

TELEVISION WEATHERCASTERS AS STATION SCIENTISTS

BY KRIS WILSON

According to a recent online survey of AMS television weathercasters, the vast majority embrace the Society's "station scientist" initiative. Three-quarters of respondents "strongly agreed" (31%) or "agreed" (43%) with the statement in the survey that read: "I am comfortable serving in the role as my station scientist." Only 13% disagreed with that statement.

"It is heartening to hear that an overwhelming majority of broadcast meteorologists are comfortable with their role as the station scientist," says Paul Gross, meteorologist with WDIV-TV in Detroit and current chair of the AMS Committee on the Station Scientist.

According to the survey, most TV weathercasters (89%) work at stations that do not employ a full-time science/environment reporter. That number is down slightly from a larger mail survey of TV weathercasters in 2002 (92%), but still indicates that local TV newsrooms rarely have this beat specialist in their shop, which means ample opportunities for those weathercasters wanting to expand their role.

"Because newsrooms are increasingly turning to their meteorologists to add informational value and perspective to stories involving science and the environment, and as these stories become more and more high-profile in newscasts, station scientists give their newsrooms a competitive advantage," Gross adds.

Anecdotal evidence had previously suggested that since the weathercaster may be the only scientifically trained person in a local TV newsroom, many scientific stories then get assigned to that specialist; results from this survey confirm that hypothesis. In an open-ended survey question, weathercasters in this sample provided a long list of stories they cover, from the expected weather-related events, such as La Niña and El Niño; to the most common—air- and water-quality issues; to the esoteric—plate tectonics, volcanism, cancer, astronomy, and even astrology. One new topic to surface among many TV weathercasters' reporting duties is the emerging "green beat," which includes a variety of topics including new technologies, Leadership in Energy and Environmen-

tal Design (LEED) building designs, recycling, and "environmental awareness" issues.

The primary science topic of interest in this survey of 121 AMS weathercasters was climate change, with 75% of the respondents saying they have already reported on that topic. While just over half of the survey respondents say they report on science and environmental stories once a month or less, the survey discovered that field reporting is not the only—nor the most common—way that many on-air weathercasters report on science-related topics, including climate change.

The most common avenue for communicating climate change among these weathercasters was speaking before community/civic/school groups (65%). The data reveal what many weathercasters already know about the importance of these community events, as half of the survey respondents say they make 1–3 of these appearances each month, with another quarter making 4–6 appearances and 15% making more than 7 per month. Further data analyses reveal that this is also the setting where weathercasters feel most comfortable discussing climate change.

Another common way in which climate change—and presumably other science issues—is discussed is during on-air anchor chit-chat. Often, news producers stack a weather- or science-related story going in or out of the weather segment, and many times the weather anchor is expected to comment on that story. Fifty percent of weathercasters in this survey say they've discussed climate change in that manner. That is more than the one-third who say they've discussed the topic during the actual weathercast and the 20% who say they've produced a reporter package on the subject. Other common ways the topic of climate change gets discussed by TV weathercasters include station blogs, station Web sites, personal blogs, newspaper columns, and radio talk shows.

These data reveal the expansive possibilities many weathercasters have for discussing science in their communities beyond just the on-air weather segment. Given the brevity of the typical weather block (3 minutes, 14 seconds), it is difficult for weathercasters to discuss other science topics in their allot-

ted time. However, this survey asked a new question about the total number of on-air minutes devoted to weather in a typical day and found an explosion of on-air time for local weathercasters. Seventy-five percent of TV weathercasters in this survey say their stations devote more than 25 minutes of on-air time a day to weather, and more than two-thirds say they devote more than 30 minutes a day. That's a lot of cumulative time devoted to weather, and one reason why local TV weathercasters have such a high profile in their communities. It is also why I argue in another study ("Television Weathercasters as Prominent Science Communicators," in the January 2008 *Public Understanding of Science*) that they may be "the most . . . prominent science communicators in our society."

Of course, that means the science that is communicated should be accurate, relevant, and timely—the same basic news values everyone else in the newsroom is expected to uphold. A more detailed *BAMS* article in early 2009 will address weathercasters' responses about the efficacy of climate modeling, their respons-

es to the IPCC consensus, what they identify as their primary obstacles to reporting on climate change, and what the most common questions are that they get from both the public and the newsroom about the subject (spoiler alert: the questions from those two constituencies are different).

The survey was e-mailed to AMS weathercasters and 121 responses were collected from 8 May 2008 to 7 June 2008. About half of the respondents have the CBM Seal, almost two-thirds have the AMS Seal, one-quarter have the NWA Seal, and just 6% have no seal of approval. The survey was designed by an advisory board organized by the National Environmental Education Foundation, which included many members representing the AMS. One of the goals of the survey was to help design and direct online instructional materials for weathercasters to learn more about the science of climate change (see sidebar).

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DESIGNING AN ONLINE CLIMATE COURSE

The climate change survey results described here are being used to inform the content for an online Climate Change course for broadcast meteorologists. The National Environmental Education Foundation (NEEF), in partnership with the Cooperative Program for Operational Meteorology, Education, and Training (COMET), is developing a free, two-hour course aimed at providing a basic overview of climate change topics, while equipping meteorologists with science-based answers to the questions they are most often receiving from their viewers. The course will count for professional development credit under the AMS Certified Broadcast Meteorologist certification program.

The course takes an approach that will provide broadcast meteorologists with background information and resources that address some of the main concerns of the public: is climate change real, how do we know, and how will it affect me? These basic questions form the course outline, which touches on the evidence for climate change, the scientific methods used to study climate, certainties and uncertainties in climate data, and climate model predictions. As with all COMET courses, each section will include references and resources that point to additional information for those who want to become better educated about the topic. There will also be a separate appendix for broadcasters with resources

for talking to the public about climate change, including tips for discussing climate change and uncertainties with the public, and a gallery of visuals that can be used on-air, online, and in community outreach activities.

The Climate Change course is part of a series of free weather/environment courses developed by NEEF and COMET as part of the Earth Gauge program (www.earthgauge.net) to support the AMS "station scientist" concept and provide professional development credits for broadcast meteorologists participating in the CBM certification program. Previously released courses include Watersheds: Connecting Weather to the Environment, Weather and the Built Environment, and Weather and Public Health, all of which are available on COMET's MetEd Web site at www.metted.ucar.edu/bmet_training.php.

The Climate Change course is being developed with an expert advisory committee that includes broadcast meteorologists and representatives from the AMS, UCAR, the Pew Center for Global Climate Change, NOAA, the Environmental Protection Agency, George Mason University, the Yale Forum on Climate Change and the Media, and the Marian Koshland Science Museum of the National Academies of Sciences.—SARA ESPINOZA, NATIONAL ENVIRONMENTAL EDUCATION FOUNDATION