspectives of Extension Professional and Research Faculty in the Northeast

BY PENNSYLVANIA STATE UNIVERSITY
AND CORNELL UNIVERSITY | AUGUST 2016



PURPOSE | To determine the current preferred delivery methods of research and Extension faculty of land-grant universities in the Northeast U.S. relative to the agriculture, natural resources, and forestry sectors.

METHODOLOGY & DEMOGRAPHICS | The population consisted of all Extension professionals, faculty, and scientists from the 16 land grant universities in 12 Northeastern states in the Colleges of Agriculture (N=3,757): CT, DE, MA, MD, ME, NH, NJ, NY, PA, RI, WV, and VT. An online survey was conducted using Qualtrics, which was reviewed by a panel of experts, and pilot tested in the Southern Region of the U.S. IRB was approved from both Penn State and Cornell Universities. There was an acceptable reliability based on pilot test data, and Dillman's five-point contact method was used to collect data. The response rates were as follows: 1,211 participants responded out of 3,757 (32.2%). Where 554 of 1,211 (45.7%) dedicated at least 1% of their time to climate change activities. 494-527 (of 554) respondents answered this segment of the survey.



DESCRIBE PROFILE OF EXTENSION & RESEARCH

OBJECTIVE 1 | To describe the profile of Extension specialists, Extension educators, and research faculty working in colleges of agriculture in northeastern land-grant universities with at least 1% of their time dedicated to climate change activities.



- A similar percentage of respondents were either research faculty (44.2%) or Extension faculty or Educators (49.0%).
- The top focus areas where respondents indicated conducting climate change work were: Natural Resources (38.8%), Cropping Systems (30.7%), Social Sciences (22.9%), Plants (22.0%), and Environment (20.8%).



DISCOVER PREFERRED METHODS OF DELIVERY

OBJECTIVE 2 | To identify preferred delivery methods among these Extension specialists, Extension educators, and research faculty.

- 13 delivery methods were split into three overarching categories—mass media (i.e. newsletters, peer reviewed publications, videos), online mass media (i.e. webinars, social media), and face-to face (i.e. field tours, workshops).



- *Field tours, websites, and workshops were indicated as the top three best perceived methods of disseminating information.*
- *Field tours and workshops were perceived to be the most useful delivery methods to change practices and behaviors.*
- *In all cases, delivery methods are perceived as significantly more useful to disseminate information than to change practices or behaviors.*



DETERMINE DELIVERY METHOD DIFFERENCES

OBJECTIVE 3 | To determine the differences in preferred delivery methods, if any, among the three groups.

- *Preference differences found between the three groups of respondents for face-to-face delivery methods to change behaviors. Extension educators preferred face-to-face methods over Extension specialists and research faculty.*

CONCLUSIONS AND FUTURE PRIORITIES | Findings from this study provide insight into the delivery methods that land-grant university research and Extension personnel in the Northeast perceive as most effective to disseminate information as well as to change practices or behaviors related to climate change. The respondents of this study represented research faculty, Extension specialists, and Extension educators from the 16 land-grant universities in the Northeastern U.S.

- 1** Across all the delivery methods preferred, respondents indicated that each method was more effective in disseminating information than in changing practices or behaviors. This finding should not come as a surprise, for behavior change is a long-term and difficult outcome to achieve in programming.
- 2** In terms of specific delivery methods, the findings indicate that respondents perceived field tours, videos, websites, and workshops as the best strategies to disseminate information and field tours and workshops as most effective to change practices and behaviors.
- 3** Traditional Extension delivery methods that emphasize face-to-face interactions are perceived by research faculty and Extension personnel as the most effective ways to engage with audiences about climate change.

ABOUT USDA NORTHEAST CLIMATE HUB | Our mission is to develop and deliver science-based knowledge and practical information for land managers and farmers to support their decision making related to climate impacts. We work in partnership with local, state, and federal governments, land grant institutions consultants, and private organizations reaching across twelve states from Maine to West Virginia and the District of Columbia.

Research team: Kaila Thorn (Pennsylvania State University), Rama Radhakrishna (Pennsylvania State University), Dan Tobin (Pennsylvania State University), Allison Chatrchyan (Cornell University), Joana Chan (Cornell University), and Shorna Allred (Cornell University)

Photo credits (front, top to bottom): Rachel Schattman, USDA, USDA Northeast Climate Hub, NRCS, USDA and Rachel Schattman

USDA is an equal opportunity provider, employer, and lender