

## NOTES ON ECONOMIC PLANTS

**Customary uses of ironweed (*Vernonia fasciculata*) by the Yuchi in Eastern Oklahoma, USA.**—The Yuchi are a small group of North American Indian people who live today in Eastern Oklahoma, but whose aboriginal homeland was the Southeastern United States, in the area of the present states of Tennessee, Georgia, Alabama, and Florida (1). *Vernonia fasciculata* Michx. var. *fasciculata* is known to knowledgeable Yuchi as *sagedi'tæ* which means bear paw in the Yuchi language. The plant's common English name, ironweed, derives from the rigid quality of the flower's stem, and the Yuchi name refers to the plant's paw-shaped root structure. The plant's stem, root, and the season of its blossoming all figure in the traditional medicinal and ceremonial uses that are reported for the Yuchi here. Unlike better known plants in the medicoreligious inventories of Woodland native peoples, uses of *V. fasciculata*, with a few exceptions, are not reported in the ethnographic and ethnobotanical literature (2).

Among the officials responsible for undertaking ritual activities in the Yuchi towns are four male adolescents known as "poleboys." During the main day of the Yuchi Green Corn ceremonies, the four poleboys also serve as policemen, guarding the town square. During their preparations for this main ceremony the boys each procure an oak or hickory tree, cut green and stripped of its limbs, with only the top most leaves and branches remaining. This large staff ( $\pm 4.3$  m in length) is both a weapon (used during the ceremony to keep nonparticipants off the square) and a badge of office. It must be carried by the poleboys throughout the main day of the ceremonial. The name of their position derives from this pole.

The town chief appoints these poleboys each year at the time of the annual Green Corn Ceremonial (June–July), the major event in the seasonal ritual cycle. These young men are then charged with undertaking many important preparations associated with the ceremony and with the ritual activities of the community over the following year. Of the three Yuchi ceremonial grounds, the one associated with the Polecat Town (near Kellyville, Oklahoma) preserves the

Yuchi practice of using *V. fasciculata* in connection with the appointment and activities of these young men.

As a token of their selection, the chief bestows upon each a wand ( $\pm 75$  cm in length) cut from the stem of *V. fasciculata* (Fig. 1). The Yuchi ideal, especially when a boy is serving for the first time, is for the chief to slip the wand of bear paw into the candidate's pocket or under his arm, surprising him and not allowing him to discuss or debate his appointment. Once the four boys are given their wands, they must keep them in their possession until the large poles used in the main ritual event replace them as emblems of office.

Traditionally, these wands serve an additional function during the ceremony. On the afternoon of their appointment, the day before the main ceremonial, the poleboys obtain four logs of blackjack oak (*Quercus marilandica* Muenchh.) to be used throughout the ceremonial, fueling the new fire kindled on the square as part of the ritual event. In this task, the wands of bear paw act as units of measure. In preparing them, the chief indicates the uniform length at which he wants the four logs cut. One wand's length is used for these logs and four wand's lengths are used to measure the single blackjack oak "medicine log" upon which the poleboys pound (with blackjack oak mallets) the roots of the plants used in medicine teas consumed during the ceremony (1).

The poleboy's wands were described by W. L. Ballard's Yuchi consultant(s) as being made of dogwood branches, but this statement appears to be an error on the part of his sources (3). The Polecat town chief responsible for preparing these wands or switches during the period of Ballard's fieldwork (ca. 1970–1975) guided and contributed to my own work during the 1990s. I have closely observed and participated in the ceremonial practices of the Polecat Town since 1993, photographing the preparation and distribution of the wands and identifying the plant species used with knowledgeable botanists and with Yuchi elders (1).

In Eastern Oklahoma, *V. fasciculata* blooms fully in the month of July, the period during



**Fig. 1.** While serving as a Poleboy at the Polecat Ceremonial Ground in July, 1997, Josh Bearpaw holds up his wand of *sagedi'tae* (*Vernonia fasciculata*) as he and his peers depart to obtain the special oak logs described in this note.

which the Green Corn Ceremonial is scheduled and held at the main Yuchi settlement—Polecat Town. For this reason, Yuchi associate the plant's flowering with other activities taking place at this time—especially the harvesting of the ritual medicine plant known among the native peoples of Eastern Oklahoma as redroot (*Salix humilis* Marsh). The flowering of horsemint (*Monarda fistulosa* L.) and the ripening of the corn crop are additional signs from nature that the time of the ceremonial has arrived.

Beyond these uses in the Green Corn Ceremonial, *V. fasciculata* has a role in Yuchi herbalism in a treatment for pain in the upper and lower legs. In this remedy, the paw-shaped roots of the plant are pounded to make them fleshy and then boiled in water. While she or he is seated in a chair, the steaming medicine is placed in a pan beneath the patient's legs and a blanket is placed over them to create a steam tent. Two to four such treatments, undertaken over four suc-

cessive days, are the recommended course. For other body aches, the same infusion can be applied directly with a wet compress using the same treatment schedule. The pattern number four reoccurs throughout Yuchi ritual and the preparation of medicinal roots through pounding is a standard practice in traditional Woodland Indian medicine. Beyond the practical effectiveness of this medical technique and the Yuchi view that all positive medicines available to, and known by them, are gifts from the Creator, the effectiveness of this treatment may hypothetically relate to an association between the leg strength of bears and the name and iconography of this plant in Yuchi plant lore. Although unattested in Yuchi ethnography, such iconographic associations are well documented in Native American medicinal practices.

These uses of *Vernonia* spp. are not reported in published ethnobotanical sources for the Native peoples of the Eastern United States, except

that Howard documented the use of *Vernonia baldwinii* Torr. in an Oklahoma Seminole compound medicine used to relieve a sore back (4). Among the Natchez, *Vernonia* was used in a cure for dysentery and as an astringent (5, 6). Among the eastern Cherokee, *Vernonia glauca* L. is incorporated into medicinal teas (2, 7). Beyond its medical use, bear paw's ceremonial role is culturally unique to the Yuchi. The responsibilities given to the Yuchi poleboys are divided among other, adult officials in the similar ceremonies of neighboring groups such as the Creek, Seminole, Shawnee, and Cherokee. The activities of the poleboys are an important means by which Yuchi ritual knowledge, especially ceremonial plant lore, is transmitted to capable young men.

Having experienced considerable cultural change over the last century, Yuchi people acknowledge and regret the loss of traditional plant lore in their community. Despite this loss, considerable knowledge remains in the custody of Yuchi ritual leaders and elders. These individuals are working consciously and actively to perpetuate this knowledge among an expanding group of community members committed to Yuchi cultural survival. Yuchi elders are also eager to create a record of such traditional knowledge through collaboration with responsible scholars. Yuchi willingness to share insights into their knowledge of the biological world has a long history that is linked to a long-standing interest in making clear to non-Native peoples their linguistic and cultural differences from their Muscogee (Creek) neighbors. Philip Georg Friedrich von Reck's remarkable study of Creek and Yuchi ethnobotany, undertaken in 1736, drives this fact home (8).

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