

Understanding Climate Change: Project BudBurst

Climate change is global and local. How it affects a particular locality depends on large-scale weather patterns, changes in the jet stream, and geographic features such as mountains, coastal proximity, and urbanization. The interactions are complex.

A living organism responds directly to its environment and therefore can be a kind of “measuring device” that monitors climate change. Within the span of a year, plants typically develop stems, leaves, flowers, and seeds. This developmental sequence, called phenology, is cued by the environment.

Observing phenology is not new—familiar terms such as “an early spring” or “a late fall” describe plants’ response to year-to-year variation in the arrival of the seasons. By participating in Project BudBurst, anyone can contribute essential data on local plant responses and play an important role in helping researchers understand climate change.



Participants can create personalized “MyBudBurst” pages which allow them to record and save the locations and plants they are observing and consolidate their data collection efforts. The BudBurst website accepts data year round to accommodate data reporting in all regions.

Keeping Watch on Climate Change: Project BudBurst



CHICAGO BOTANIC GARDEN

Earth's climate is changing.
Can you see it or feel it? Is it
happening in your neighborhood?
What affects will it have on
our lives?.



The Chicago Botanic Garden and its partners launched Project BudBurst in 2007 to provide citizens with an opportunity to observe the effects of climate change. Plants respond to factors such as temperature, moisture, and day-length to cue the seasonal growth of leaves, flowers, and seeds. By observing how the timing of these events changes year to year and place to place, scientists can gauge the effect of changing climate on the plants in our gardens and surrounding natural areas.

Project BudBurst is a citizen-science project that uses the internet to collect and consolidate data from all over the U.S. Citizens observe plant species in their backyard or community park throughout the growing season and enter observations into the BudBurst database. The website includes detailed information on climate change and plants, as well as guidelines for family, youth and in-school activities.

Project BudBurst (www.budburst.org) is a collaborative effort by the Chicago Botanic Garden, the University Corporation for Atmospheric Research, the University of Montana, and multiple other members of the U.S. National Phenology Network (NPN).

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