NIFA: Research, Education, and Extension

National Institute of Food and Agriculture

Ray Knighton

- CSREES
 - Competitive programs (extramural research)
 - National Research Initiative
 - Capacity programs (research & extension)
 - Land grant universities
 - Special Research Grants (earmarks)
 - PM research at Washington State

- Sponsored National Academy of Science study with EPA on air emissions from animal feeding operations
 - Recommends process based modeling rather than using animal emission factors

- New National Research Initiative Air Quality Program (~\$35M from 2003-2009)
 - Determine emission factors for production agriculture
 - Develop new monitoring and measurement technologies
 - Understand the fate and transport of agricultural air pollutants
 - Develop and transfer practices that reduce emissions

- Special Research Grant to Texas A&M
 - Focused on beef CAFO issues

- National Workshop on Agricultural Air Quality in June, 2006
 - Produce a state-of-the-art air emissions inventory for agriculture
 - Produce a best practices document for reducing air emissions



Workshop on Agricultural Air Quality: State of the Science

Bolger Conference Center, Potomac, Maryland near Washington, DC • USA June 5-8, 2006

Farm Bill

CSREES



NIFA

- •Same authorities
- •New Director
- •New Chief Scientist
- •New Organizational Structure
 - •4 Institutes
 - •5 priority science areas
- •Bigger budget for competitive programs
 - •AFRI

National Institute of Food and Agriculture

- AFRI- Air Quality program continues
 - Emission data from production practices particulates, gases/odors
 - Improved measurement protocols/instrumentation for within field and edge of field boundaries
 - Practices for mitigating emissions
 - Fate and transport of emitted particulates and gases

- AFRI will support interdisciplinary, multi-functional projects in five "societal challenge" areas :
 - Keep American agriculture competitive while ending world hunger
 - Improve nutrition and end child obesity
 - Improve food safety for all Americans
 - Secure America's energy future through renewable biofuels
 - Mitigate and adapt agriculture to variations in climate
- Foundational disciplinary programs
 - Air, water, soil programs combined to form Renewable Energy, Natural Resources and Environment (RENRE)
 - \$15M to \$9M
 - Multimedia approach to nitrogen and phosphorus
- Climate Variability and Change Challenge Area
 - \$60M in CAP projects
 - \$65M in standard grants
- Loss of majority of special research grants

- AFRI Climate Variability and Change Challenge Area will not be offered (2010, 2012, 2013)
 - CAPS have gone from \$20M to \$5M
 - Standard grants from \$5M to \$750,000
- AFRI RENRE (2010, 2011, 2012, 2013)
- New AFRI Water Challenge Area

Education

Contacts

National Atmospheric Deposition Program



New Issues

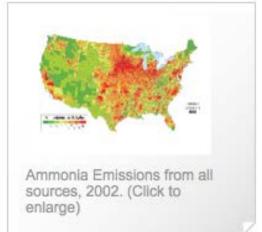
Ammonia Monitoring Network (AMoN)

Conferences

Committees

The AMoN is the only network providing a consistent, long-term record of ammonia gas concentrations across the United States.

Ammonia (NH₃) is a gas readily released into the air from a variety of biological sources, as well as from industrial



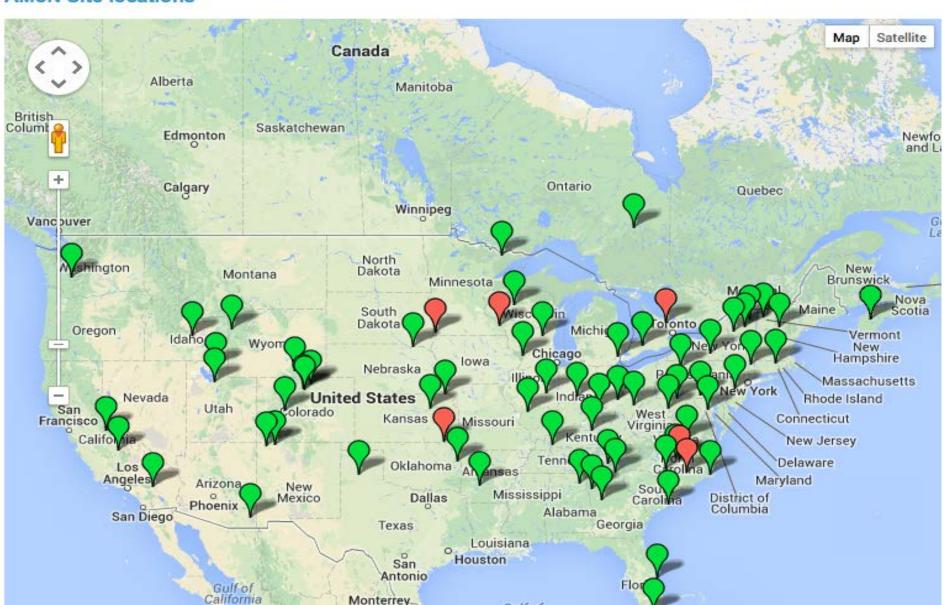
About NADP Networks Maps & Data Publications Conferences

Committees

New Issues

Education

AMoN Site locations



Questions

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