# Seeds of Survival and Celebration

# Plants and the Black Experience

Many dishes in America today were first prepared by enslaved people and their descendants using their culinary excellence and the plants that came with them from West Africa.

What were first "cuisines of survival," the foods prepared by enslaved people quietly made their way into the dishes prepared for plantation owners, and eventually became regional staples.



# Plants first domesticated in Africa make up a large share of the world's food supply today.



### **SELECT FOOD CROPS OF AFRICAN ORIGIN**

ASIA

Watermelon (Citrullus lanatus) Coffee (Coffea robusta, Coffea arabica) Kola nut (Cola acuminata, Cola nitida) African yam (*Dioscorea rotundata*) Finger millet (*Eleusine coracana*) Hibiscus/roselle (*Hibiscus sabdariffa*) Bottleneck gourd (Lagenaria siceraria) African rice (*Oryza glaberrima*) Pearl millet (*Pennisetum glaucum*) Sesame (Sesamum alatum) Gboma eggplant (Solanum macrocarpon) J.S. Sorghum (*Sorghum bicolor*) Black-eyed pea/cowpea (Vigna unguiculata) 



From 1502 - 1867, the transatlantic slave trade displaced 12.5 million Africans on an estimated 30,000 voyages the largest forced migration in history. Dozens of Africa's cultivated plants made their way to the Americas as provisions on slave ships.

living quarters.

Image: Slave deck of the ship 'Wildfire' transporting 510 captives from Africa to the Caribbean (wood engraving in Key West in 1860 with modern color).

The grains, medicinal plants, and root vegetables occasionally left over from the Atlantic crossing provided enslaved Africans access to familiar plants, which they grew around their

# **A Culinary Fusion**

Enslaved Africans used African plants to continue some of their food traditions of specific West African cultures, and they also integrated these plants in new ways with Native American and European foods. Depending on geographic location and available ingredients, these dishes evolved into a variety of regional cuisines.

# Foods prepared by enslaved Africans have made a big impact on cuisines of the Americas today.

While African plants came to the Americas primarily on slave ships, it was enslaved Africans who pioneered the cultivation of these familiar plants to relieve hunger, have more food choices, enjoy customary food preferences, and treat illnesses. These African food staples—including black-eyed peas, okra, greens, and rice—were slowly introduced into the meals of slaveholders by the enslaved cooks who prepared them.

> Today, we recognize their culinary skill in popular dishes like gumbo, fritters, Caribbean callaloo, Hoppin' John, and many more.



### **BLACK-EYED PEAS**

Enslaved Africans and their descendants grew black-eyed peas in their domestic vegetable gardens and traditionally cooked them in a savory combination of pork, such as smoked ham hocks or bacon, onions, aromatic spices, and collard greens. Hoppin' John is a classic Soul Food dish that represents good luck and prosperity when eaten on New Year's Day.

Black-eyed peas (Vigna unguiculata)

# GREENS

Continuing a West African custom of incorporating leafy green vegetables into one-pot dishes such as soups and stews, enslaved African cooks slowly simmered collard greens and other greens with ham hocks or pork belly—today a signature dish in Black and Southern cuisine.



### OKRA

Generations of enslaved Africans boiled or fried the pods of okra and combined them with rice and black-eyed peas. They often added okra to peppery soups and stews with available ingredients such as seafood, chicken, and pork, giving rise to gumbo, a word derived from *ki ngombo*, or its shortened form *gombo*, meaning okra in several West African languages.



# SWEET POTATO

Sweet potatoes were a staple food source for enslaved Africans throughout North America, especially during winter months when food rations were low. They were roasted, fried in lard, or mashed and sweetened with molasses and seasoned with spices. Sweet potato pie is a traditional Soul Food dessert especially popular during Thanksgiving and Christmas. Some people in the U.S. call this plant a yam, a name also used for a staple root vegetable native to West Africa.



# RICE

African rice has been an important staple in many traditional African dishes. It was stocked as provisions on slave ships and was often grown in garden plots of enslaved Africans as well as throughout southern states for local consumption. By the early 1700's, an Asian rice variety, Carolina Gold, was grown using the forced labor of enslaved Africans who knew how to cultivate wetland rice. The increased yields from this cultivation made rice a commercial crop in Georgia and the Carolinas.



# CORN

Corn was central to the diet of enslaved Africans in North America, and learned from Native Americans how to make ash cakes with corn meal moistened with water or animal fat and baked over a fire. Another variation was hoe cakes—a mixture of corn flour and water cooked on a flat surface over a fire. Coarsely ground corn cooked as porridge was the precursor to today's classic corn grits. Corn flour was also used to make cornbread, still popular in America today.



# Sorghum and Millet: Hope in the Face of Climate Change

Millet and Sorghum are two African crops that show great potential for combatting food insecurity brought about by climate change. These grains are heat and drought tolerant, making them well-suited for their native range within the dry subtropics of West Africa, a major cradle of ancient crop domestication. Both historically and in the present day, millet and sorghum have been staple crops in many regions of Africa and throughout the world.

These grains first arrived in the Americas on slave ships, often stocked as provisions to feed captive Africans during the Atlantic crossing. Millet and sorghum were grown by enslaved Africans around their living quarters, which has been documented throughout North, Central and South America. Millet and sorghum flour were used to bake cakes and breads. Ground millet and sorghum were boiled into porridge, a technique enslaved people also used to cook ground corn, which was the genesis of grits.





Sorghum is the world's fifth most important cereal crop grown in dry regions of every continent, but was first domesticated in Central Eastern Sudan more than 5,000 years ago. Today, sorghum is a staple food source for more than 500 million people in more than thirty countries including tropical areas of Central America.



Pearl millet was domesticated in the Western Sahara more than 4,900 years ago and reached South Asia in ancient times. In the past 1,000 years, pearl millet has been cultivated in agroforestry systems, particularly under the canopies of shea trees and remains a major food crop throughout Africa and India.



Finger millet was domesticated in East Africa 7,000 years ago and reached India by 3000 B.C. Finger millet is one of the richest grain sources of minerals including calcium and the amino acid lysine, deficient in many other cereals. Today, it is cultivated throughout Africa, India, Nepal, China, and Japan.

### Cornell is part of an international research group that grows varieties of sorghum and millet that will thrive in changing climates.

At the Feed the Future Innovation Lab for Crop Improvement, Cornell plant breeders and social scientists are partnering with researchers and farmers in East and West Africa to improve local crops that are essential for food security. The Centers of Innovation based in Uganda and Senegal act as regional hubs to confront common challenges of frequent droughts, devastating floods, low crop productivity, and pest and disease outbreaks that threaten livelihoods.

The knowledge of African farmers, which has accumulated from thousands of years of experience, is key to breeding varieties of sorghum and millet best suited for areas enduring drought and high temperatures. Learn more at **ilci.cornell.edu**.



Based in Senegal with partners in Burkina Faso and Niger, the Center of Innovation for West Africa is accelerating the development of climate smart varieties of sorghum, pearl millet and cowpea that target nutrition security, resilience, and economic growth in West Africa.

# **Enslayed Africans continued their traditions of** holistic healing through the use of herbal medicine.

To maintain equilibrium between body, mind, soul, and the environment, enslaved Africans built a comprehensive inventory of plants available for treating illness and disease in their new environment. This holistic approach provided a bit of control over their own health in a world where they were stripped of their agency.



### Traditional West African herbal medicine approaches healing by considering a person's mental, physical, and spiritual well-being.

Although there are differences among West African herbal traditions, there are typically two types of healers—the spiritual healer and the herbalist.

West African spiritual healers, or conjurers, were often religious leaders who prescribed remedies that integrated ritual, sacred objects, and herbs. This inter-connectedness of religion and traditional medicine was continued in new ways by enslaved Africans and their descendants in the Americas.



Historic records from enslaved communities have referred to the herbalist as "healer," "midwife," or "granny." Often only one or two herbalists lived in each community and the remedies prescribed were often subtle and preventative. Above: Midwife going on a call in Georgia, taken in 1941.

### Enslaved Africans applied their knowledge and practices of West African herbal medicine to survive in a new environment.

Although a few medicinal plants came with them from Africa, enslaved Africans relied on medicinal plants available to them in the Americas. Through their own experimentation and incorporation of wisdom gained from Indigenous peoples and some established European remedies, enslaved Africans adapted their practices of herbal medicine to develop their own *materia medica*—a body of knowledge about plants—to promote health and well-being, tailored to their needs for enduring the conditions they faced.



**BASIL: CONTINUING A CULTURAL PRACTICE** Enslaved Africans recognized the similarities of sweet basil (*Ocimum basilicum, left*), available to them in the Americas, to an African species of basil (*Ocimum gratissimum, right*) and applied their knowledge to use sweet basil for lowering fevers, and relieving fatigue, headaches, nausea, and stomach cramps.

### **CASTOR BEAN**

Castor beans have been cultivated in West Africa for thousands of years and were first brought to the Americas via the Trans-Atlantic slave trade. Enslaved Africans and their descendants commonly used castor oil as a laxative and as a general tonic for treating illnesses. The oil was also applied externally to ease inflammation due to arthritis and rheumatism.



### ELDERBERRY

Enslaved Africans adopted knowledge about plants from Indigenous peoples including medicinal uses of American elderberry. Elderberry medicine made from the berries, leaves, and roots, is used to treat a variety of ailments including fever, coughs, colds, asthma, inflammation, infections, and constipation.



### ASAFOETIDA: ODOROUS REMEDY

Native to Iran and Afghanistan, Asafoetida (Ferula asafoetida) has been used for centuries as a remedy for treating a variety of illnesses. The odorous resin was shipped to the American colonies from England where it was used to flavor food and to treat nervous disorders. Enslaved Africans and their descendants tied small cloth bags containing asafoetida around their necks to help fend off common colds and flu. They believed that inhaling the sulfurous fumes would protect them from contracting other illnesses such as mumps, measles, and chicken pox.

### West African herbal medicine has adapted, endured, and flourishes in the U.S. today.

After slavery was abolished, Black communities continued to practice traditional herbal medicine, and depended on highly trusted and respected herbalists.

A deep mistrust of western medicine stemmed from medical torture and experimentation during and following the enslavement period. Western medicine was also considered inadequate because treatments did not consider the mind and spirit along with the physical body.

People continue to share the knowledge of traditional African American healing, a rich cultural tradition of plant use akin to Arabic, Ayurvedic, Native American, and Chinese medicine.

## **Cornell: A Health-Promoting Campus**

The healing traditions adapted by enslaved Africans and their descendants aim to not only heal individuals, but their communities and Mother Earth. This aligns with Cornell University's commitment to support holistic well-being for students, staff, and faculty.

Cornell is one of over 100 Health-Promoting Universities and Colleges in the U.S. dedicated to transforming the health and sustainability of societies by considering the health and well-being of people, places, and the planet in all aspects of campus life.



Learn more about the Okanagan Charter for Health-Promoting Universities and Cornell's commitment: mentalhealth.cornell.edu/hpc.

# Holistic Healing Herbs

Enslaved Africans continued their traditions of holistic healing through the use of herbal medicine, adapting West African practices to build a comprehensive inventory of plants and knowledge to promote health and well-being in their new environment.

Traditional West African herbal medicine approaches healing by considering a person's mental, physical, and spiritual well-being. Scan to learn more in a three-minute audio narrative.



# **Environmental Hero**



The black-eyed peas growing here, along with peanuts and sweet potatoes, were three crops that scientist George Washington Carver encouraged farmers in the south to grow to nourish depleted soil and generate income. His research on innovative uses of these crops to increase their market demand earned him the reputation as one of the greatest scientists of his era.

George Washington Carver's approach in rural Alabama over 100 years ago is an inspiration to today's challenges in food systems and environmental justice. Scan to learn more about Carver's life and achievements in a three-minute audio narrative.



# ELEMENTS OF THE EARTH

This garden includes elements frequently seen in traditional African American gardens, where the arrangement of plants and objects fulfill practical, spiritual, and emotional needs.

These gardens are an extension of the home, showcasing innovation and resourcefulness, preserving and creating self-identity through "African remnants" and unique regional experiences. Some elements are frequently seen in gardens of many families and express resistance, remembrance, and Earth stewardship.



This photograph is one of nine on display inside the Nevin Welcome Center that are part of a compilation of more than 80 fine art stills of African American gardens and their creators in Louisiana, Mississippi, Alabama, Georgia, South and North Carolina taken over 20 years by renouned photographer Vaughn Sills.

# REVSED OBJECTS

Just like knowledge and cultural practices were passed on from West African and enslaved ancestors, so were physical objects chosen for display in the garden. Other garden objects are repurposed everyday items.

# HOLLOW PIPES & VESSELS

During enslavement, West Africans and their descendants secretly expressed their cultural knowledge through ordinary objects and many of these covert symbols and practices remain today. Hollow pipes provide a conduit for ancestors to communicate through the Earth. Inverted vessels, like bottles or shoes, provide spiritual protection and ward off evil.



JATER Water bolds p

Water holds profound symbolism within the Black community and represents cleansing and purfication. The color blue, seashells, and water vessels represent strength, adaptability, and the enduring spirit.

# White painted objects occur often in these gardens, which is associated with the sacred and good character.

# STONES OR BRICKS

TIRES

WHITE

These are often reused to create edges of flower beds or paths. Stones collected from old houses and bricks were sometimes kept from houses that burned down.

Circular objects like tires represent natural cycles, which require constant adaptation to change. Old tires are transformed into planters, symbolizing the "dead" nourishing new life.

CHAIRS



# ATTICE

Multiple chairs or benches are invitations for neighbors and ancestors to stop and visit.

Fences were uncommon in rural areas to prevent alienating community. Lattice fencing was integrated into gardens as an ornamental element to delineate inside from outside.