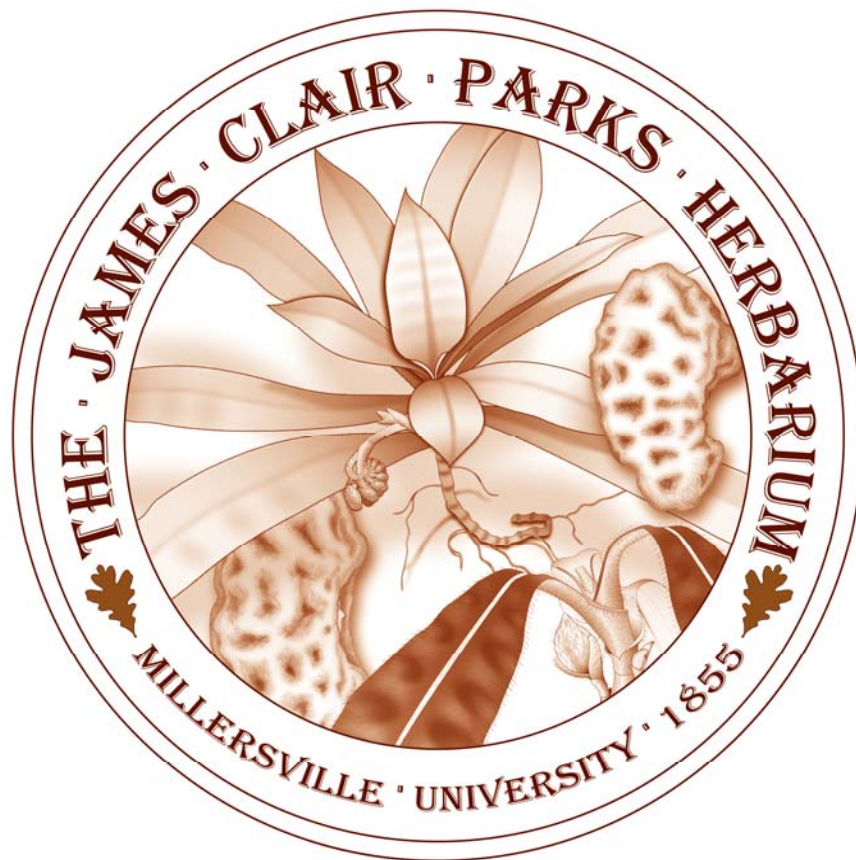


PARKSIA

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useful information regarding plants.

PARKSIA

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About Parksia

Parksia is published periodically by the James C. Parks Herbarium of The Department of Biology, Millersville University of Pennsylvania. It is dedicated to publishing short encyclopedic articles and essays containing useful information about plants in our world. *Parksia* is available for free, on the Web at <http://herbarium.millersville.edu>. The street mailing address for the Herbarium is James C. Parks Herbarium, Department of Biology, Millersville University of Pennsylvania, 288 Roddy Science Building, 50 E Frederick St, Millersville, Pennsylvania, 17551, United States of America.

Contributions

If you are interesting in contributing to *Parksia*, please send correspondence to the *Editor* at the address above.

CAN AN UNSEASONABLY WARM SPRING BRING ABOUT AN UNUSUALLY EARLY BLOOM OF SPRING FLOWERS IN THE NORTHEAST?

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This is a common question, and the answer is “yes,” but before I explain, let me first add an important caveat about what is considered “unseasonable.” When temperatures are said by the weather person as “unseasonable,” they are usually referring to them as being above-average. It is important to keep in mind that “averages” are statistics that obscure the normal and expected range in temperatures we find for a given month or day, etc., from year to year. Now to my explanation.

The timing of events such as flowering and leaf expansion in the spring are generally influenced by temperature. Warmer temperatures can and do bring about earlier than average flowering in plants and it is also true that soft, nondormant tissues of flowers and leaves, or even just their buds that have started to grow in response to warm temps are more sensitive to freezing than their dormant counterparts. Thus, were warm temperatures that accelerated bud break and flower formation followed by an extreme cold-snap, it is possible that the early flowers could be frost-bitten and many damaged or killed. However, merely freezing temps (32 F) overnight are not necessarily bad – it would need to take the form of sub-freezing temps to do the damage (since plant cellular solutions are analogous to saltwater and do not necessarily freeze at 32 F) and the threshold temperatures required to do this damage will depend on the species and on the stage of growth.

The real problem arises when we have warm (e.g. 60 F) temps very early, say in January (and that does happen from time to time), and then winter returns with force as would be expected for January or February. Indeed, 50-60 F temps in the core of winter *are* unseasonably warm and can “trick” plants into flowering early and they are then sensitive to frostbite that is likely to follow, with the consequence of fewer flowers and fewer fruits later in the season. Cornell Horticulture has an article on this and the related topic of climate change if you’d like to read further (Anonymous 2010).

REFERENCES

Anonymous. 2010. Will warm winter wither plants? Cornell Gardening Resources. Retrieved online at http://www.gardening.cornell.edu/warm_winter/index.html.

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