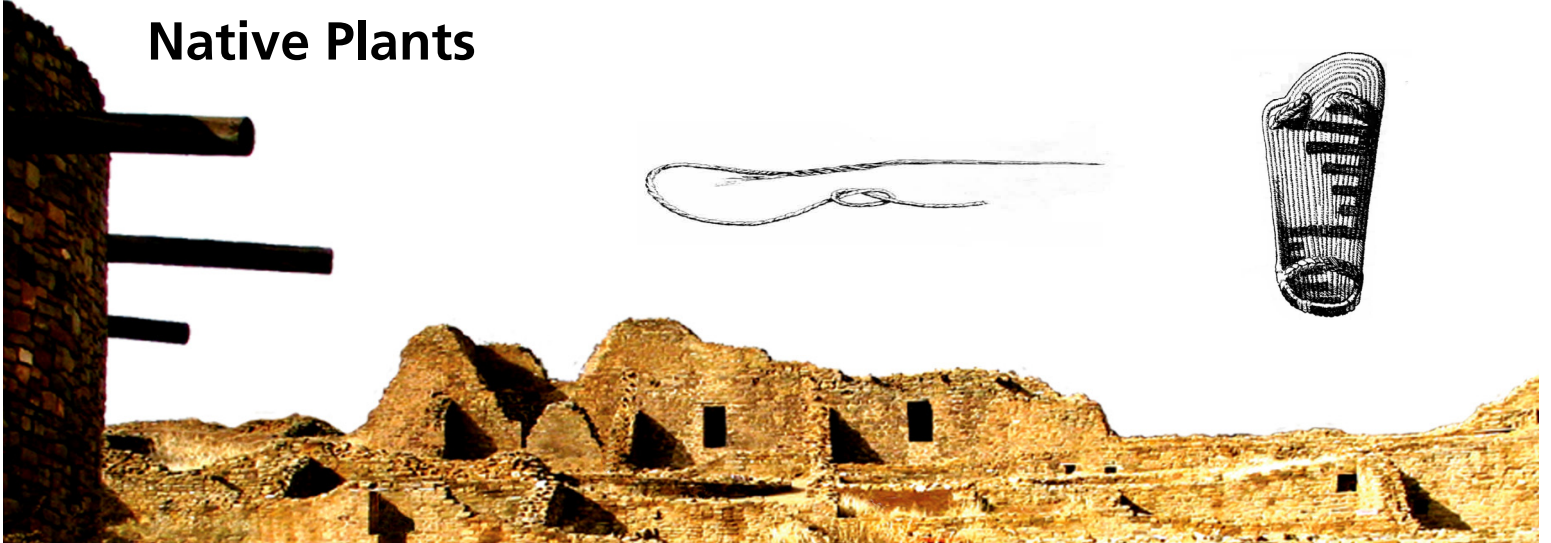




Native Plants



Ethnobotany

Regardless of place or time, every human has basic needs that must be met: shelter, fuel, food, clothes, tools and medicine. The Ancestral Pueblo people were no exception, and they expertly used the local plant life to meet these needs.

Ethnobotany is the study of how people use (and have used) plants. Most plant remains from Ancestral Pueblo times have since perished. Fortunately, due to the high quality of preservation at Aztec Ruins, a considerable number of plant remains have survived. Plant remains were found during excavations in trash deposits and intact, roofed rooms. They include perishable artifacts like baskets, sandals, cotton clothing and twine, and desiccated human feces. Ethnobotanists analyzed these ancient plant remains and, combined with oral stories passed down through generations and current known uses, have inferred ways in which Ancestral Pueblos used the native flora.

The following plants were utilized by the Ancestral Pueblos and are still used by modern peoples. Most are still found at Aztec Ruins. Use this bulletin in conjunction with your guide book as you tour the ruins.

Stop #1 Sagebrush (*Artemesian tridentata*)

Sagebrush flowers, seeds and leaves were used extensively by the Ancestral Pueblos. The leaves are a good source of iron and vitamin C. Medicinally, sagebrush is known to be an antihelmintic (expels parasitic worms). The leaves make a tea used for bathing wounds and combating digestive and respiratory tract problems, headaches and colds. Sagebrush wood is used as fuel because it burns hot. The smoke is used as a fumigant in ceremonies



Stop #6 Utah Juniper (*Juniperus osteosperma*) (look to the left at the top of the steps).

Juniper berries were eaten and used to season meat. Women drank juniper-sprig tea during labor or immediately after childbirth. With sagebrush, juniper is used to treat indigestion. Juniper bark was used for cordage, insulation, roofing material and even pillows, toilet paper, and baby diapers. Juniper wood was heavily used in construction and the stems and branches of junipers were used for arrow shafts, bows, cradleboards, basket frames, ladders and knife handles. Juniper ash is still used in cooking.



Stop # 18 Globe Mallow (*sphaeralcea coccinea*)

The roots of globemallow were used to treat snakebites and sores to draw out venom and as an anti-inflammatory. A paste made from the roots was used to make casts for broken bones and used in hardening adobe floors. A mixture of globemallow roots and cholla fruits was used to treat diarrhea. The leaves were rubbed on sore muscles and ground-up to treat rheumatism. The Navajo use globe mallow as a medicine to treat stomach aches, as a tonic to improve appetites and to cure coughs and colds. They also dry the leaves and use them as tobacco.



Stop # 18 Fourwing Saltbush (*Atriplex canescens*)

Ancestral Pueblo people collected saltbush seeds for food to make a mush or bread. Saltbush wood was collected for fuel and ash was mixed with blue cornmeal to maintain the blue coloring in certain foods and often used to bring out the color in items. Saltbush ash is also used in cooking.



Stop #19 (east of the great kiva): Yucca (*Yucca elata*)

Yucca fruits are often eaten raw or baked and yucca roots were used as soap. The fibers were processed, twisted, braided and wound together and used for wearing, manufacturing and construction. Yucca cordage was used for lashing house beams, fixing ladder rungs, making blankets, belts, bowstrings, nets and sewing animal skin robes together. Hairbrushes made from the pointed ends of yucca fibers were discovered here at Aztec. Note: this particular species of yucca is not native to this area and has been planted here at Aztec Ruins.



Stop #21 (turn around): Cottonwood (*Populus fremontii*)

Cottonwood was used as roof beams and in the construction of hearths, fire-drills, bows, awls and wooden tablets. Dead cottonwood trees with rotted centers are still commonly used in the making of drums as they were in historic times. Cottonwood was often burned in summer because the flame burns bright but the fire does not produce much heat. The drooping flower clusters were eaten in early spring. The Hopi use the roots to make kachina doll carvings.



Stop #21: Piñon pine (*Pinus edulis*)

Pine nuts were important for their nutrition and high calories, providing a source of complete protein, as well as potassium. The nuts were toasted before being stored for winter. In winter, cones were put on hot coals, forcing them to spring open. The nuts are ground with corn, used as flour and also eaten fresh or parched. Piñon pitch is used to mend cracks in pottery, waterproof baskets and is applied to cuts and sores to protect them from exposure to air. Many people chewed on pitch as gum. The gum could also be burned and the smoke inhaled after death by a family for protection against sorcery. Medicinally, the needles are chewed as an aid in curing venereal diseases. Timber was used for construction and fuel.



Stop #22: Rabbitbrush (*Chrysothamnus nauseosus*)

Extracts from rabbitbrush were used to make basket, wool and cotton dyes. The flowers produced a yellow dye and the bark from the stem produced a yellow-green dye. Branches were also burned for fuel. The tips of the plants are chewed by the Hopi and applied to boils to dry them out. The straight stems were peeled to make arrows and wicker mats.



Stop in museum: Sacred Datura (*Datura meteloides*)

Sacred datura is an incredibly toxic plant - even small doses can result in death. Datura is a hallucinogen, a potent narcotic, and can be used as an analgesic to dull pain. Western pueblos report using datura on occasion, however, no modern use has been reported in eastern pueblos. Look in the museum to see a pot possibly modeled after a datura seed pod.

