



Toward a phenology network in Turkey

H. N. Dalfes (1,2), H. Ülgen (3), U. Zeydanli (3), and A. T. Durak (4)

(1) Istanbul Technical University, Eurasia Institute of Earth Sciences, Istanbul, Turkey (dalfes@itu.edu.tr), (2) National High Performance Computing Center, Istanbul, Turkey (dalfes@itu.edu.tr), (3) Nature Conservation Center, Ankara, Turkey (huma.ulgen@dkm.org.tr), (4) Istanbul Technical University, Informatics Institute, Istanbul, Turkey (atuncer@gmail.com)

All climate projections indicate that drastic changes are to occur in the Mediterranean Basin and Southwestern Asia. Detailed studies also foresee strong patterns of change in seasonality for most climate fields all across the country, threatening Turkey's rich biodiversity and diverse ecosystems already in trouble due to massive land use changes and careless resource extraction projects. It is therefore obvious that climate impact studies can benefit from detailed and continuous monitoring of relationships between climate and natural systems. Recently started efforts to build a phenology network for Turkey will hopefully constitute a component of a more comprehensive ecological observation infrastructure. The Phenology Network of Turkey Project saw its debut as a joint initiative of an academic institution (Istanbul Technical University) and a research NGO (Nature Conservation Center). It has been decided from the very beginning to rely as much as possible on Internet technologies (provided by the National High Performance Computing Center of Turkey). The effort is also inspired by and collaborates with already established networks in general and USA National Phenology Network in particular. Many protocols, instructional materials and *Nature's Notebook* application has been borrowed from the USA NPN. The project has been designed from the start as a two-faceted effort: an infrastructure to accumulate/provide useful data to climate/ecosystem research communities and a 'citizen science' project to raise nature and climate change awareness among all components of the society in Turkey in general and secondary education teachers and students in particular. It has been opted to start by gathering plant phenological data. A set with 20 plant species has been designed to serve as a countrywide 'calibration set'. It is also anticipated to salvage and extend as much of possible historical animal (especially bird and butterfly) observations.