Using phenology to detect plant responses to climate change: the California Phenology Project

The California Phenology Project (CPP; www.usanpn.org/cpp) is a new state-wide monitoring program funded by the National Park Service (NPS) to track the effects of climate change on the seasonal behavior of our flora and fauna (learn about the *nationwide* USA-National Phenology Network at: www.usanpn.org). **Phenology** is the study of the timing of seasonal plant and animal life cycle events, such as the flowering and fruiting of plants and the hatching or fledging of birds.

In order to detect the causes and consequences of variation in plant and animal phenology, scientists require large quantities of data, across large geographic areas. To achieve this goal, the CPP invites residents across California to aid in observing key phenological events in ecologically important plants. **Since 2011, citizen scientists, educators, and national park staff have contributed over 460,000 observations to the California Phenology Project, and we now see that many of our monitored plant species are highly sensitive to climate.**

The CPP has begun this work in seven California National Parks: Joshua Tree National Park, Santa Monica Mountains National Recreation Area, Golden Gate National Recreation Area, John Muir Historic Monument, Redwood National Park, Sequoia and Kings Canyon National Parks, and Lassen Volcanic National Park, and we are recruiting volunteers interested in participating in the parks, in University of California Natural Reserves, in other wild lands, or in their backyards and communities. Volunteers assist by monitoring plants using the standardized methods developed by the USA-National Phenology Network and used across the U.S., allowing observations in California to be compared observations collected elsewhere.

Come and learn: What species are we monitoring in California? How does climate affect their leafing, flowering and fruiting? Which species are most sensitive to climatic conditions?

Where: Santa Barbara Botanic Garden, Blaksley Library

Date: Monday, April 28

Time: 5:30 pm

Who: Dr. Susan Mazer, Field Director, The California Phenology Project and Professor of Plant Ecology & Evolution, University of California, Santa Barbara