

Workshop to Develop Implementation Plan for a National Phenology Network

Aug. 23-25, 2005

Westward Look Resort

Tucson, AZ

Hosted by

Institute for the Study of Planet Earth, Univ. of Arizona

Sponsored by

National Science Foundation

U.S. Geological Survey

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Coordinator

Teresa Carochi, ISPE, Univ. of Arizona

Role of NEON in Addressing Ecological Implications of Climate Change

Report from a Workshop
held August 24-25, 2004
Tucson, AZ

Convened by
Julio Betancourt
Pat Mulholland
Dave Breshears

<http://www.neoninc.org>

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Recommendations from NEON Climate Workshop

- Establish a National Phenological Network that includes public observers and leverages existing ecological networks
- Explore integration of NPN w/ new & improved Mesonet
- develop a working group that includes phenology & remote sensing experts
 - a **continental-scale** network for regionally appropriate native plant species & cloned indicator plants (e.g., lilac)
 - thorough understanding of phenological cycles & relationship to climate, hydrology, ecosystem processes
 - comprehensive ground-truthing of green-up & other remotely sensed phenology
 - detect & discriminate long-term phenological trends in response to long-term climate variability & global warming

National Phenology Network



The **National Phenology Network (NPN)** exists to facilitate collection and dissemination of plant phenological data to support climate change research.

NPN asks individuals to observe and record phenological events for a variety of species to observe, and then encourages them to share their data on the Internet. The program is designed to facilitate comparison of phenological data across different locations.



species to observe, and collect each year over the course of the growing season. The program is currently focused on lilacs, that are well suited to each location.

Phenology is the study of the timing of seasonal cycle events, which are triggered by environmental factors such as temperature. Wide ranges of phenological events are observed, from leaf and flower buds, to insect hatchings and return of birds. Each one gives a ready measure of the environment as viewed by the associated organism. Thus, timings of phenological events are ideal indicators of the impact of local and global changes in weather and climate on the earth's biosphere.

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Prototype for web-based NPN
<http://www.npn.uwm.edu>



Workshop Products

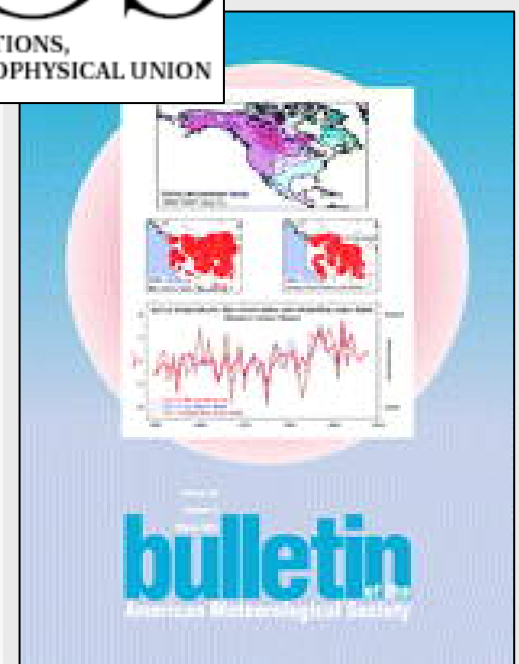
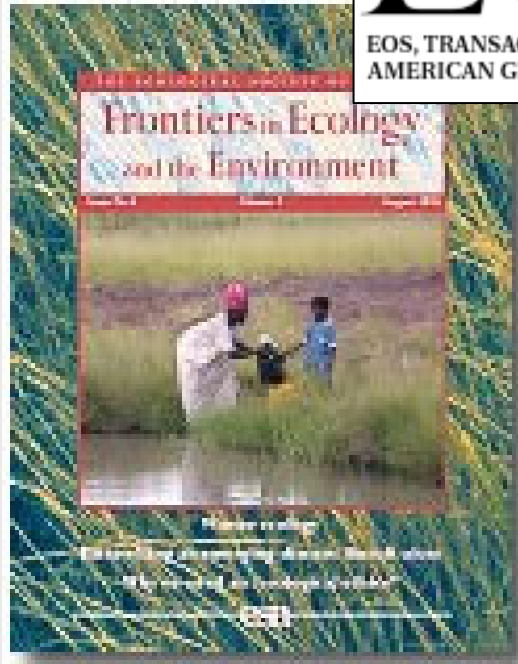
- Report of NPN Design and Implementation Plan
- Interagency Agreements
- Organize Citizen Science & educational programs
- White papers

Science, EOS, Frontiers in Ecology & the Environment, Bull. Am. Met. Soc., Remote Sensing of Environment

- Proposals for follow-up workshops & short-term research products



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Rules of Engagement

- Tent Card Method (place vertical when you want the floor, horizontal once you have it)
- Share the floor- one conversation at a time; be succinct
- Try to listen as an ally to help clarify and expand important ideas
- Honor time agreements (breaks, lunch, agenda)
- Breakout group leader should keep group on task and ensure that all have chance to contribute
- Reporters should strive to record contributions fairly and faithfully
- Identify both short-term and long-term goals & products
- Look beyond the Workshop; identify responsibilities you can safely assume in the coming months