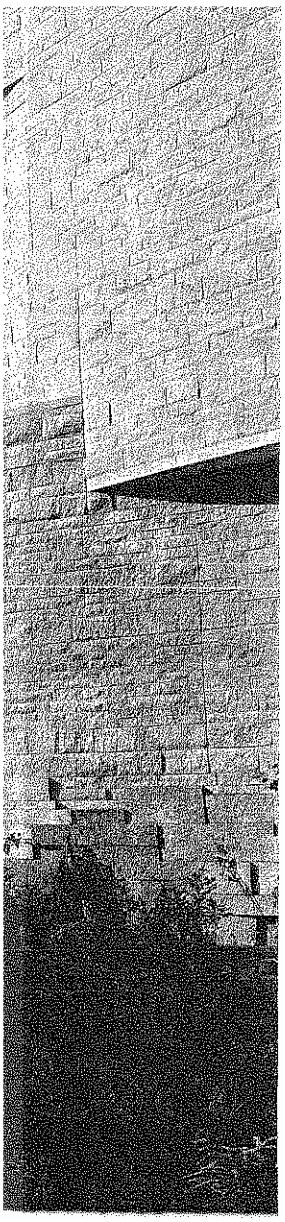

THE LAND HAS MEMORY

INDIGENOUS KNOWLEDGE, NATIVE LANDSCAPES, *and the* NATIONAL MUSEUM OF THE AMERICAN INDIAN

Edited by
DUANE BLUE SPRUCE
and
TANYA THRASHER

2008

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STORIES OF SEEDS AND SOIL

GABRIELLE TAYAC & TANYA THRASHER

Every plant, animal, and stone has a story to tell. This concept can be understood through the more than 27,000 trees, shrubs, and herbaceous plants; 40 massive boulders; and 4 Cardinal Direction Marker stones placed throughout the National Museum of the American Indian's landscape. All were carefully selected, blessed with prayer and song, transported over thousands of miles, and thoughtfully re-oriented on the museum's four-acre site. These living beings traveled by boat, helicopter, flatbed truck, and tractor-trailer, and when they arrived at the museum, they were tearfully and joyfully welcomed as long-absent relatives.

All seeds have stories. The evolution of stories, knowledge, and memories of our ancestors are embedded in them. We take care of them like they took care of us. . . . We prepare them for their journey.

Donna House (Diné/Oneida), 2004

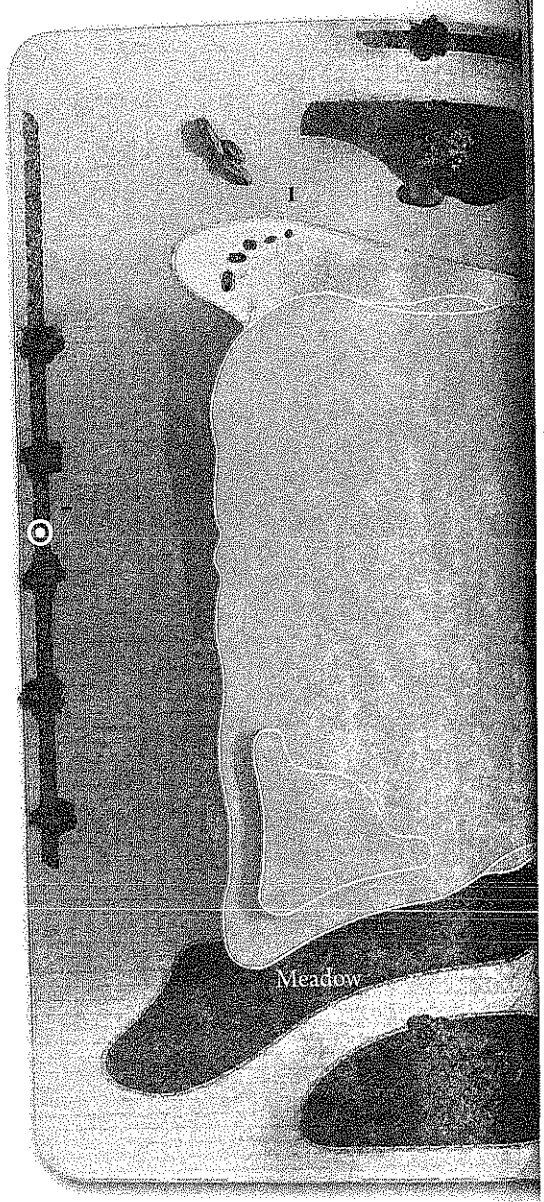
Four hundred years ago, the Chesapeake Bay region abounded in forests, meadows, wetlands, and Algonquian peoples' croplands. This land, as all of the Americas, can be further understood through indigenous peoples' cultural perspectives. Over millennia, intense observation and practical experience formed deep knowledge of place. The specific indigenous people of the area now known as Washington, D.C., were called the Anacostans, a tribe belonging to the Algonquian-speaking Piscataway

nization; however, related Algonquian peoples — including the Nanti-
coke, Piscataway, and Powhatan — maintain a distinct relationship with

In the language of the Algonquian peoples who once lived on this land, wingapo, *or "welcome." Welcome to a Native place.*

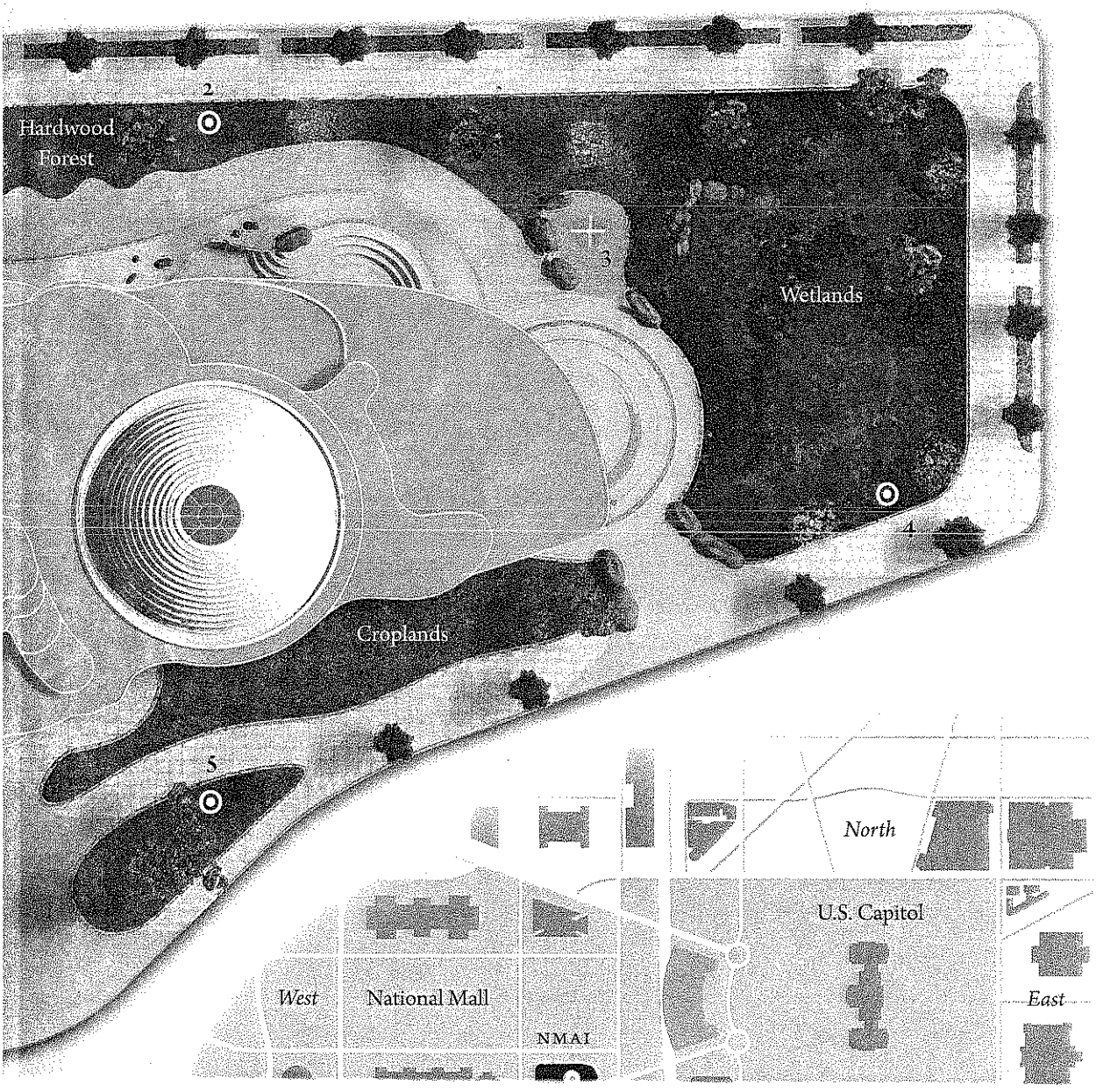
Entering the museum grounds, visitors immediately encounter the indigenous plants and voices that existed here 400 years ago. The sounds of the city soon fade, replaced by the cacophony of nature: water crashing onto boulders and flowing along the forest's edge; ducks and birds nesting among the wetlands reeds; and the rustling of tall grasses in the meadow.

This site plan shows the four environments that encircle the museum and a few of the many exterior design features that represent Native peoples' connection to the land and respect for the Four Directions. The following plant-based information is a synthesis of ideas based on generations of traditional knowledge and practice; under no circumstances should it be considered a guide to the use of herbal medicine.



KEY

1 The northwest entrance features the Grandfather Rocks, birch trees, and a cascading waterfall.
2 Northern Cardinal Direction Marker
3 The museum's offering area is a place for quiet reflection.
4 Eastern Cardinal Direction Marker
5 Southern Cardinal Direction Marker
6 The south entrance features a spiral moon pattern in the pavement.
7 Western Cardinal Direction Marker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Hardwood
Forest
3
Wetlands
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Croplands
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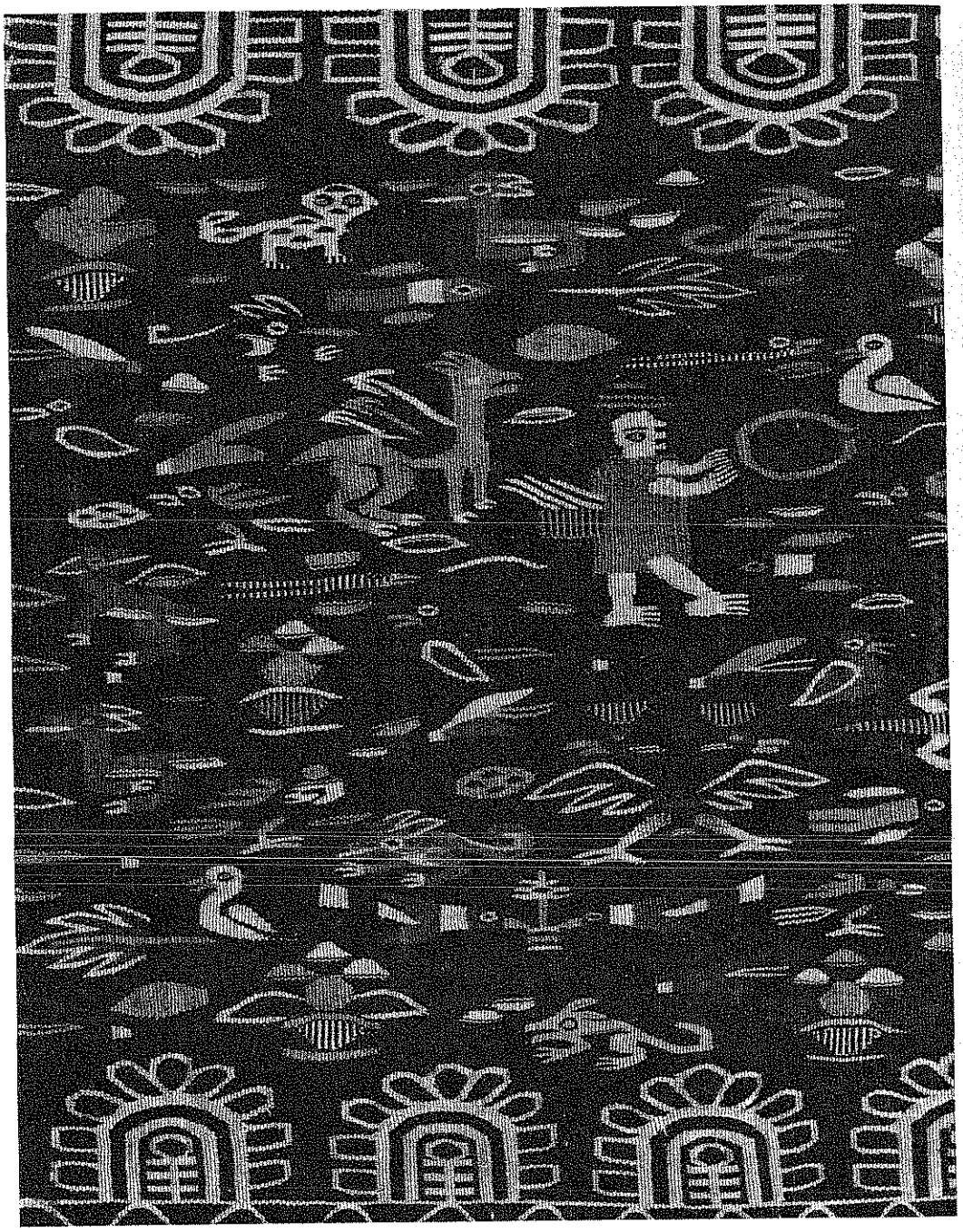
North
U.S. Capitol
West
National Mall
NMAI
East
South



Incan woven manta, Bolivia, 16th c. 5/3773

the land to this day. These peoples gained a deep understanding of the land through observation of the natural world.

Although the museum's diverse plantings specifically recall the indigenous environment and culture of the Algonquian peoples prior to European contact, the four environments are presented with sensitivity to the enduring connections that Native peoples throughout the Americas have to their homelands. Native peoples do not merely adapt to a natural environment but traditionally manage their ecosystem in a way that is consistent with their philosophical worldviews. For example, Native peoples encouraged the growth of a variety of plants in the same area, a technique known as biodiversity. Biodiversity is just one concept that was used to restore the museum grounds to their ancestral form.

The Diné (Navajo) people of the Southwest articulate an idea that profoundly informs NMAI's landscape and architecture. In the Diné language, *hózhó* means the restoration of beauty and harmony, which was a guiding principle of Donna House's landscape-design work at the museum. Rigorous botanical research and numerous consultations with Native peoples went into the effort to bring back the Algonquian environment.

The towering glass doors at the museum's main entrance — etched with sun symbols — face the east and greet the rising sun, as do many traditional Native homes. Most Native peoples follow a solar calendar, which indicates the proper time to hunt, plant, harvest, and conduct ceremonies. The changing seasons have long been interpreted and honored as a sacred cycle of life, and keen observation of these cycles, especially the solstices and equinoxes, has been considered necessary to ensure the seasons' continuation.

Through strict observation of nature, Native peoples learned the con-

of the sun and moon at the museum's main entrances and in male and female plants in each environment. In concert with this concept, most

Goyathlay (Geronimo) with wife and family in melon patch, Fort Sill, Oklahoma, ca. 1895. N37517

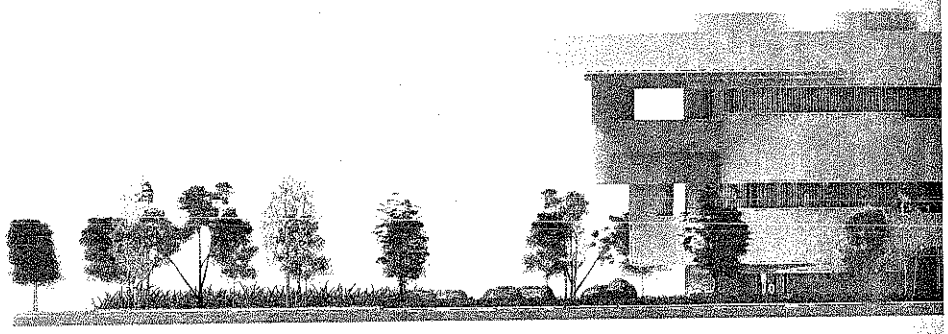
Native societies believe that living on the land involves reciprocity — a process of give-and-take. Humans are generally considered to be responsible stewards of land rather than owners. The Kanaka Maoli (Native Hawaiians) express this idea through the philosophy of *aloha 'aina* or "love of the land." Similar to many other Native peoples following ancestral principles, the Kanaka Maoli judge the merit of their actions by whether or not they show proper respect for their environment and compassion for the land.

Many Native peoples have developed philosophies about the connections between all entities in the universe. Humans are not generally believed to dominate the world in most traditional Native teaching but instead are related to all other beings. The Lakota, for example, affirm their prayers with a phrase that shows their understanding of this idea: *mitakuye oyasin*, meaning "all my relations." In many Native languages, nonhuman beings — either living or inanimate — are referred to in kinship terms. These ideas come from the sacred oral narratives passed on from one generation to the next.

Upland Hardwood Forest

The grouping of trees, plants, and shrubs on the museum's north side is known as an upland hardwood forest. The more than thirty species of trees reflect the dense forests that exist in the Blue Ridge Mountains, along the Potomac River, and elsewhere. Before European contact, Virginia and Maryland were heavily forested with birch, alder, red maple, beech, oak, witchhazel, and staghorn sumac, among others.

The Nanticoke and other communities relied upon the forest for a variety of foods and medicines, including the willow tree, which was used to create aspirin. Now the most widely used drug in the world, aspirin was made from the tree's inner bark, which Native peoples boiled or powdered.



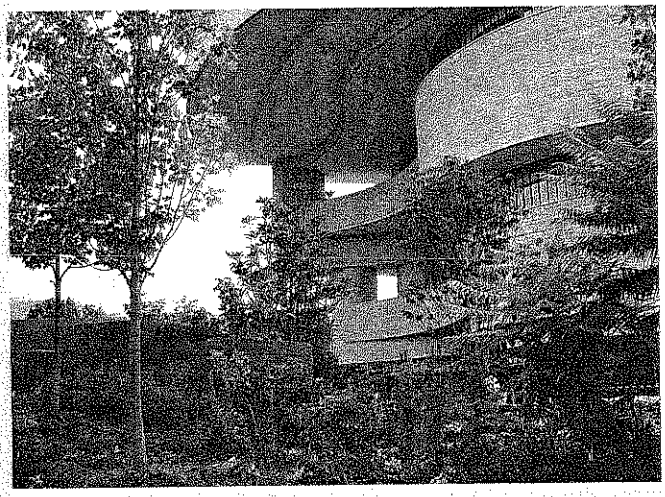
The hardwood forest spans the museum's north side.

Eastern Redcedar

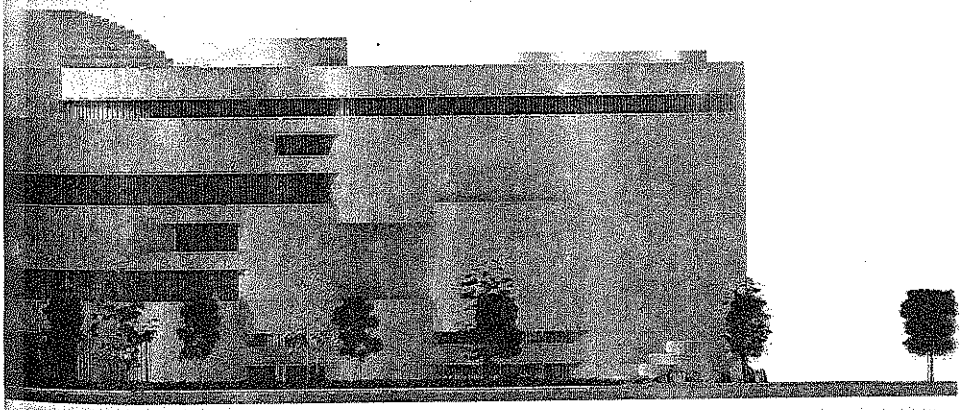
Eastern redcedar is connected to the spiritual traditions of many Native communities, including the Kiowa and Lenape (Delaware). The tree's unique red, aromatic heartwood and evergreen leaves are valued for ceremonial and medicinal uses. Native peoples make flutes and other items from the beautiful wood, and they burn the tree's leaves, inhaling the smoke to both purify themselves and help cure head colds.

Native peoples discovered such medicines in many ways, including the observation of animals. For example, they saw that bears rubbed certain plants on their fur, and they learned how to use such plants to treat a variety of human illnesses.

This lush environment is comprised of three distinct types of forest plantings. The three plant communities all require different levels of moisture, ranging from xeric (dry) to mesic (moderate) to hydric (abundant).



Tuliptree, southern magnolia, and dogwood trees provide shade for sumac and cardinal flower in NMAI's woodlands.



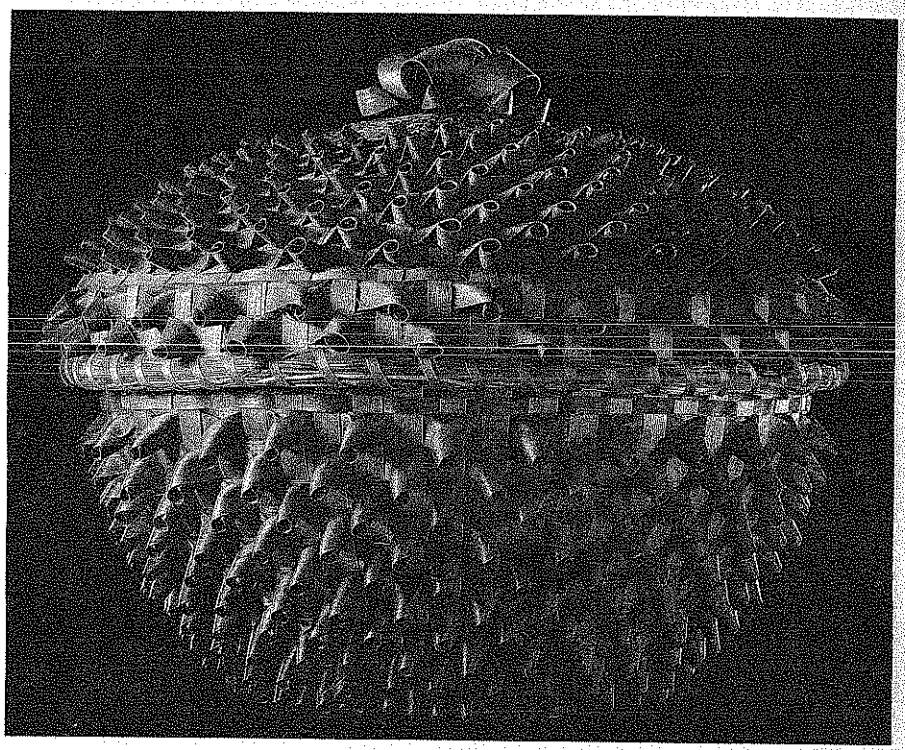
Witchhazel

A popular commercial remedy and facial astringent throughout the world today, witchhazel was first harvested by Native peoples in the eastern

stop bleeding. They also used witchhazel to treat skin irritations, [illegible] insect bites and made a tea with it, often mixed with maple syrup, to treat sore throats.

Strawberry

A member of the rose family, the strawberry is an excellent source of antioxidants and the only fruit with seeds on the outside rather than the inside. Many tribes, including the Haudenosaunee (Iroquois) and Wampanoag, crush the berries to make a refreshing drink and mix them with cornmeal to make strawberry bread. Native peoples greatly value the sweet fruit and have many stories of how it came to be. The Cherokee relate the following story about the creation of the strawberry: "Long ago, Man and Woman lived together and were very happy. Yet one day, the couple argued, and Woman left in haste. Taking pity on the husband, the Sun placed raspberries, blueberries, and blackberries in her path, in an attempt to stop her. Only the Sun's final gift of strawberries was sweet enough to ease the woman's anger and reunite the couple."



Strawberry basket, ca. 1985. Made by Mary Adams (Akwesasne Mohawk, b. 1917). 26/3867

Sassafras

Known as *pakwani-misi* to my people, the Shawnee, the sassafras tree is a significant, living link to our community history. Relocated to Oklahoma Territory in the 1800s from their original lands in the Ohio Valley and West Virginia, our ancestors were forced to leave their villages and familiar food sources. Traditional ways were compromised, but several Shawnee groups maintained traditional practices, including the harvesting of sassafras. This beautiful and distinctive tree, which also happened to grow in the new northeast Oklahoma environment, became an important tie to our original homelands, ancestors, and way of life.

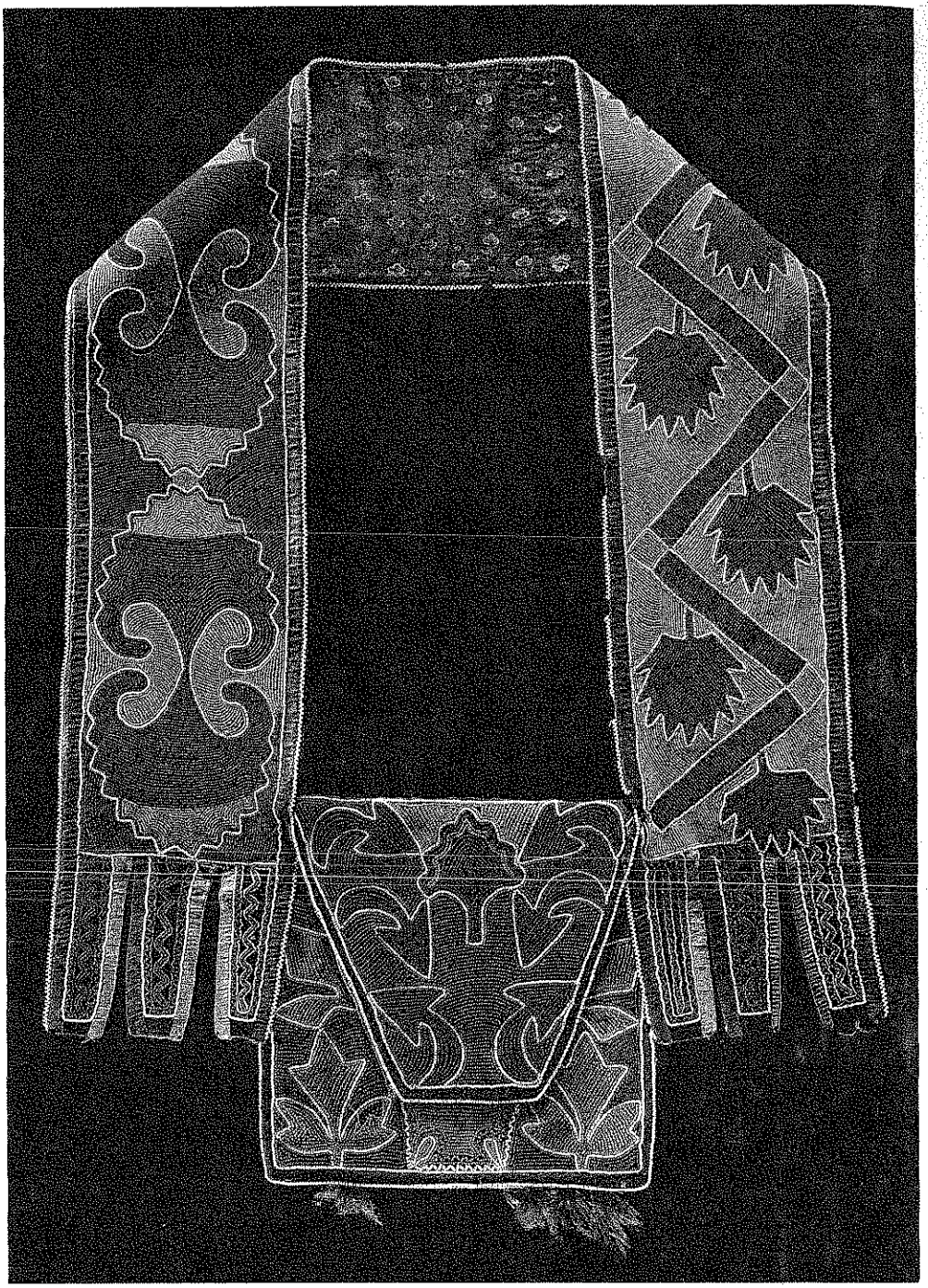
Before the relocation, the Shawnee and other tribes taught settlers how to harvest and use sassafras, and demand grew quickly. In the 1700s, it became one of the largest exports to England, second only to tobacco. Once it gained popularity, sassafras was sold commercially as a flavoring in tea and as one of the first soft drinks — root beer.

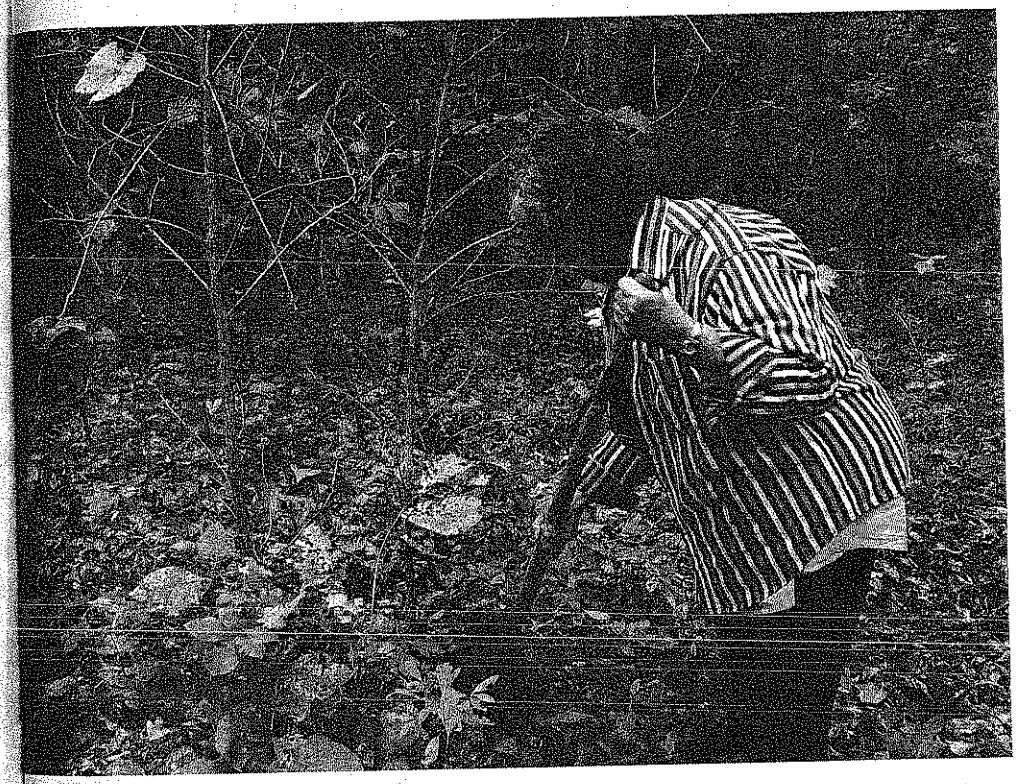
For centuries, Native peoples used the bark, roots, and leaves of the sassafras tree as medicine and flavoring in food and beverages. The Delaware, Nanticoke, and Seminole, among many other tribes, used sassafras as a blood purifier, a poultice for bee stings, and an eyewash. The Choctaw of Louisiana and Mississippi taught settlers to dry the leaves and grind them into a powder, now known as "filé," a pungent flavoring for soups and gumbos.

All three Shawnee groups (Eastern, Absentee, and Shawnee) continue to harvest sassafras today, drinking tea made from the root bark to remove impurities from the blood. I was taught to gather the roots and bark of the sassafras when the sap runs down the tree (in the fall or winter), when the [illegible] the ground is the strongest. When taken in the spring, [illegible] the winter, the tea [illegible]

My great uncle, Jasper Milhollin, used to drink sassafras tea to help with

Shawnee bandolier bag with sassafras leaf design, ca. 1830. 10/3133





Vivian Gokey (Eastern Shawnee) gathering sassafras in Oklahoma, 2004. Photo courtesy Cathleen Osborne-Gowey (Eastern Shawnee).

migraine headaches. I have also learned to harvest the plant in the proper Shawnee way: never removing the smallest or largest plant, asking permission, and leaving an offering (such as a coin or special rock) to the plant's spirit. Like the Cherokee teachings, the Shawnee believe that you must pass over four families of the plant you seek and only gather from the fifth, ensuring that it will continue to flourish for future generations.

—RENÉE GOKEY

Wetlands

The museum's diverse wetlands area — and the ducks, squirrels, and dragonflies that make it their home — represent the original Chesapeake Bay environment prior to European settlement. Native communities of this region harvested the roots of cattails and yellow marsh marigolds for food during the winter and early spring, when root vegetables and paw-paw fruit were scarce. Cypress trees were prized for their usefulness in making dugout canoes. River birch, swamp milkweed, pond lilies, silky willow, and wild rice abounded in the dense marshes, as they do in the museum's natural habitat.

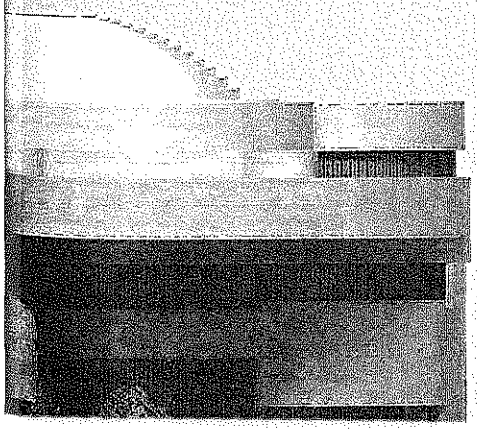
River birch bark.

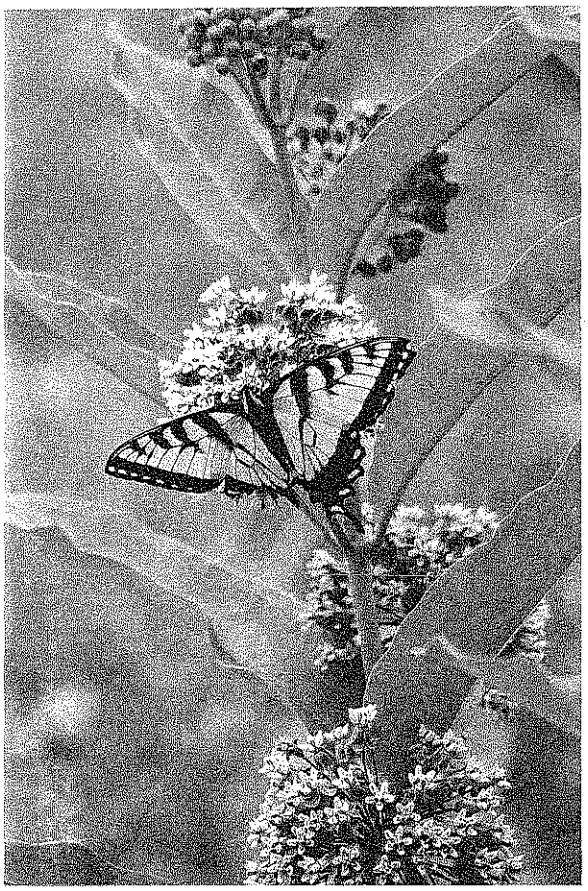
Native peoples of the Chesapeake made full use of resources in the wetlands, without draining or exploiting the waterways. Reeds were woven into mats and made into cordage for nets. Massive oyster beds grew in the river, and oysters were roasted to provide food throughout the seasons. While severely decimated during the nineteenth and twen-

The museum's east entrance faces the wetlands.

Cattails and cardinal flower in NMAI's wetlands.

tieth centuries by overfishing, pollution, and erosion, the bay is making some recovery due to human efforts to restore a natural balance to this rich ecosystem.





Swamp milkweed.

Southern Bald Cypress

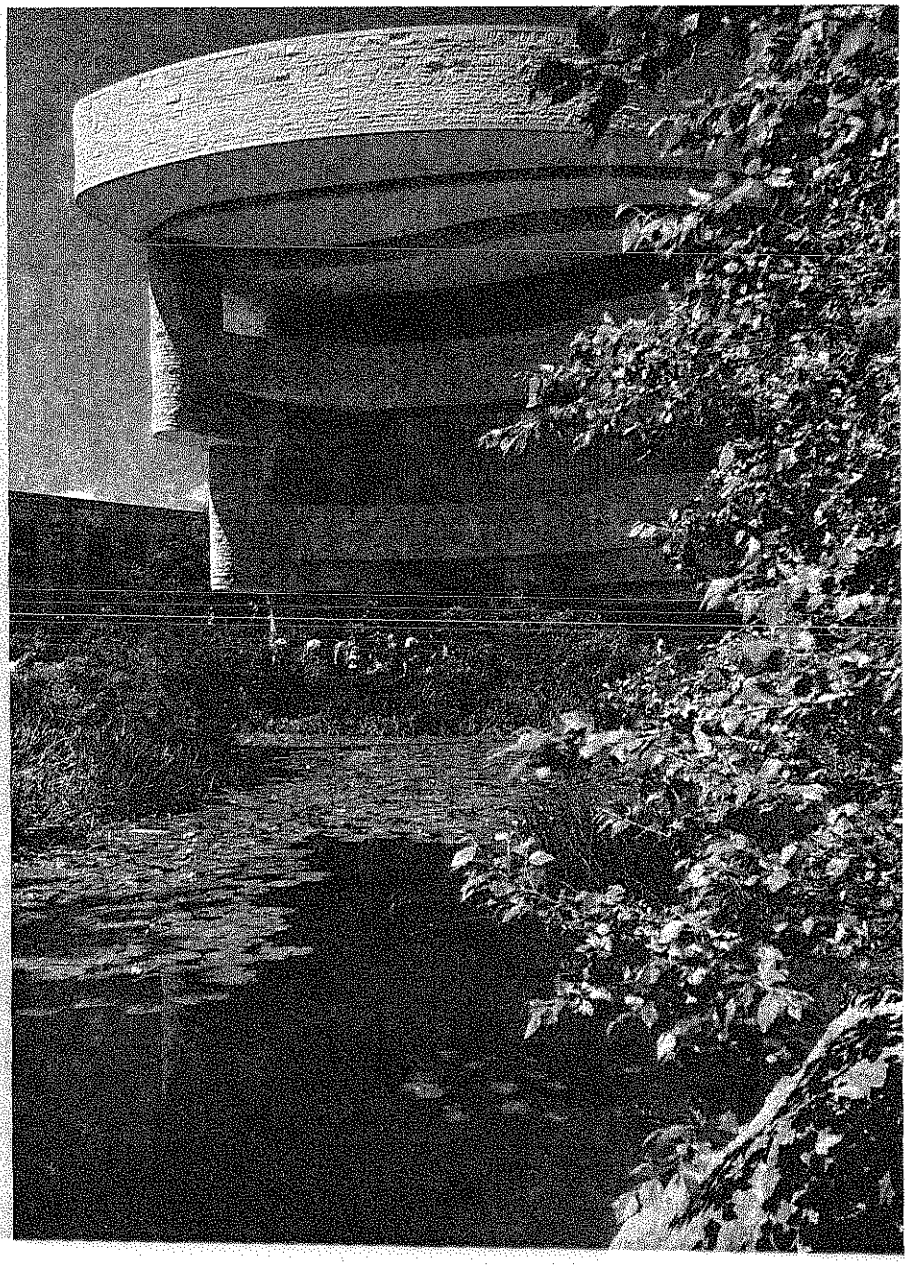
In the middle of the museum's wetlands, you can see the entire life cycle of the unusual and long-living southern bald cypress tree. A fallen trunk was placed in the wetlands to evoke an authentic wetlands environment, and a young cypress has begun to grow out of the stump of the fallen tree. The Choctaw used the tree's bark to make cordage, or thick ropes, and communities such as the Piscataway favored the cypress for canoe and paddle making.

Swamp Milkweed

Distinguished by its scarlet, hourglass-shaped flowers and white sap, the swamp milkweed is a beautiful wetlands plant harvested by Native tribes. The Menominee gathered the plant "heads" when in full bloom and added them to soup or stored them for winter use. The Sac and Fox used swamp milkweed root in a strengthening bath, and they made twine, fishnets, and straps from the plant's fibers.

Broadleaf Cattail

One of the most well-known wetlands plants, the cattail contains ten times the amount of starch as potatoes — an important source of energy. In addition to using the plant for food, Native peoples used its "fluff" to insulate footwear or bedding, as well as to pad a baby's cradleboard. The Mi'kmaq, Paiute, and Ho Chunk, among many other tribes, used twisted strands of cattail leaves to make thick cordage that was then woven into strong, weather-proof mats for house or floor coverings or fashioned into toys, dolls, and duck decoys.



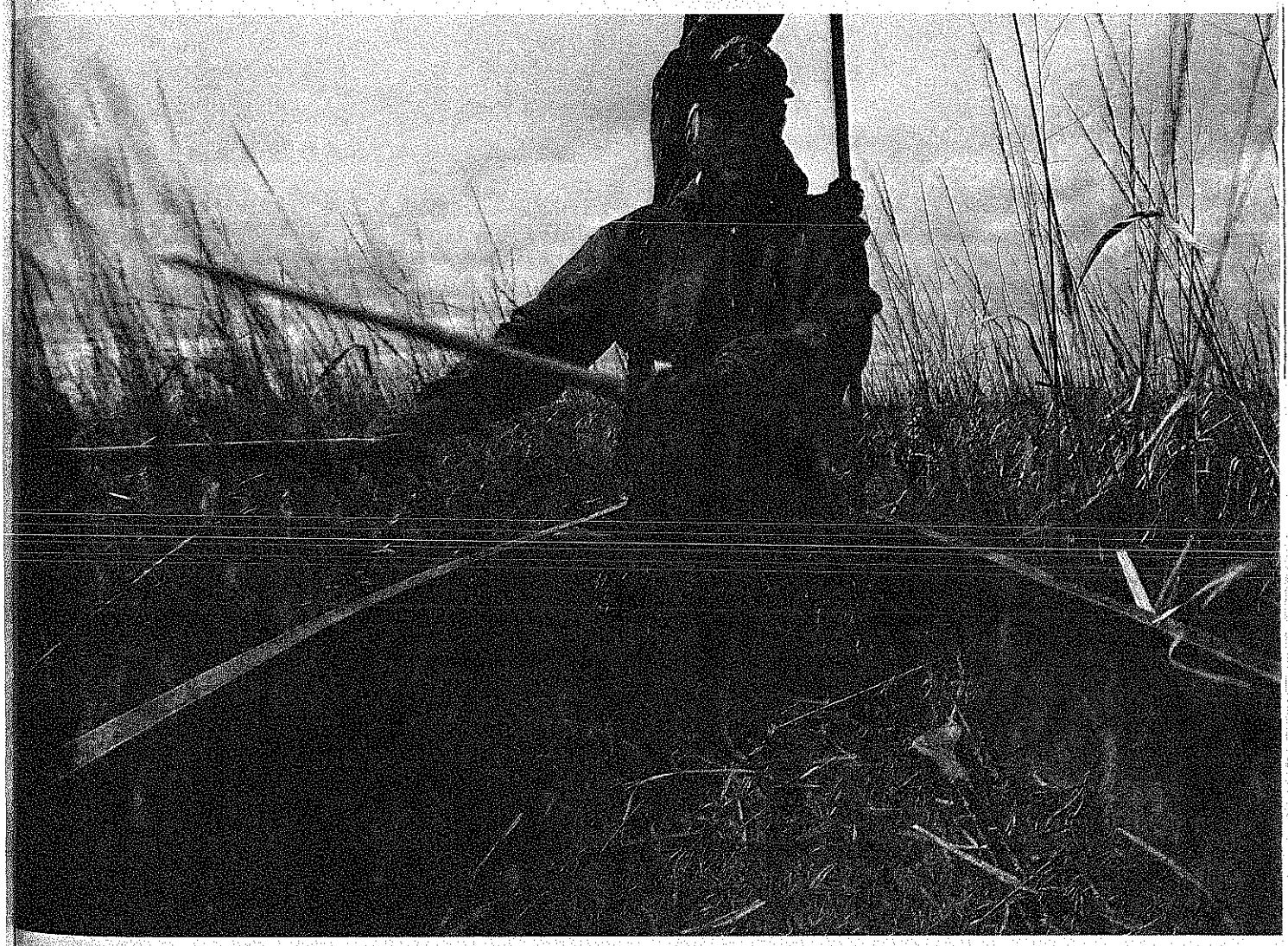
Cypress tree and water lilies in NMAI's wetlands.

Wild Rice

According to the oral tradition of the Anishinaabe (Ojibwe), wild rice is an important part of the community's origin story and continues to be a central element in ceremonies and feasts. Known as *manoomin*, wild rice is a sacred food given to the Anishinaabe after a great migration long ago. Following a prophecy that instructed the people to move west until they reached a place "where food grew on water," the Anishinaabe migrated from their original homelands along the East Coast. Discovering *manoomin* growing on the water in the Great Lakes, the people knew they had reached their new home.

A grass that grows eight to twelve feet tall in swiftly moving water, wild rice is harvested in the Great Lakes region during the month of September, known by the Anishinaabe as Manoominike Giizis or the Wild Rice Moon. In tribal communities, including those in Louisiana and South Carolina, wild rice is harvested traditionally, following strict protocols. Two people harvest the grains together, one using a long pole to direct the canoe or boat and the other using two smooth sticks, or "knockers," to bend the sheaths of rice over the canoe and gently knock the ripe grains from the top of the plant. Not all of the rice ripens at the same time, so several trips are required during the harvesting season. Some of the ripe grains fall into the water or are left to reseed, ensuring a continued crop the following year.

After harvesting, the rice is sun-dried and parched in large kettles to loosen the hull of the grain. To fully separate the delicate grain from the hull, a process known as "jigging," the rice is placed in a bucket or skin-lined pit, in which a "jigger" walks about in soft-soled moccasins. The loosened hulls and grains are placed in a birch bark winnowing tray and gently tossed, so that the heavy rice falls to the bottom and the papery hulls blow away. Rice is stored in baskets, bags, or birch bark containers known as *makuks*.



Using traditional harvesting techniques of their Anishinaabe (Ojibwe) community, Gene Goodsky (seated) and Frank Porter gather wild rice on Nett Lake in Minnesota, 1994.

a rich, gray-brown color.

—JOSÉ MONTAÑO

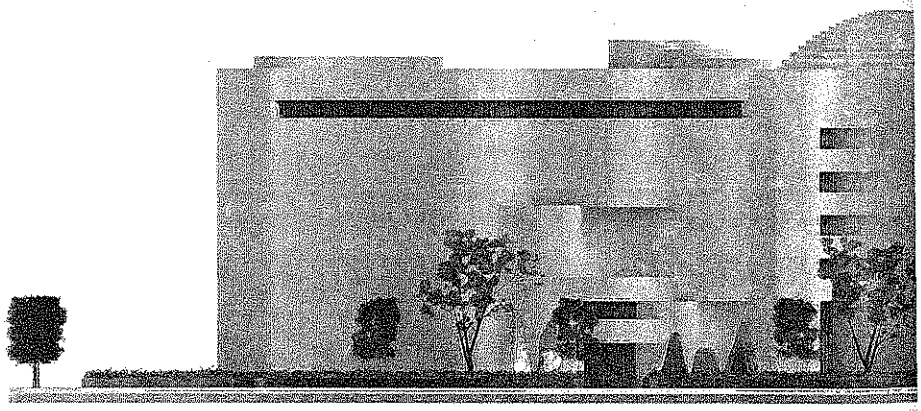
Traditional Croplands

Agricultural Gifts to the World

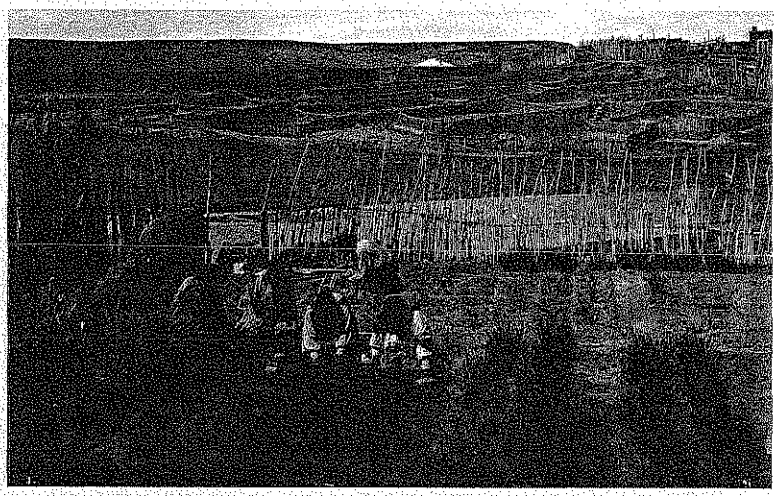
About 60 percent of the world's diet today is derived from foods indigenous to the Americas, such as potatoes, chilies, tomatoes, and even chocolate. The museum's traditional croplands incorporate the irrigation and planting techniques of Native peoples that revolutionized agriculture around the world. Expert farmers, Native peoples encouraged the growth of many plants together, which promoted healthier crops and resulted in a greater variety of medicinal plants.

Long before 1492, Native peoples across the Americas had cultivated more than 300 food crops, and farming was an integral part of their lives. Native farmers practiced a variety of planting techniques, including crop rotation, which helped to rest and restore the soil to protect topsoil from erosion and to help conserve moisture. Ancient Puebloan peoples allowed edible weeds such as amaranth and mustards to grow wild among their crops, and today, the Hopi encourage weed growth around corn plants to prevent wind erosion.

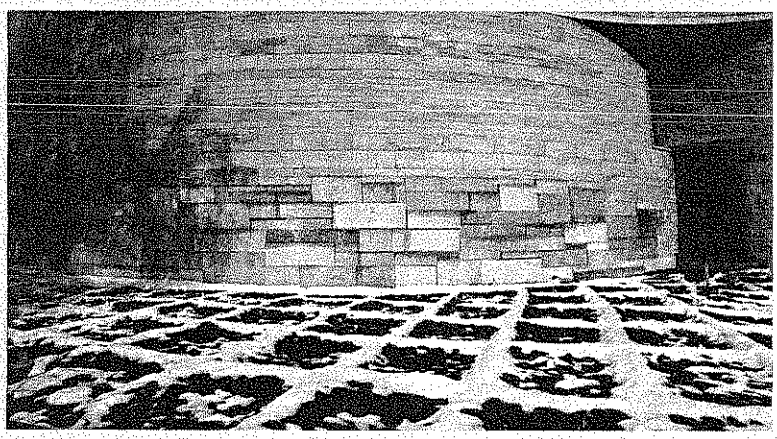
During the winter months, the museum's croplands include a waffle garden, a traditional dry-farming method developed by the A:shiwi (Zuni) peoples of New Mexico. From above, these small garden plots



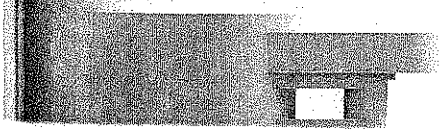
The croplands area follows the curves of the south façade.



View of Zuni "waffle" gardens, Zuni Pueblo, New Mexico, 1919.
P11433



Wintertime waffle garden in NMAI's croplands.



look like waffles, with recessed squares of soil that retain moisture. Waffle gardening makes optimal use of limited water resources in a semi-arid environment.

The Three Sisters

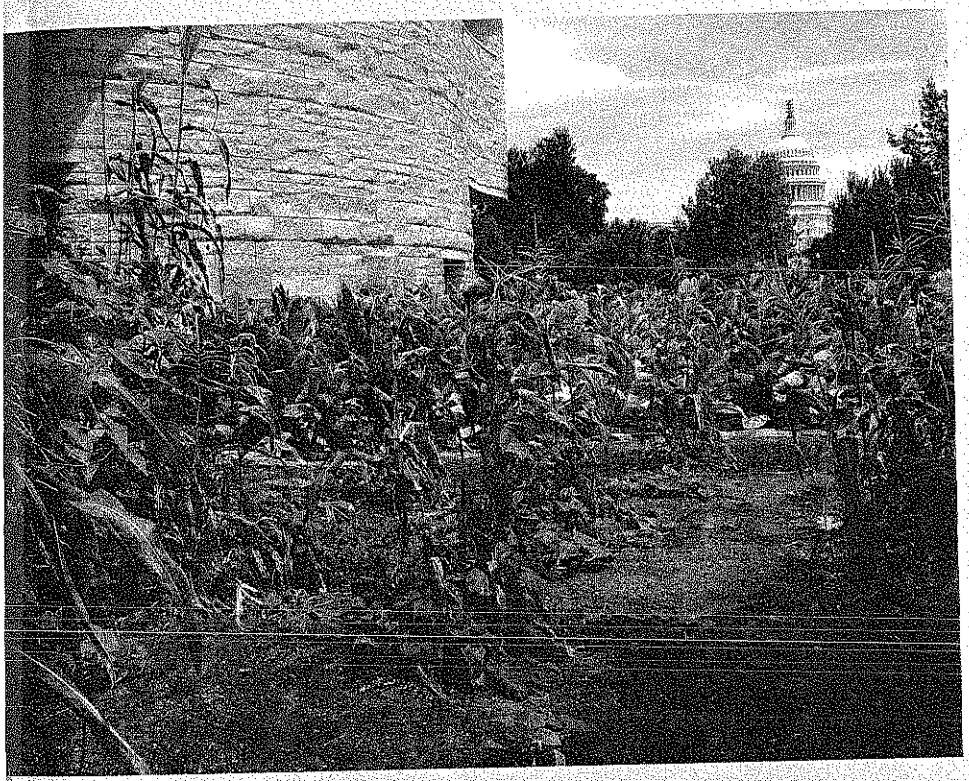
Known by many tribes as the "Three Sisters" or *tres hermanas*, corn, beans, and squash are planted together in a way to enhance each other's growth and to replenish the soil — an ingenious technique called companion planting. The tall stalks of corn provide a natural trellis for the beans; the beans take nitrogen from the air and put it into the soil, feeding the corn, bean, and squash plants; and the squash plant's large, low-lying leaves protect the roots and soil. When eaten together, they provide a fairly complete diet — corn has carbohydrates and amino acids, beans have protein, and squash has vitamin A.

Native American Astronomy

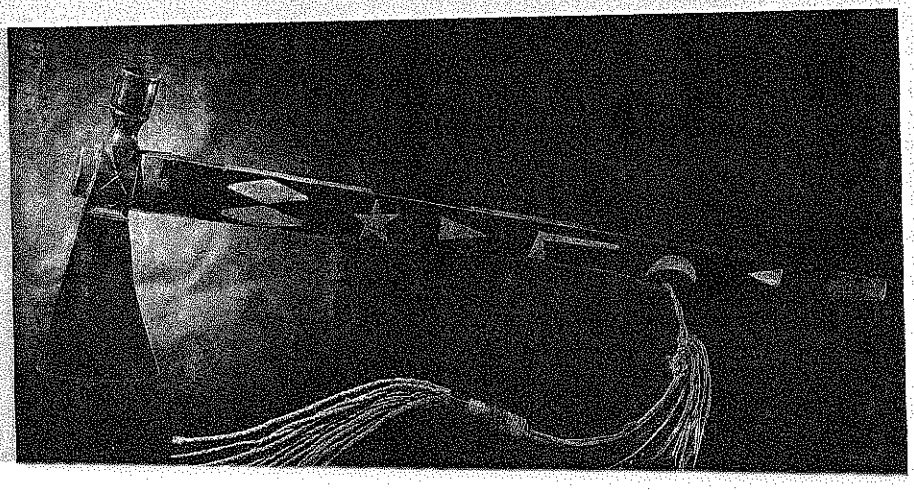
Indigenous societies have engaged in celestial study for a long time. The ancient Mayan pyramid, Chichén Itzá, is aligned on the summer solstice to capture light in the form of a serpent. A more contemporary example can be found among Native Hawaiians, who have revived an ancestral technique of noninstrumental navigation using stars and horizon lines on transoceanic journeys. The alignment and architectural design of NMAI pay respect to this continuous knowledge building with the universe.

The pattern embedded into the paving stones of NMAI's Welcome Plaza represents five planets — Mercury, Venus, Mars, Jupiter, and Saturn — the sun, and the moon in their positions at sunset on the museum's birthdate, November 28, 1989. Polaris, the North Star, sits at the center of the plaza. The paths of the planets across the sky on this date begin on the eastern side of the plaza and follow an arc to the west, marking the points of rising and setting.

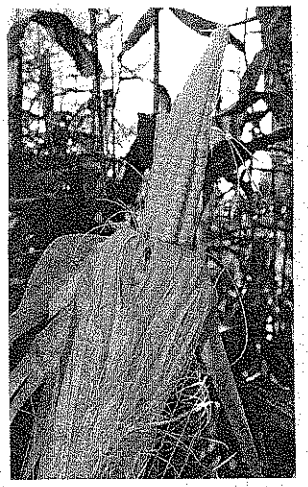
Native peoples across the Western Hemisphere rely upon ancestral



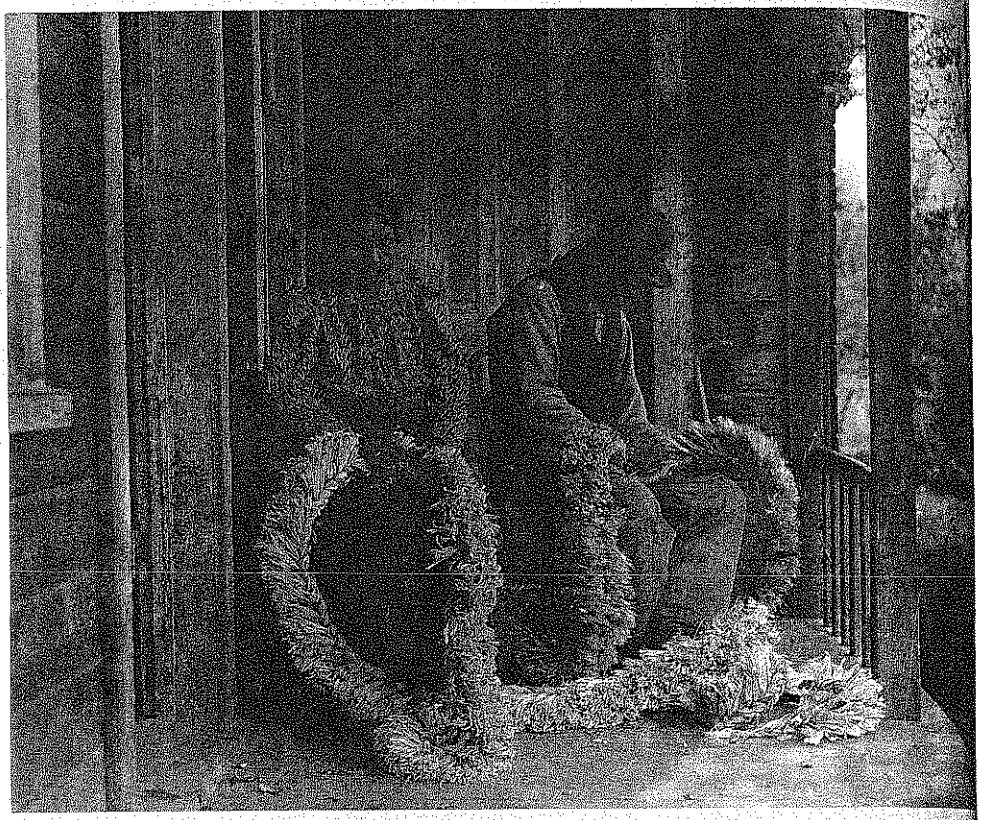
The "Three Sisters" plants flourish in NMAI's croplands. A popular museum event for all ages, the release of ladybugs throughout the summer provides a natural form of pest control.



Sac and Fox tomahawk pipe with celestial designs, late 19th c. 2/5306



top: *The museum grows a variety of indigenous species of corn, including Cherokee White Eagle and Black Mexican.*



right: *Couple making cornhusk mats, Onondaga, New York, ca. 1894.* N15289

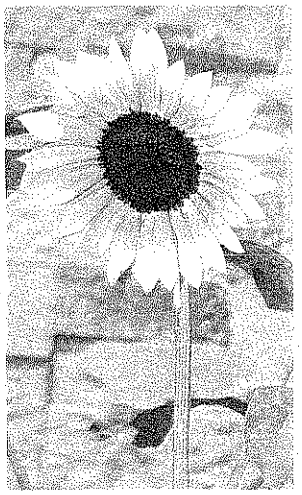
knowledge of the moon to organize traditional ways of life, including agricultural and ceremonial cycles. Algonquian peoples in the Chesapeake region observe thirteen lunar cycles, each with its own characteristics. The Algonquian-speaking Powhatan, for example, traditionally refer to the time around May as the "Corn Planting Moon." Monthly phases of the moon also serve as important time-keeping devices for gatherings. The Powhatan once kept time by noting lunar cycles on notched sticks or knotted strings.

Corn

In many Native American languages, the word "corn" means "our mother" or "our life." The creation stories of the Q'eqchi Maya community and Santa Clara Pueblo, among many other tribes, celebrate corn as the sustainer of life.

The Diné (Navajo) tell the story of First Man and First Woman, who were produced from two ears of corn.

Native people have grown and traded corn for more than 10,000 years, developing over 250 varieties and linking communities across the Americas. Also known as maize, corn originated in the Tehuacan Valley of present-day Mexico, where Native peoples cultivated the seeds of a wild grass (*teosinte*). Ancient corn had husks covering each kernel. Over time, Native peoples learned to grow the many species of the plant that we know today, with more kernels per cob and a single husk.



Domesticated sunflower.

Squash

The word "squash" comes from a Narragansett word, *askutasquash*, meaning "green thing that is eaten raw." The origins of the squash plant in the Americas can be traced to the southern region of present-day Oaxaca, Mexico, where seeds have been found dating back to 7849 B.C. From Peru to the eastern woodlands of America, Native farmers cultivated various types of squash, including acorn squash, butternut squash, Hubbard squash, and pumpkins.

Native people value squash, rich in vitamin A, as an important part of their diet. Squash is dried, boiled, baked, and eaten raw; the flowers, shoots, leaves, and seeds of the plant are used as well. The Hopi tribe of Arizona considers the squash blossom a symbol of fertility and incorporates it as a design in jewelry.

Sunflower

True to its name, the sunflower follows the track of the sun across the sky. This phenomenon is due to the differing growth of the stem — the shaded side of the plant grows faster than the sunlit side, thereby causing the stem to bend toward the sun. First cultivated by Native peoples in the Southwest nearly 3,000 years ago, the sunflower has become one of the most well-

many others, ate the seeds, extracted the oil from the seeds for hair tonic, and used the seeds, petals, pollen, and stalks for dyes, clothing, and flute making.

Tobacco

According to Potawatomi oral tradition, a long time ago a young man lived with his sister in a wigwam near a lake. One night the brother received instructions in a dream, which he relayed to his sister: "Five young men will knock on the door — ignore the first four, but speak, laugh, and look at the fifth." It happened just as the brother said. The sister ignored the first four men but opened the door and talked, laughed, and looked at the fifth man. He became her husband. The first four men died of grief, and the new husband buried them.

From their graves grew *nInse'ma* (tobacco), *wapkonen* (pumpkin), *koje'suk* (beans), and *ashktamo* (watermelon). The bridegroom was *ndamen* (corn), and from his union with the woman, all Indian people are descended.

This story is one of thousands passed down through the generations explaining the origins of sacred plants. Tobacco, considered one of the most sacred by Native communities, has many associated origin stories. According to the timelines of Western science, Native peoples of the Peruvian Andes first learned to cultivate tobacco between 5,000 and 7,000 years ago.

By the time Christopher Columbus and his astonished crew witnessed the Taino peoples of the Caribbean islands inhaling smoke from large rolls of burning leaves — called *tabacu'* by the Arawak-speaking community — the plant had been cultivated or traded throughout the Americas for centuries. As the Taino believed, tobacco was a sacred plant used ritually in ceremonies and for healing.

Traditional use of tobacco involves offering the plant itself or its smoke, which rises and carries prayers to the Creator and the spirit world. Occasionally, tobacco is mixed with sumac or other aromatic leaves. Preparation and use can take many forms: tobacco leaves can be smoked; chewed; dried, powdered, and then ingested through the nostrils; steeped in hot water and drunk; rolled into cigars; or wrapped in cornhusks for storing.

Often, tobacco is placed in medicine bundles, given as gifts, or buried with the dead.

Medicinally, tobacco is sometimes used as a mild analgesic with antiseptic properties. Native communities made a poultice from the crushed leaves used to cure earaches, snakebites, and toothaches. Tobacco is still used by Native peoples throughout the Americas in prayer to offer protection. Miners in South America leave offerings of tobacco to the *huari* (deity) of the mines to prevent danger, and Native men and women in the military often carry tobacco or smoke it during ceremonies before departing for service.

Tobacco "ties" made from dried NMAI croplands plants.

Pipes and tobacco pouches are often elaborately decorated to show reverence for the plant. Ceremonial use of tobacco requires following prescribed rituals — for example, the pipe is often offered to the Four Directions and the sky and earth before a breath is drawn. For many people, the pipe is never stored with the bowl connected to the stem, as the two pieces should only be connected when used in ceremonies.

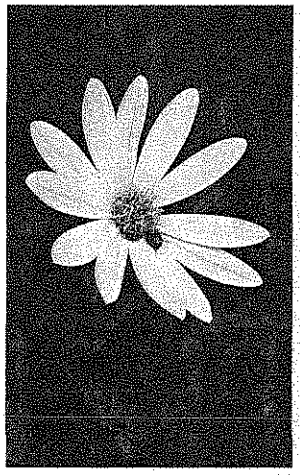
Although there are dozens of species of tobacco plants, Native peoples use primarily two domesticated species: *Nicotiana rustica* and *Nicotiana tabacum*. The latter species was the first to be exported from the Americas and made into a commercial product. Tobacco reached Portugal in 1558 when a member of Columbus's crew, Rodrigo de Jerez, brought a supply home with him. Perhaps because smoke was associated with the devil at that time, he was imprisoned for public smoking. By 1600, tobacco was grown and used widely throughout Europe, and in the following century, the plant was cultivated in China, Turkey, and the Mid-Atlantic and southern regions of the United States.

Tobacco is known by many names: for the Aymara peoples of South America, it is *sayri*; the Mexican Zapotec peoples, *nicietl*; and the Zuni of

and healing.

—JOSÉ MONTAÑO

Meadow

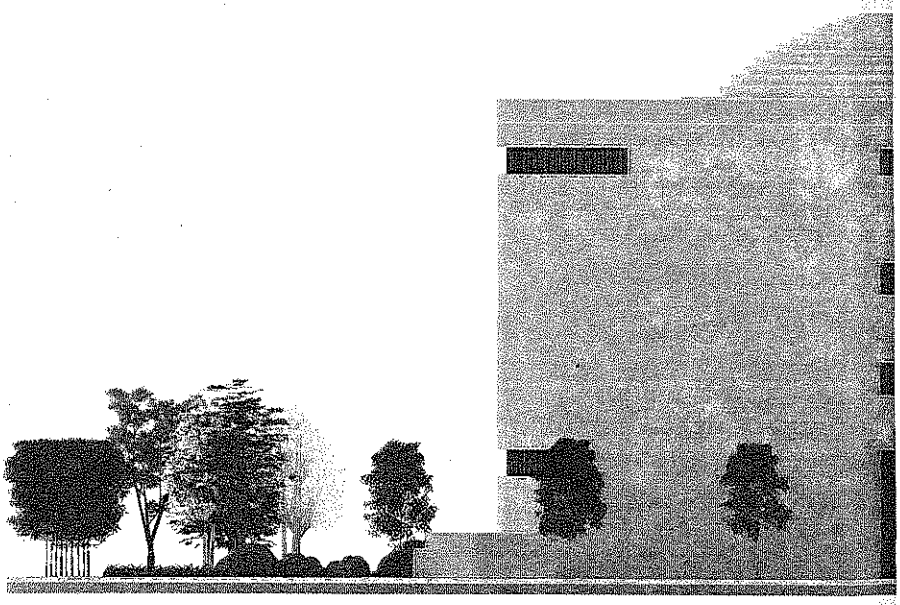


Wild sunflower with ladybugs.

The museum's meadow environment consists of abundant grasses, wildflowers, and shrubs, including buttercups, fall panic grass, and black-eyed Susan. The plants are perennials, growing or lying dormant according to the season.

Plants such as sumac, juniper, goldenrod, and wild onion grow thick in sweeping meadow expanses between forested areas. In natural habitats, these open areas provide grazing for deer, once a major source of meat and clothing for Native peoples in the Chesapeake region. According to the Patawomeke people's creation story, the hairs of a deer became humans.

Meadow plants, such as sunflowers, also provided a plentiful food source for tribes across the Americas. The Hidatsa, who still live on the plains of North Dakota, cultivated several varieties of sunflowers, drying the seeds for grinding into a paste, adding the seeds to flour to form

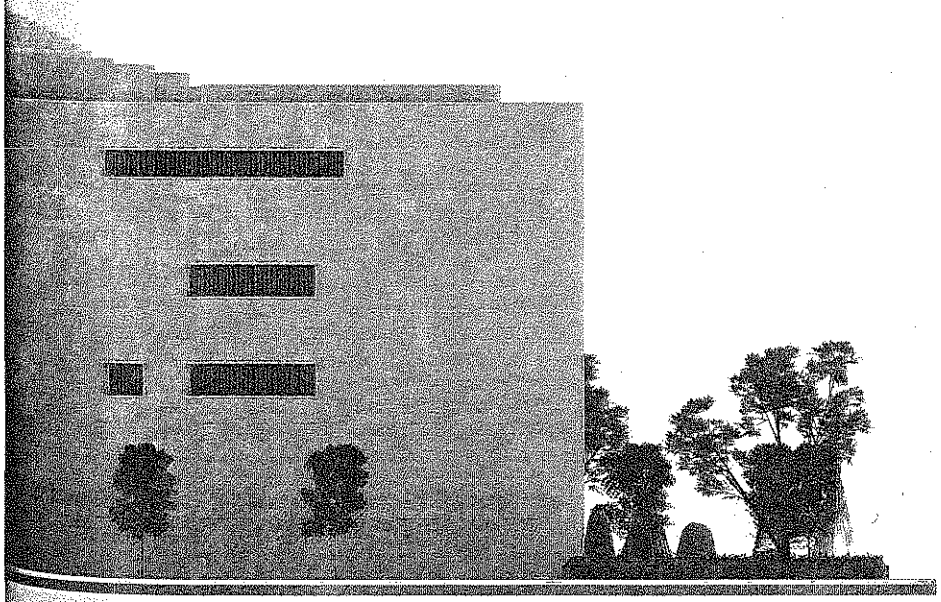


cakes, and eating the seeds whole as a fiber-rich snack. The sunflowers in the museum's meadow habitat are wild (with short stalks, thin leaves, and small flowers), while those in the croplands habitat are domesticated (with tall stalks and a single, large flower).

Plant Medicines

Meadows are important sources of medicinal plants used by traditional healers, who give thanks for the plants through offerings of tobacco, song, and prayer. Plants are considered by some tribes to be the hairs of Mother Earth, and one must express appreciation when taking them from the soil.

No matter where they lived, in meadows or mountains, Native peoples developed medicines from a variety of plants and trees and introduced these natural treatments to the world. Modern pharmacology began when quinine was brought from Peru to Europe in the 1600s to treat malaria. Named for the Quechua word for cinchona tree bark (*quina*), qui-



The meadow begins on the south side of the museum and continues around the western façade.

Mrs. Kanrilak (Yup'ik) (left) and a friend gather saltwater grass to make coiled baskets, Tunuak, Alaska. P26512

nine was long used by the Native peoples of Peru to kill the parasites that caused malaria and other illnesses.

Little Bluestem

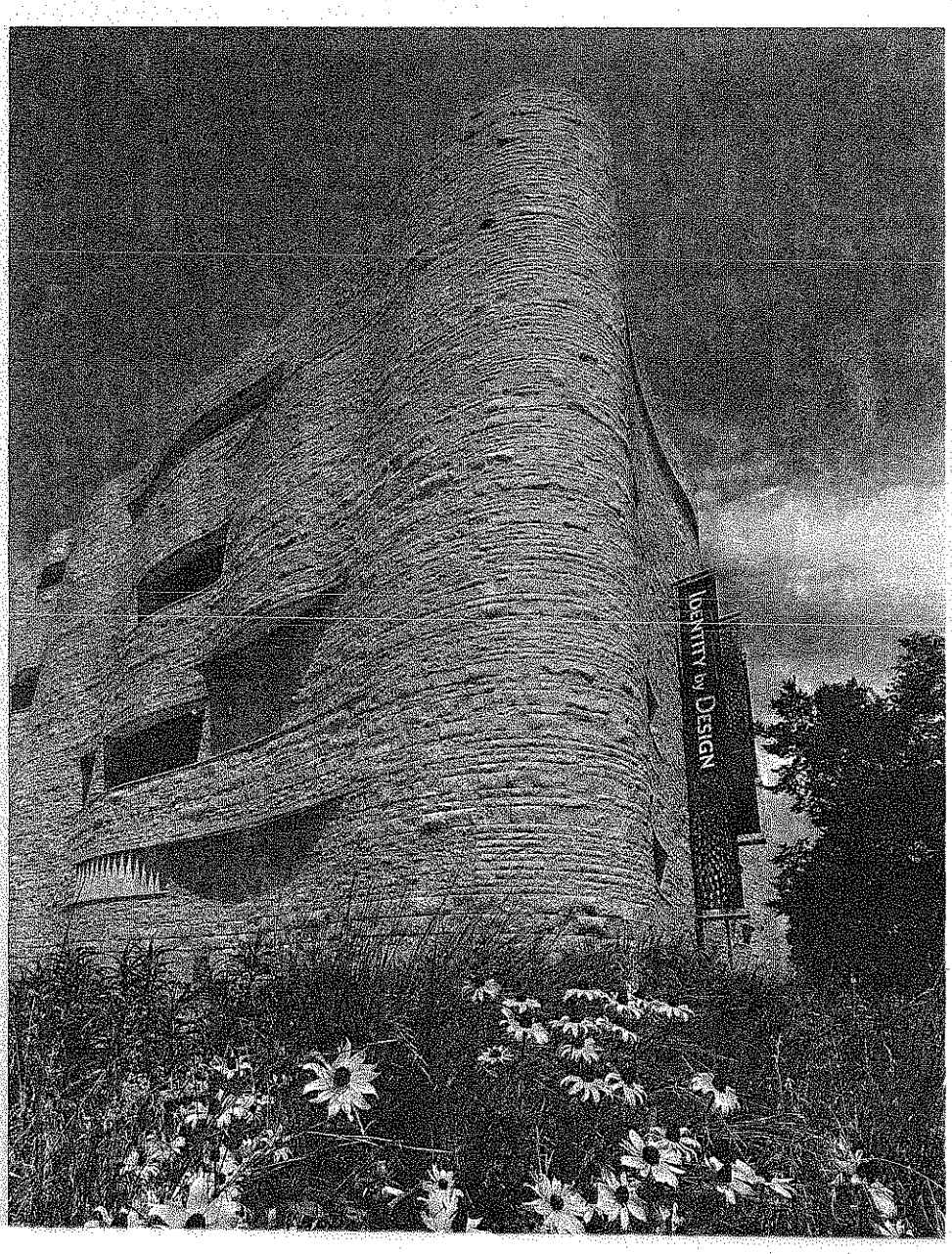
A hardy perennial grass that blooms during the fall, the little bluestem grows in large bunches across North American meadowlands. The Comanche used the ashes of burned plant stems for treating sores and collected bundles of bluestem for use in sweat-lodge ceremonies.

Black-eyed Susan

Like its name suggests, the black-eyed Susan features a striking black "eye" surrounded by eight to twenty-one bright yellow petals. The state flower of Maryland, this meadow plant is one of the most common American wildflowers. The Seminole, Cherokee, and Anishinaabe (Ojibwe) gathered black-eyed Susan for use as a cold and fever remedy and as a wash for inflammations and snakebites.

Smooth Sumac

The smooth sumac, with its yellow flowers and dark red fruit, was sought by many Native tribes for use as food, medicine, and raw material for baskets and dye. Native peoples boiled the fruit of the smooth sumac to make a refreshing drink similar to lemonade, and the Kootenai drank the juice from the roots to ease sore throats.



Black-eyed Susan, broomsedge, and bluestem grasses in the museum's meadow.

Understanding Our Place in Nature

Everything is connected — the sun, moon, stars, Mother Earth, wind, fire, rocks, plants, animals, and humans. You cannot separate one from the other. All work together in balance and harmony: this is the foundation of our traditional ceremonies, songs, and prayers.

You cannot simply talk about the plants alone. How can you ignore the earth and sun, which provide nourishment? The animals and insects that exchange the plant's pollen? The powerful medicine held within a root, stalk, or leaf? The seasonal cycles that affect the plant's growth, when it blooms or bears fruit? Plants are part of our universe, given to us by the Creator to ensure our harmony and survival.

Native people use plants for food, clothing, tools, equipment, medicine, transportation, and shelter and, in doing so, honor this interconnected universe. Many of the objects at the National Museum of the American Indian, for example, have been blessed during harvesting of the materials, during construction, or when used by the community.

Each plant is either male or female, with specific uses. A living being, a plant has much to teach us, and that is why we make sure to give an offering (usually corn pollen, tobacco, a song, and a prayer) before separating it from the earth. When a plant is chosen, we are taught to replace it so that it can provide for the following season.

Depending on the use of a plant, seasonal cycles are important because the strength of a plant's medicine changes throughout the year. Many community members know plants well, but only a few are called upon to be medicinal herbalists. These specialists spend a lifetime learning about plants and creating a personal relationship with each one. As Standing Rock Sioux scholar and theologian Vine Deloria Jr. once said, "In this universe, all activities, events, and entities are related. . . . To Indians, life is not a predatory jungle, 'red in tooth and claw,' as Western ideology likes to pretend, but a symphony of mutual respect in which each player has a specific part to play. . . . Because we humans arrived last in this world, we

Navajo woman gathering corn pollen, New Mexico, ca. 1960. P15269

are the 'younger brothers' of the other creatures and therefore have to learn everything from them. Our real interest should not be to discover the abstract structure of physical reality, but rather to find the proper road down which to walk."

of plants that the Creator has given us.

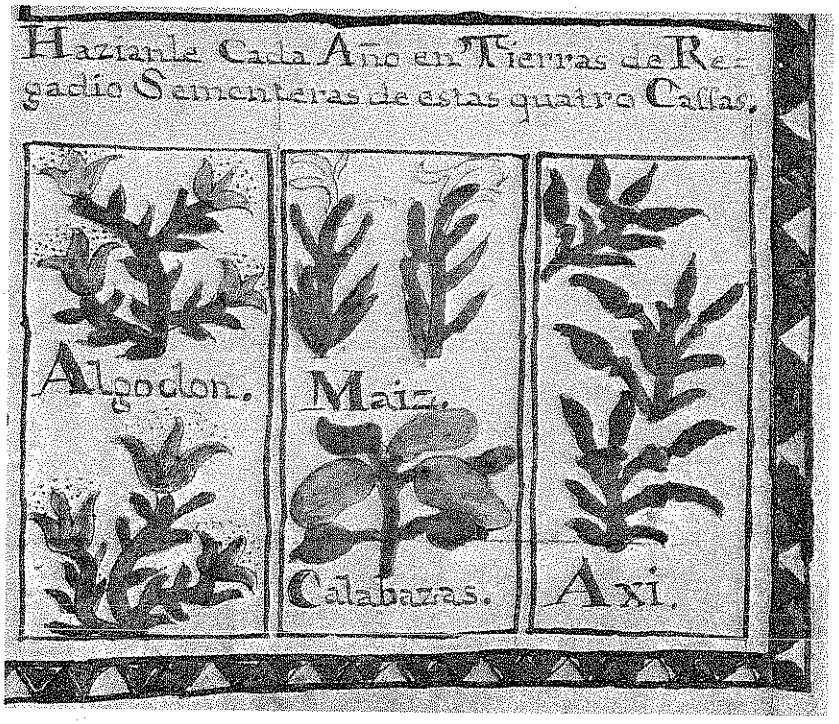
— SHIRLEY CLOUD-LANE

A Resounding Voice

As an aspiring chef in the mid-1990s, I looked around one day and realized that there was almost no authentic representation of Native Americans in the world of professional cooking. There was also a startling lack of appreciation for the immense depth and rich legacy of indigenous cuisine. Based on this simple observation, I embarked on a journey that has fundamentally changed my life. It is a journey the roots of which can be traced to my days growing up on the White Mountain Apache and Diné (Navajo) reservations, looking for a path in life. The path I found, as a professional chef, has led me beyond mere youthful curiosity toward a deeper understanding of my culture and my calling. On this journey, I found a hidden voice that speaks to me in the universal language of taste. Over time, I came to understand that it was a voice that needed to be shared.

In 2003, as a way of offering my growing expertise in ancient cooking techniques to the community and providing the world of emerging Native chefs with an active network, I founded the first culinary organization for Native peoples. Through the Native American Culinary Association (NACA), up-and-coming culinary students and trained chefs from all corners of Indian Country have come together in a national forum. At last, we have a vehicle for the research, development, and preservation of traditional foods from the first peoples of the Americas.

Few Americans today have heard of the Mandan peoples from the upper Missouri River country, who were masters of the floodplains they occupied, conquering hunger through their agrarian prowess. Nor are they aware of the planting techniques of the Diné, which were so impressive that the first Spanish chroniclers spoke of the Diné as "the people with the great planted fields." For Native peoples across the Americas, methods of growing crops and reliably storing food and seeds were highly specialized and central to the fabric of tribal life. These lifeways were abruptly disturbed in the violent clash of cultures that followed the



Detail of painted tribute record representing goods given in trade: cotton, corn, squash, and hot peppers, 18th c. copy of ca. 16th c. original, Puebla, Mexico. 8/4482

arrival of Europeans in North America. It was a confrontation that has lasted over 500 years and imposed on Indians the reservation system and a new diet of cheap, high-fat, and high-carbohydrate commodity foods. "The commodz," as they are popularly known, consist of sugar, lard, refined flour, and processed meats distributed by the U.S. government. The consumption of these foods has produced diabetes, heart disease, and obesity — killer diseases that run rampant in Native communities. This relentless physical decline is a result of what I call the Great Interruption in the evolution of Native culture and cuisine.

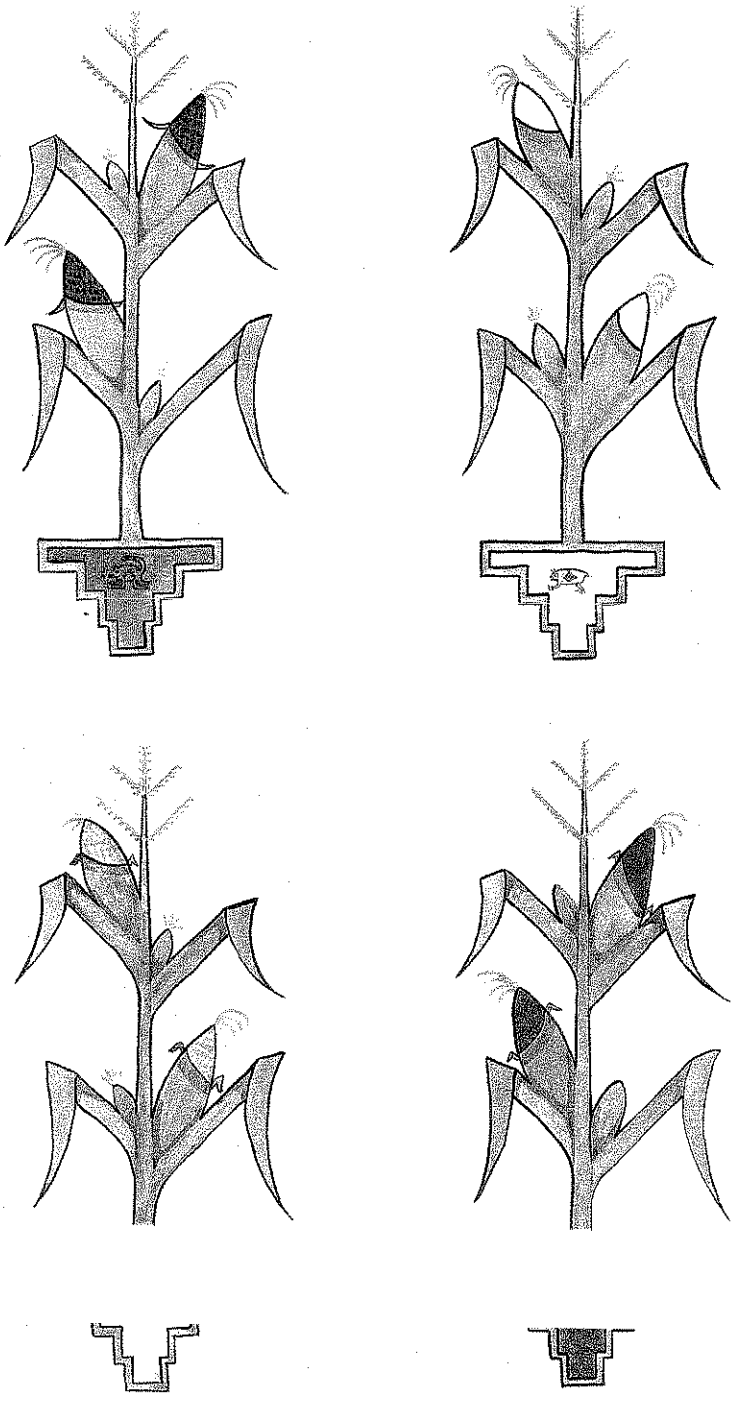
My vision as a chef is to recapture the vast culinary and cultural heritage of our ancestors, returning to the traditional foods that once sus-

(which some chefs have ignorantly dismissed as "primitive"), we can educate the broader public not only about their benefits but also about

the sophisticated agricultural achievements of Native America. Through NACA, we are attempting to re-introduce American Indian flavors and philosophies to the world palate and dramatically improve public health in Native communities.

The deeper I delved into the culinary history of indigenous peoples of the Americas, the more I realized that food is a central means of retelling history, retaining culture, and creating a pathway for future generations. In my lectures and demonstrations to young culinary arts students in Native communities, I often present dishes such as Western Apache acorn stew and racket bread or Navajo steamed corn stew and fry bread — traditional dishes that are pure reflections of my own cultures. I encourage students to think outside the boundaries of classic European cuisine and find inspiration from their home communities and traditions. For example, we discuss how indigenous food staples such as tepary beans, cholla buds, acorn flour, Apache salt, wild rice, blue and white corn flour, and Indian tea can be the centerpieces of modern, upscale dishes. Traditional, seasonal foods can be combined in innovative ways that are considered serious cuisine.

In addition to the use of these fortifying and healthy staples, I feel that chefs must also give voice to the rich traditions of history and even spirituality in the preparation of indigenous foods. My father, Vincent Craig, introduced me to this concept. He encouraged me to incorporate Diné teachings into my work and taught me how to translate those teachings into English. When I began to use the actual philosophies of the Diné and my mother's Apache people in the conceptual, planning, production, and evaluation stages of my culinary operations, I found that the age-old teachings were effective and comprehensive. My father taught me how to approach modern cooking using a traditional "problem solver" based on respect for the Four Directions. This problem solver helped me to organize effectively all aspects of culinary production. The number four is sacred to the Diné and Apache people, so the problem solver consists of four stages or directions.



Lithographs made by John Garcia (Santa Clara Pueblo), 2003.

top left: *Ping piye (north), blue, and mountain lion.* D263046

top right: *Than piye (east), white, and badger.* D263043

bottom left: *Tsan piye (west), yellow, and black bear.* D263045

bottom right: *Akon piye (south), red, and bobcat.* D263044

East is the concept- or idea-development stage for planning a menu or particular dish. The food ingredient is still in its raw state. To the Diné people, the east is a sacred direction that represents a new day or new beginning, and traditionally, prayer is offered in this direction.

South represents a time for gathering and organizing ingredients, tools, and knives. In the classical French culinary tradition, this preparedness is known as *mise en place,* or "things in place."

West is the production or application stage, the point at which all ideas, tools, and resources are applied to cooking. This stage represents labor and production.

North corresponds to the evaluation stage, a time to try new strategies, ingredients, or cooking techniques in order to improve your work. The North also represents the conscious fulfillment of your blessings, when you reap the benefits of your successful ideas, thoughtful planning, and hard work.

These "Four Directives of Cuisine" can help to solve a simple or complex challenge when working with food — from envisioning how to work with familiar ingredients in a new way to creatively pairing various elements of a menu. As I adapted traditional philosophies to the creation of contemporary dishes, cooking soon changed from an occupation to a calling. I came to understand that cuisine is a direct representation of culture — food ties humans together and ensures survival. Now, as a chef, I know that "Native American cuisine" is born of survival and humility.

Both sides of my Diné and Apache family show great respect for food, its growth, and its preparation. We avoid waste and bless the food prior to eating. With such appreciation instilled in me, I offer a prayer before preparing food. Such reliance on the Creator ensures precision, diligence, and clarity of thought as I work to feed and nurture others. I also rely upon my family's tenacity and determination; both are required to endure the physical demands of service and long hours of labor in a profes-

sional kitchen. In addition, I am keenly aware that my ancestors survived by working together as a community; likewise, teamwork is also a vital element in my profession. It is from these inherited qualities that I draw inspiration.

My ancestors understood that proper rituals were responsible for ensuring balance and harmony within the community. Hard work and knowledge of the land — its sandy soils, short growing seasons, and uncertain amounts of water — were vital to the cultivation of crops and community survival, but paying proper respect was no less important. By conducting ceremonies to honor the sun and the gathering of seeds and observing the movements of the stars to determine when to plant, the people maintained the strength and stability of the community.

Food is history. Food is medicine. Food is even humility. Food relates to every aspect of human life — health, spirituality, ceremony, family, and culture. All human beings need to be fed and nurtured. Much was lost for Native peoples during the Great Interruption, particularly for the peoples who were relocated, but the traditions are powerful and still with us. Through my work with indigenous foods, seeds, and plants, I have found an intimate link among the physical, mental, and spiritual realms of Native people. Through NACA, I am striving to use this culinary and cultural heritage to build the future of Native American cuisine, to improve public health, and to help bring a spirit of renewal to the Native world.

— NEPHI CRAIG