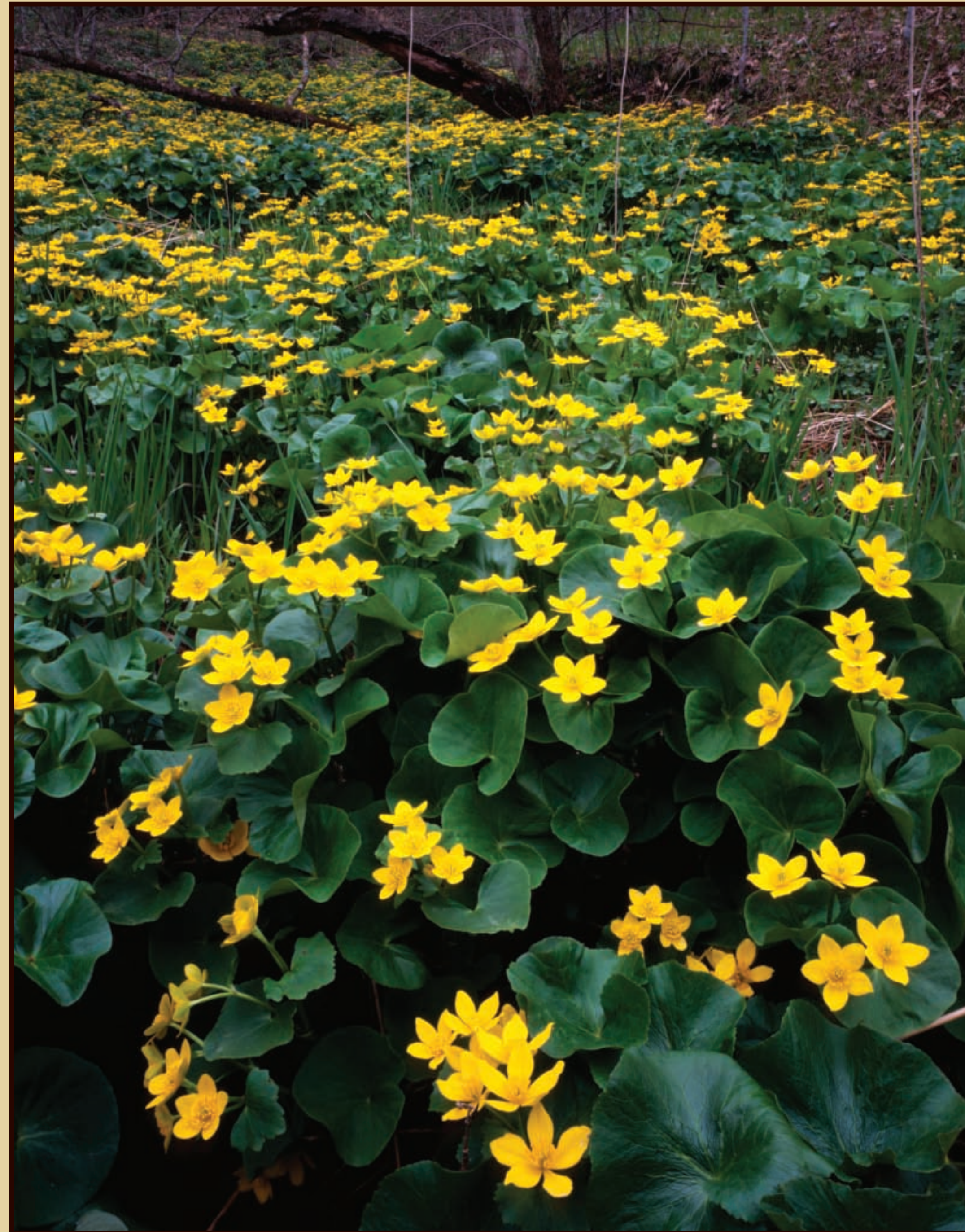


Heritage Plants *of the* Iowa River Valley



An Introduction to the Cultural and Natural History of the Iowa River Valley Corridor

From front

Marsh marigold *Caltha palustris*

Center photo, © Carl Kurtz

The marsh marigold can be found in marshes, woodlands and along waterways. The bright yellow flower of this plant provided a welcoming sight in early spring for both American Indians and early settlers because the plant provided many medicinal and culinary uses. The yellow flowers were crushed and used as a dye by both the Meskwaki and early settlers. The flower buds were pickled and eaten with the leaves as salad by both American Indians and early settlers, and the blossoms were made into a wine by early settlers.

White trout lily *Erythronium albidum*

Top left photo, © Christine Taliga

This plant is found in moist woodlands and river bottomland. It blooms in spring months. The Meskwaki dug up the root bulbs of the plant to eat them raw or cooked. The plant was also used as a treatment for gout.

American lotus *Nelumbo lutea*

Top middle left photo, © Callie Wetjen

This emergent water plant can be found growing in abundance today at the Amana Lily Pond in Main Amana. The plant was primarily used as food, particularly as a type of “potato” favored by the Meskwaki. The shoots of the plant near the rootstock were harvested and eaten like a potato. The shoots have the shape and size of a banana and were strung up to dry for winter usage. The half-ripe seeds resemble chestnuts, and the ripe seeds were boiled or roasted.

Pale purple coneflower *Echinacea pallida*

Bottom middle left photo, © Callie Wetjen

This coneflower can be found in tallgrass prairie and along roadways, blooming in summer months. Named “*ashosikwimiakuk*,” or “smells like muskrat scent” by the Meskwaki, the Meskwaki used the root to treat eczema, cure stomach cramps and cure “fits.” Early settlers also used the plant to treat eczema.

Rue anemone *Anemone thalictroides*

Bottom left photo, © Christine Taliga

The rue anemone can be found in open woodlands and along shaded slopes. It is a member of the buttercup family and both American Indians and early settlers harvested the tubers of the plant for food. The root was also used by American Indians to treat diarrhea and vomiting.

Spring beauty *Claytonia virginica*

Top right photo, © Christine Taliga

This early spring plant blooms in moist open woodlands, and was a welcoming sight for American Indians and early settlers. The tuber roots of this plant were valued for their potato-like bulbs. They were eaten raw or boiled. Leaves of the Spring beauty were eaten like salad greens.

Butterfly milkweed *Asclepias tuberosa*

Top middle right photo, © Callie Wetjen

This showy milkweed plant blooms with bright orange flowers in summer months, and is found in mesic prairies and along today’s roadsides and railroads. The Meskwaki crushed the flowers to make a permanent red dye for their baskets. Early settlers used the plant for medicinal purposes — as an expectorant and to treat lung ailments such as pleurisy and pneumonia. Several parts of the plant are very sweet when cooked and eaten. The flower buds resemble the flavor of peas and the young shoots were cooked by early settlers as a substitute for asparagus.

Bloodroot *Sanguinaria canadensis*

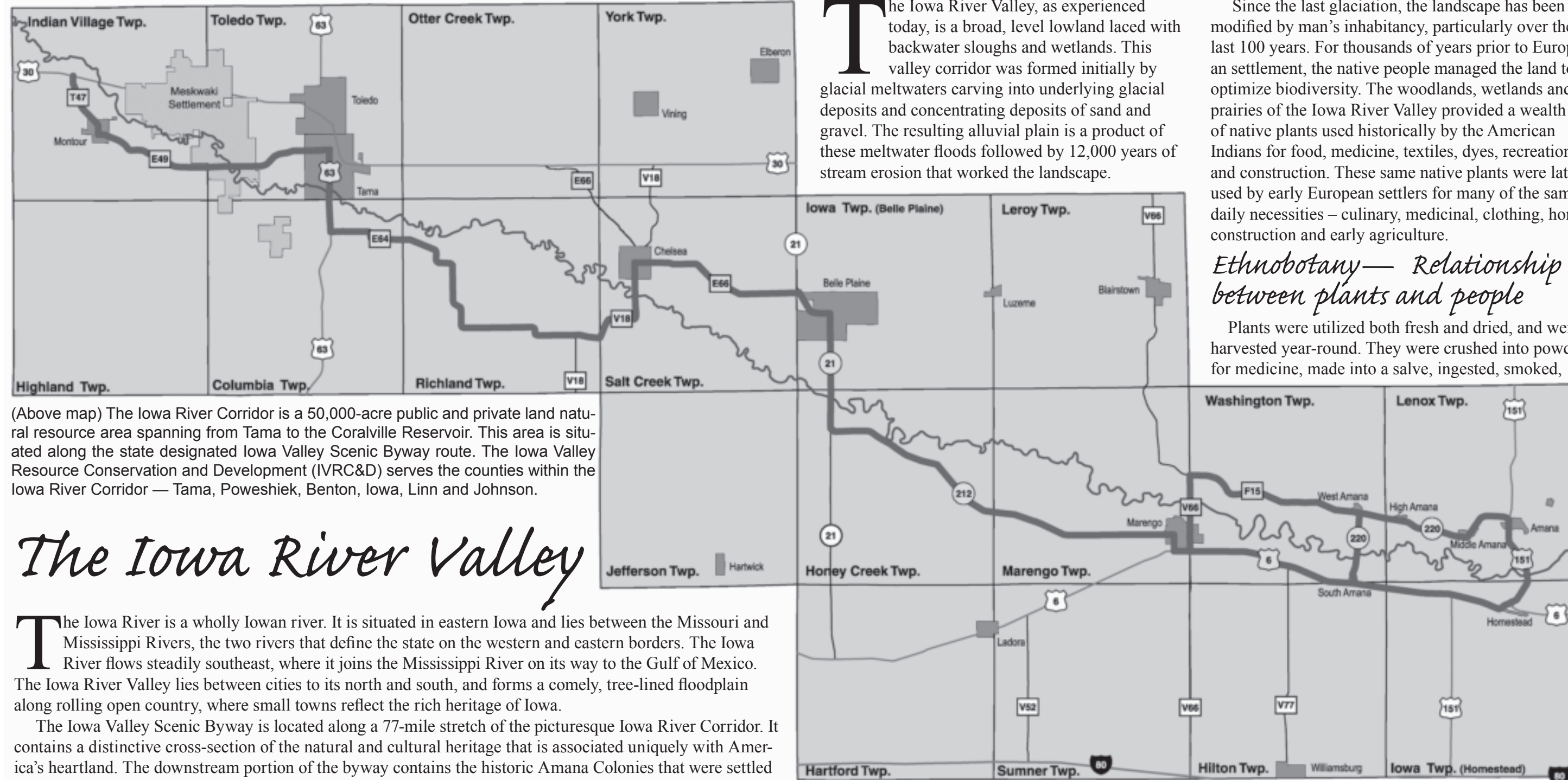
Bottom middle right photo, © Christine Taliga

This plant can be found growing in the woodland understory. It blooms in early spring. The Meskwaki used the root to create a red face paint and to dye baskets and rush mats red. Early settlers also used the plant for dye. By adding oak bark, which contained tannin, it helped set the color to make it more permanent. Early settlers used the plant medicinally — as a sedative, diuretic or as a stimulant or expectorant in cases of bronchitis and whooping cough. Meskwaki used the plant root for treatment of menses, stomach trouble and flux. The root was chewed and the spittle placed on burns to relieve the pain.

New England aster *Aster novae-angliae*

Bottom right photo, © Callie Wetjen

The New England aster can be found in a wide range of environments, including marshes, open woodlands and remnant prairies. The plant was used by the Meskwaki, who smudged the burned plant onto the patient’s skin to revive consciousness.



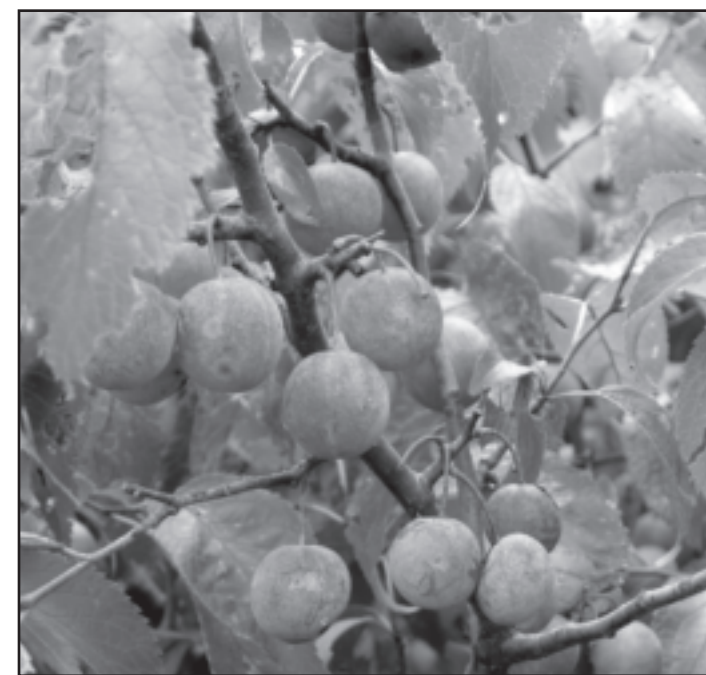
(Above map) The Iowa River Corridor is a 50,000-acre public and private land natural resource area spanning from Tama to the Coralville Reservoir. This area is situated along the state designated Iowa Valley Scenic Byway route. The Iowa Valley Resource Conservation and Development (IVRC&D) serves the counties within the Iowa River Corridor — Tama, Poweshiek, Benton, Iowa, Linn and Johnson.

The Iowa River Valley

The Iowa River is a wholly Iowan river. It is situated in eastern Iowa and lies between the Missouri and Mississippi Rivers, the two rivers that define the state on the western and eastern borders. The Iowa River flows steadily southeast, where it joins the Mississippi River on its way to the Gulf of Mexico. The Iowa River Valley lies between cities to its north and south, and forms a comely, tree-lined floodplain along rolling open country, where small towns reflect the rich heritage of Iowa.

The Iowa Valley Scenic Byway is located along a 77-mile stretch of the picturesque Iowa River Corridor. It contains a distinctive cross-section of the natural and cultural heritage that is associated uniquely with America’s heartland. The downstream portion of the byway contains the historic Amana Colonies that were settled by German immigrants in 1855, and comprise seven villages and 26,000 acres of rich Iowa land. The upstream portion of the byway includes the Meskwaki Settlement. Here, in the 1850s, the Meskwaki chiefs purchased the first tracts of the “beautiful Iowa land” located along the river valley in Tama County, and returned their people to their ancestral homeland. The Iowa Valley Scenic Byway spans three counties, 12 townships and 11 towns and villages, and each community along the byway has a unique culture and history.

The byway corridor, bisected by the meandering Iowa River, is located in the heart of North America’s tall-grass prairie country. It was once covered by thousands of square miles of rolling grasslands that were beset by beautiful flowers of “every brilliant hue.” Such beauty, coupled with the rich black soils that were formed by centuries of deeply rooted prairie plants, attracted early settlers to the bounty of the Iowa River Valley. The present day landscape of the scenic byway is made up predominantly of agricultural land, woodlands and wetlands. The immediate Iowa River corridor and the Salt Creek corridor, which extends to the north, are comprised of forested wetlands that are flooded intermittently.



© IVRC&D

Wild plum *Prunus americana*

Wild plum trees can be found in open woodlands, along timber edges and fence rows. The Meskwaki used the bark of the root to cure canker sores in the mouth. American Indians and early settlers harvested the plums when ripe, and ate the fruit raw, or made plum preserves.

Wild plum jelly

7 1/2 cups sugar
1 box fruit pectin
4 cups wild plum juice
1 1/2 cups water

Measure sugar and set aside.

Stir fruit pectin into juice and water into a large stock pot. The pot must be large enough so that it is not be more than 1/3 full to allow for a full rolling boil. Bring to a full boil over high heat, stirring constantly.

With a wooden spoon, stir in all of the sugar. Continue stirring and bring to a full rolling boil. Boil hard for 1 minute, stirring constantly. Remove from heat.

Skim off foam with metal spoon. Immediately ladle into hot pint jars, leaving 1/8-inch space at the top of the jars. Wipe jar rims and threads. Quickly cover with two-piece lids and screw bands tightly. Place jars on elevated rack in canner. Lower rack into canner. Water must cover jars by 1 to 2 inches. Cover; bring water to gentle boil. Process 10 minutes. Remove jars and cool completely. Store in cool, dry place.

The Iowa River Valley, as experienced today, is a broad, level lowland laced with backwater sloughs and wetlands. This valley corridor was formed initially by glacial meltwaters carving into underlying glacial deposits and concentrating deposits of sand and gravel. The resulting alluvial plain is a product of these meltwater floods followed by 12,000 years of stream erosion that worked the landscape.

Since the last glaciation, the landscape has been modified by man’s inhabitancy, particularly over the last 100 years. For thousands of years prior to European settlement, the native people managed the land to optimize biodiversity. The woodlands, wetlands and prairies of the Iowa River Valley provided a wealth of native plants used historically by the American Indians for food, medicine, textiles, dyes, recreation and construction. These same native plants were later used by early European settlers for many of the same daily necessities — culinary, medicinal, clothing, home construction and early agriculture.

Ethnobotany— Relationship between plants and people

Plants were utilized both fresh and dried, and were harvested year-round. They were crushed into powder for medicine, made into a salve, ingested, smoked,



May apple punch

Using a juicer or food processor, crush and strain the seeds from enough raw fruit to make one ounce of juice. Combine the liquid with seven ounces of fresh lemonade. Stir and pour into glasses filled with ice.

© Christine Taliga

May apple *Podophyllum peltatum*

The may apple thrives in the woodland understory. The yellow, plum-sized fruit can be found hiding beneath two large, umbrella-shaped leaves, and was eaten raw or cooked. The root was used medicinally by the Meskwaki to treat snake bite and rheumatism, and by early settlers to treat children for “summer diarrhea” by purging.

steeped in tea, eaten in stews, syrups and sauces, woven into mats and baskets, used for bedding, thatched as roofs and crushed or boiled for textile dyes and face paints.

As native plant knowledge was passed down from generation to generation and exchanged among tribes and ethnic cultures, and new plant uses were discovered, more and more parts of the plants were utilized— roots, tubers, leaves, barks, greens, flowers, seeds, berries, nuts, fruits, fibers and juices.

Harvesting the plants

The vital connection between the American Indians and the early settlers of the Iowa River Valley and the valley’s diverse ecosystem was a critical balancing act. People were dependent on the healthy growth and diversity of the tall grass prairie ecosystem.

Whether the plant was harvested for medicine, food, textiles, dye, recreation or construction, consideration was given to the sustainability of the plant and its value to the people. While ample harvesting could proliferate certain plant species, such as the May apple, shown above; that same harvesting could harm other plant species, such as the yellow lady’s slipper orchid, *Cypripedium pubescens*. Just as generations passed down to their children their knowledge of plant medicines, basketry lessons and culinary recipes, they passed down a deep respect and understanding of nature and conservation.

Meskwaki medicine men and women understand that there is a proper season for gathering the various medicines, when the medicinal principles are the most active and know also that this period of time may be short, of only two or three days’ duration... There are certain rules about gathering these medicines, which they still follow religiously. One would think that when there is sufficient of the materials to last them for a long time, that they would lay in a supply, but such is not the case. They have rules about how much they must have at any one time and they will not exceed those amounts. (From *Ethnobotany of the Meskwaki Indians* by Huron H. Smith, Cannon Printing Co., Milwaukee, Wis., 1928.)

Plant lore through the ages

Particular plants often held unique characteristics that were readily identified by different cultures and generations for similar reasons.

For example, Cord grass, *Spartina pectinata*, is found in low places, like wetlands, river bottoms and roadside ditches. The coarse, tough leaves of cord grass have a unique trait of repelling water.

The grass was used by both American Indians and early pioneers for thatched roofs. Later, early farmers placed cord grass, which some referred to as “slough grass,” over their cut hay piles or corncribs to repel rain water until the hay or grain could properly dry. That agricultural practice was passed on through generations of Iowa River Valley farmers as late as the 1940s.



© Carl Kurtz

Rose mallow *Hibiscus militaris*

With its large, showy pink blossoms, rose mallow stands out among its peers in the river bottoms and wetlands, where it thrives. The leaves and roots were used in the treatment of dysentery, lung and urinary ailments. The petals were used by early settlers as polishing cloths for shoes.



© Christine Taliga

Sensitive fern *Onoclea sensibilis*

This delicate fern can be found in wooded swamps, marshes and along shaded waterways. It was used medicinally by some American Indian tribes to give relief to nursing mothers with sore breasts and to stimulate the flow of milk.



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