1968

Wisconsin's earliest native flowering plant

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cover. From time to time we plan to keep you informed of the progress of these studies through this Bulletin.

WISCONSIN'S EARLIEST NATIVE FLOWERING PLANT

With the coming of spring there is an enthusiastic revival of interest in people for the out-of-doors and, not infrequently, a more than casual interest in the pursuit of the first flowering plant. For the stay-at-home there is contentment in simply waiting for the first Crocus, Scilla, Narcissus, Forsythia or even the Common Dandelion (Taraxacum officinale Weber) to bloom, but the dedicated naturalist is not satisfied until he finds the native harbinger-of-spring. During this adventure the often asked question is "What is the earliest native flowering species?"

The "Pussy" Willow (Salix sp.) is sometimes considered a claimant for this honor as its partially emergent, fuzzy catkins appear in mid-winter. Since flowering time is considered to be when the flowers are sufficiently expanded to be functional (referred to as anthesis), the Willow has to be ruled out of contention as its flowers are not fully developed until April. According to Gray's Manual of Botany, the following species may appear in flowering condition between February and early April: Skunk Cabbage (Symplocarpus foetidus [L.] Nutt.), Silver Maple (Acer saccharinum L.) and Harbinger-of-Spring (Erigenia bulbosa [Michx.] Nutt.). All of these species range throughout the eastern and southeastern United States, and the February flowering time undoubtedly occurs in the southern states. Depending upon weather conditions, especially temperature, soil frost and snow persistence, all of these may flower in Wisconsin before the end of March or in early April.

The Skunk Cabbage is usually found in swampy woods, bogs, marshy areas, ravines and along moist stream banks. The flowers are small and clustered on an elongated and thickened axis, about one to three inches long, called a spadix, which is almost entirely enclosed by a large, reddish, leaflike growth called a spathe. It is this entire portion of the plant, called an inflorescence, which identifies it in the early spring. Long before sighting this inflorescence, the presence of the plant can be detected by its odor, which someone described as "a combination of skunk, putrid meat and garlic." Despite its odor at flowering time (or later when the leaves are crushed), many nature groups make special field trips to sites where this plant is in bloom.

Flowers of the Silver Maple are usually overlooked because they are small, greenish-yellow to reddish, and are on branches which may be beyond the reach of most people. Although this tree grows naturally in bottomlands and along river banks, it is often planted as a shade tree along city and town streets and in yards. Observation of the flowering time for this tree is an activity which can be shared by the true natural-

ist and the stay-at-home naturalist, if the latter is aware of the presence of such trees in his immediate vicinity.

The third species, which bears the name (and possibly the title), "Harbinger-of-Spring," is one of the rarest plants in our state. It has been collected only in a few localities in southeastern Wisconsin, and most of these sites have disappeared. The plant is a small herbaceous perennial, four to six inches high, with one or two leaves which are twice- or thrice-divided into narrow segments, and bears one or more umbels (umbrella-like clusters) of small flowers at the tip. It usually occurs in moist woods of maple, basswood, beech and oak. This writer is very interested in knowing of any remaining places in Wisconsin where this plant may still be present.

The question as to which of these is the earliest flowering plant has not been answered. Phenology records (observations of various events for many years) kept by Dr. James Zimmerman of Madison, indicate that the nod goes to the Skunk Cabbage. However, in any given year with unusual vernal climatic conditions, it is possible for any one of these to be the earliest flowering state plant. Which one was it this year?

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References

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WINTER BIRD STUDIES AT THE UWM FIELD STATION

When the UWM Field Station was acquired in 1964, it provided opportunities for planning and conducting long-term field studies in an area protected from disturbance, vandalism and "development." In line with my interests in population ecology, physiology and bioenergetics of birds, I began to plan investigations that would utilize the full potential of the station to integrate and coordinate field and laboratory approaches. After considering the birds at the station in terms of abundance, migration habits, and known physiological and ecological traits, three species were singled out for intensive study: the Ovenbird, Black-capped Chickadee and Slate-colored Junco.

The Ovenbird is an abundant breeding bird of the upland hardwood forest, present in the area from May to September. It is a long-distance migrant with a short, highly synchronized breeding and molting period. The Black-capped Chickadee has a less dense but more widely distributed nesting population, being found in the swamp and bog forests as well as the upland woods. The breeding population is believed to