

Title: Trophic Mismatch: Plant Phenology

Authors:

PI: Eric Post
Professor
Department of Biology
Penn State University
208 Mueller Lab
University Park, PA 16802 USA
esp10@psu.edu

Co-PI: Chris Wilmers
Assistant Professor
Environmental Studies Department
University of California
Santa Cruz, CA 95064
Phone: (831) 459-3001
Cell: (510) 393-0290
Fax: (831) 459-4015
Email: cwilmers@ucsc.edu

Researcher:

Jeff Kerby
PhD Student
IDGP Ecology
Penn State University
208 Mueller Lab
University Park, PA 16802 USA
jtk210@psu.edu

Address data questions to Eric Post or Jeff Kerby

Funding Source & Grant Number:

NSF Arctic Sciences Division
Award # 0713994

Dataset Overview:

Species specific dates of first observation of various plant phenophases.

May 2008 – June 2011
Lat/Lon: 67.11, -50.33

Detailed overview and methods have been published in: Post & Klein 1999 J. Wildl. Manage. 63:335-345 and Post et al. 2003 Can. J. Zool. 81:1709-1714.

Data Collection:

Data were collected visually by a trained field observer.

Data were transferred directly from field-notebook into an electronic spreadsheet and then reviewed for accuracy at a later date by comparing original datasheets with electronic version.

Data Format:

Data are organized by columns. Year is self-explanatory, site identifies one of three meadows (A,B,C) within which are nested four 0.5² meter vegetation plots (1-4). The three meadows (A,B,C) are of comparable species composition, aspect and elevation; these meadows were chosen to be representative of, and adjacent to, the areas where parturient caribou are observed. The remaining columns identify a plant species/genus and phenophase combination.

The final letter of each column denotes phenophase (E – emergent, FS – flowerset, B – bloom, RS – fruitset, LB – leaf buds closed, LBO – leaf buds opening, LO – leaves open).

Species/genus abbreviations are as follows:

B nana = *Betula nana*

Calamagrostis = *Calamagrostis sp.*

Campanula = *Campanula gieseckeana*

Carex = *Carex bigelovei*

Cerastium = *Cerastium alpinum*

Draba = *Draba sp.*

Equisetum a. = *Equisetum arvense*

Equisetum f. = *Equisteum fluvatile*

Festuca = *Festuca sp.*

Juncus = *Juncus sp.*

Kobresia = *Kobresia sp.*

Luzula = *Luzula sp.*

Poa = *Poa sp.*

Polygonum = *Polygonum viviparum*

Potent = *Potentilla hookeriana*

Pyrola = *Pyrola sp.*

Rhodo = *Rhododendron sp.*

Salix = *Salix glauca*

Stellaria = *Stellaria longipes*

Vaccinium = *Vaccinium sp.*

UnkForb = Unknown Forb

-999 = No data

Three digit numbers below the species/phenophase header columns indicate the Julian day of year of first observation of the corresponding species/phenophase combination on the plot identified by each row.

Disclaimer: Although the data have been checked for errors, we will update the data if we realize retrospectively that an error has been committed in identification of a species or in transcription from field data sheets.