

**Memorandum of Understanding
between the National Phenological Network and
the Long Term Ecological Research Network
for Cooperation in Phenological Monitoring and Assessment**

This Memorandum of Understanding (“MOU”) sets forth the basic terms and conditions between the USA National Phenology Network (“USA-NPN”) and the Long-Term Ecological Research Network (“LTER”), each of which is referred to as a “Party” and collectively the “Parties”, regarding the Work Program to be undertaken between them and the disposition of Intellectual Property which might result from that work program. The Parties agree as of this ___ day of _____, 2008 to collaborate, as described herein.

I. Background and Purpose

Both the USA-NPN and the LTER are engaged in monitoring and assessing the phenology of plants, animals, and ecosystem processes. The mission of the USA-NPN is to facilitate systematic collection and free dissemination of phenological data from across the United States. This is primarily being done to support scientific research concerning interactions among plants, animals, and the lower atmosphere, especially the long-term impacts of climate change (www.usanpn.org). The mission of the LTER is to provide the scientific community, policy makers, and society with the knowledge and predictive understanding necessary to conserve, protect, and manage the nation's ecosystems, their biodiversity, and the services they provide (www.lternet.edu). The purpose of this Memorandum of Understanding is to provide the framework for cooperation between the USA-NPN and LTER in the conduct of phenological monitoring and assessment activities.

II. Authority

The authority for entering into this MOU exists under the provisions of the by-laws and other governing documents for USA-NPN and LTER.

III. Scope of Work

As the combination of programs in USA-NPN and LTER is more beneficial to the public interest than either program alone, it is mutually agreed upon that collaboration between USA-NPN and LTER programs will include:

- Collection, sharing, and dissemination of phenological data;
- Facilitation of systematic collection and free dissemination of phenological data from across the United States;
- Collaboration in scientific research concerning interactions among plants, animals, and the lower atmosphere, especially regarding the long-term impacts of climate change;
- Coordination of education, outreach, and training activities where beneficial to both Parties;

- Coordination of methods development and methods testing activities for the field, laboratory, and interpretive aspects of environmental assessment programs;
- Coordination of monitoring guidelines and protocols each Party may issue for measurements of particular phenological parameters.

IV. Agreements

Both parties agree to:

- Meet at least semiannually to review progress of cooperative efforts, to discuss key findings from program activities, and to discuss the scope, plans, and implementation of future activities;
- Participate on technical advisory groups as requested;
- Identify appropriate points of contact to help ensure that the information provided by USA-NPN and LTER programs is communicated among Parties in a timely manner;
- Share information on field, laboratory and interpretive methods, guidelines and protocols;
- Make available data and other information as appropriate and in accordance with the policies of the respective parties;
- Pursue the opportunity to increase the interoperability of their data bases;
- Acknowledge the collaboration between the organizations on their respective web pages;
- Develop joint position statements to advance the mutual interests of the Parties.

The USA-NPN agrees to:

- Provide plant and animal species lists and standardized observational protocols;
- Access to national phenological data base, bibliography, educational manuals and training templates, and data entry and visualization tools;
- Facilitate implementation of USA-NPN protocols.

The LTER agrees to:

- Encourage LTER scientists, sites, and affiliates to adopt and implement USA-NPN protocols for collecting phenological data;
- Work with the USA-NPN to identify and contact appropriate Regional Phenology Network coordinators
- Collaborate with NPN to share metadata and access to existing LTER phenology datasets, as well as identify opportunities to continue to develop said datasets as appropriate.

V. Implementation

Each Party will identify an individual who will serve as the principal point of contact to implement this agreement and to coordinate the review of documents, protocols, and participation on technical advisory committees.

VI. Renewal

This agreement will be reviewed annually and revised as necessary. The duration of the agreement will be five years, and may be renewed by mutual accord.

VII. Termination

Either Party may terminate this agreement by providing written notice to the other Party.

VIII. Publications

Publications documenting cooperative efforts may be prepared by either Party, or jointly, provided that both Parties have an opportunity to participate in and review manuscripts prior to publication. To the extent possible, decisions involving authorship and review of publications will be addressed during the preparation of work plans. Should differences of viewpoint occur, an effort will be made to reconcile these differences. However, this shall not prohibit either Party from publishing the jointly-collected data, providing it assumes sole responsibility and gives appropriate credit to the other agency.

IX. General Terms

Funds. This MOU does not obligate or include any funds and shall not obligate either Party to expend funds or involve any Party in any contract or other obligations for the future payment of money. Any endeavor involving reimbursement or contribution of funds between the signatories will be handled in accordance with applicable laws, regulations, and procedures. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the each Party and shall be independently authorized by appropriate statutory authority.

Conditions. This agreement is conditional to, and is constrained by, the legal mandates of all involved Parties. All actions and agreements are subject to budgetary constraints of the signatories.

Intellectual Property. Any intellectual property created by the joint work between LTER and the USA-NPN is considered jointly owned. We will limit our creative work, which might result in the creation of intellectual property, to work on joint programs specific to NPN and LTER.

Public Disclosures. Any public use of a Party's name, trademark, service mark or trade dress, as well as all media releases, public announcements, and public disclosures relating to this MOU and activities occurring under the MOU, including promotional or marketing material, but not including announcements intended solely for internal

distribution or disclosures to the extent required to meet legal or regulatory requirements beyond the reasonable control of the disclosing Party, shall be coordinated with and shall be subject to the written approval by each Party prior to release.

Expenses. The Parties shall each bear their respective costs and expenses in conducting activities resulting from this MOU including, without limitation, telecommunications services and equipment, and expenses of all attorneys, advisors and consultants retained by or representing each "Party".

No Liability. Neither Party shall be liable to the other for any indirect, special or consequential damages arising out of or in connection with activities or services provided under or pursuant to this MOU.

No Licenses. No licenses or rights under any patent, copyright, trademark, trade secret or any other intellectual property right are granted or are to be implied by this MOU.

Agreed and accepted as of the date first written above

LTER

USA-NPN

By _____

By _____

Name: _____

Name: _____

Title: _____

Title: _____