

Foreword

The effects of climate change on the phenology and pollination of plants is expected to be a major factor in the problem of maintaining biodiversity as well as that of feeding a growing global population. Though ecologists and agricultural researchers have historically tried to stay out of each other's domains, climate change has dealt them a globe of shared problems that will not easily be teased apart. For example, the honey bees that agriculture depends upon to pollinate crops are not native to North America. Whether those introduced pollinators help or hinder native species is a complicated problem, but they are certainly a part of the environment that researchers are going to have to study more closely as the world's population grows. Many native species and human-produced cultivars have co-evolved to depend upon or compete with each other in ways that we haven't yet discovered. We are reaching back in time to pull out some phenology and pollination data that can be compared with current data to study changes in species genomes or gene activity that might be related to climate change.

Connie Taylor wrote "Pollination Ecology of *Sabatia campestris*" in 1972 based on data she collected while taking a summer course at the University of Oklahoma Biological Station at Lake Texoma. Written as a student research paper, its significance lies not in numerical data, but in her descriptions of pollination processes she observed in the field, which differed from those processes described from research done in green house environments.

Shang-Wen Liaw was a graduate student at the University of Central Oklahoma who studied under Gloria Caddell. His 1999 Master's thesis went unpublished as he took advantage of an opportunity to go directly into a Ph.D. program. We are proud to publish "The Structure of the Gynostegium, Breeding System, and Pollination Ecology of Spider Milkweed, *Asclepias viridis*."

If that requires more phenology and pollination terminology than you know, you can flip to the Critic's Choice essay in the back where we've reprinted Paul Buck's Botany Bay article from the Fall 2000 Gaillardia, "A Conversation with a Small Beetle." His explanation of pollination from the standpoint of the pollinator is both entertaining and educating.

You can take a break from pollination studies and read Amy Buthod's floristic inventory of Kessler Atmospheric and Ecological Field Station. This site holds great potential for future climate change comparisons using sophisticated environmental monitoring equipment that will enable a coupling of species inventories with climate change.

We also have an assessment of a five-year recovery from a burn at Wichita Mountains Wildlife Refuge by Oklahoma City University authors, Laura Jardine, Adam Ryburn, and Anthony Stancampiano. This is a great piece of local ecological research that can play an important role in predicting dynamics due to fires which may become more frequent due to climate change. Again this year, we have something for everyone.

If you do research in or about Oklahoma's native plant environments, please consider submitting your own manuscript next year. We want manuscripts based on the newest concepts in research as much as we want manuscripts based on historical data. We want manuscripts written by authors with years of experience, but our editorial staff is also ready to help first-time authors get the experience they need to develop science writing skills. The *Oklahoma Native Plant Record* is a professionally reviewed publication. Our abstracts are indexed in the "Centre for Agricultural Bioscience International" that is based in the U. K., and the *Record* is listed in the "Directory of Open Access Journals" <https://doaj.org>.