

DELONG SITE

Written by JOHN DELONG
Edited by TERESA PIJOAN

Mesa Verde Area:

Sandstone cliff habitat within 50m. of the rim of the canyon at area "DeLong Site". Access to the site is limited to the National Park Service trail "Petroglyph Point" approximately 1.5 miles from the parking area at Chapin Mesa, Spruce Tree Canyon, Mesa Verde National Monument, Colorado.

Artifacts:

All known artifacts in this area have previously been removed. Tools, basketry, and pottery were located in this area. Weaving, leather working, arrow points, jewelry, and sandlemaking were found in this area. Hide scrapers, bone awls, fire drills, and stone knives were also used in this locale.

Habitat Variations:

Nomadic people settled in this area, emplacing fall and winter place camps, simple shelters, storage pits, and had fire-cracked hearths. The entire character of this site relates to an archaic technological behavior. Water supplies available were apparently intermittent as evidenced by the presence of cachelments on the top of the mesa. Previous research indicates a semi-transient to transient population occupied this area. These people employed bi-facial implements which would be imported or manufactured on site. Locally available raw materials were utilized.

A review of the fauna and flora is included to demonstrate its cultural significance with The People.

COMPOSITION

PLANTS USED IN HEALING/KERES

- 1.) Ha'mopiawe - *Aster incanopilosus* - leaf ball - round or egg shaped. The blossoms are ground to a fine powder, which is then sprinkled into a bowl of yucca suds, used for bathing a new-born infant. This powder makes hair grow on the head and gives strength to the body. This medicine belongs to all women.
- 2.) Kia'naitu - *Coreopsis cardaminefolia* - water seeds - this plant, removed from the root, makes a tea which is drunk by pregnant women desiring girl babies. This medicine belongs to all women.
- 3.) A'kwa lup'tsine - *Cycloloma atriplicifolium* - yellow medicine. This belongs to the grandmother of the Gods of War. She gave it to them telling them that when near the enemy they

should eat some of the blossoms and chew them; then spit this into their hands and rub their hands together. When the Gods of War did this a peculiar yellow light spread over the world, preventing the enemy from seeing how to aim their arrows. This medicine was in the keeping of the Power Holder Nai'uchi at Zuni. He received it from his older ceremonial brother, Me'she. These two were the earliest representatives of the Gods of War and they passed away in the late 1800's. Sandpainting and pictographs use an amber color to represent the rainbow of yellow that protects the people. Many times the sediment on an escarpment is used naturally to represent this concept.

4.) Ha'tumewe - *Phaseolus angustissimus* - strong leaf. This medicine is of the Gods of War and is named A'hayuta. The full name is A'hayuta-an Kwiminne or A'hayuta's root. When an infant boy is timid, his father carries a small quantity of corn meal wrapped in corn husk to a warrior. Presenting it, he asks that the warrior apply the A'hayuta medicine to his child. Crushed leaves and blossoms, with powdered root of this plant, are chewed by the warrior and ejected into his hands, which he then rubs over the nude body of the child. He gives the child a small quantity to eat. This is to give the boy courage, strength, and a brave heart.

5.) Kwi'mi-i'topona - *Rumex Mexicanus* - painted root. A strong tea is made of the root by a husband who has no offspring. He gives this to his wife, morning, noon, sunset, and at bedtime for a month. This assures the woman will become pregnant. If the medicine fails it is because one of them is not pure of heart. This remedy belongs to all men.

6.) Ha'ko'lokta no'we a'wa a'kwawe - *Thelypodium wrightii* - sandhill crane beans. All medicine seeds are removed from the pods, crushed by women of the Sandhill Crane clan, mixed with beans that are to be planted. This causes the bean crop to be abundant. This belongs to the Sandhill Crane clan.

7.) U'tea Ko'Hakwa - *Anogra albicaulis* - flower of White Shell Bead Mother. The Keres people believe the mother of the Sun was originally a woman, but she became a white shell, from which the sacred beads were made. "White Shell Bead Mother lives in the west and it is to her home the Sun Father goes before descending into the lower world for the night. The Sun Father always was and always will be." The blossoms are given by the High Priest and the Sun Priest of the Keres to maidens who dance in the drama of the "Coming of the Corn Maidens." The girls take the blossoms into their mouths, and after chewing eject them into their hands and rub their neck, breasts, arms, and hands, that they may dance well, so that the White Shell Bead Mother, "Mother of the Sun", may be pleased and the rains will come and the corn will grow.

8.) To'shcha'chikia - *Artemisia frigida* - wild sage, medicine of the Corn Maidens. Sprigs of this plant are tied with ears of corn and attached to decorated tablets carried in the hand of certain maiden dancers. These are dipped in water and dripped over the Sun Priest to ensure an abundance of corn.

9.) Ke'mawe - *Atriplex canescens*, salt weed. Prayer plumes are

attached to twigs of this plant and sacrificed to the cottontail rabbit at the winter solstice. Prayers are said to ask that rabbits may appear in large numbers when sought out by hunters.

10.) Ta'lup'tsine - *Berberis fremontii* - yellow wood. Crushed berries are used for coloring the skin purple as well as objects used in ceremonies. These berries are used only by the people of the Ki'witsiwe, and the tree belongs to them.

11.) A'neglakya - *Datura meteloides* - nightshade family. This was the name of the mythical boy who could see things no one else could see. He misused his powers and was turned into this plant. A small quantity of this powdered root is administered by a rain priest to put one in condition of awake sleep. This enables them to see visions. This procedure is for rain, and is used by the rain priest as a medicine to cause visions as in the Prayer Offering Plume Ceremony. Each plume has a underwing plume of the to'na (turkey); one white fluffy plume of the kiakia (eagle) from the top of the tail; one tail plume for the e'ya (duck); one wing feather from the o'nelikia (long tailed chat), bird of the north; one tail feather from the mai'ya (crested jay), bird of the west; one tail feather from the mu'la (macaw), bird of the south; one tail feather from the ka'tetasha (spurred towhee), bird of the east; one wing feather from the kia'wulokia (purple martin), bird of the zenith; one tail feather from the he'alonsetto (painted bunting), bird of the nadir. The rain priest deposits each offering separately in a niche which he makes with an ancient bean-corn-planter. He says, "I place my te'likyina'we (prayer plumes) and I take your medicine that I may talk to the birds of six regions, and that the rains may come and plants may grow, and the Old Woman Earth will be rich with life."

12.) Pi'sha li awe - *Epicampes rigens* - come up quick tall grass. This is used only by the Star and Shuy'maak'we clans. The grass is attached to the sticks of plume offerings given to the spirits. A single spear of grass is measured from the top with the four fingers cross-wise and the length needs to be from the tip of the thumb to the tip of the middle finger. This plume-stick is given to the Spirits with the plumes of the eagle and of other birds that they will carry the breath of their prayers up to those who will listen.

13.) U'mokia'nakia - *Leucelene cricoides* - suds making thistle. This plant is used to symbolize clouds. The powdered root is deposited in a ceremonial vessel with water. The mixture is whipped with a slender reed until suds rise high above the bowl. These cloud-suds are made, used, and given by the Rain Priests during their summer retreat.

14.) Kia'latsilo - Douglas Fir - *Pseudotsuga Menziesee*. "Water comes out of arms" is the term, "kia" (water) and "latsilo" (come out arms). In the special rain ceremonies, the rain priests and the dancers who impersonate the rain-makers extend their arms covered with branches to ask for water from the Sky Father to nurture life in the Old Woman Earth. It is believed that the Keres came from Mesa Verde. The Tsia Pueblo Keres make prayer sticks out of willow except in the case of the summer ceremonies

for rain when spruce or fir with some attached twigs are used. The tall blue spruce tree at Mesa Verde holds a story that it was a bringer of Rain Cloud People for the crops. At Hano the Douglas Fir, tsele, is used in most winter dances. Spruce twigs made with yucca fiber packed into compact neck wreaths are called 'imbitseleket'o. There are no Douglas Fir trees near Hano and it is retrieved from east of First Mesa, Hopi. The Navajo traditionally would bring spruce to trade for corn. There was a story that Little K'wafot'o dance was made possible by the trade and barter of spruce from the Navajo for corn. The Corn clan would save all the corn and use it for this purpose. Once the spruce was obtained it was put in a munate or the estufa of the kiva would be full to overflowing. A grandfather tells a story his grandfather told him. "At night when the Corn clan would sing for sacred Tse (spruce) the spirits would take the corn and grow a Tse in the estufa of the kiva. In the morning, we would see the branches rising out from the estufa up to the sky. We knew this was good." The spruce branches are thrown off the edge of the mesa when the ceremony is over, or dropped in a hidden place among rocks. Pueblo people have a place called k'ajete, or fetish house, where they leave their spruce.

15.) Ho'mane - Juniper - Juniperus Monosperma. Prominent in forest growth, the bark is used largely for firewood. The bark is called huqwi'b'e, or huqwi, and huk'owa. It was daily kindling material. The old myths tell of how the bark would ignite merely from the heat of the sun. Long shreds of this bark were bound into compact bundles by means of a p'agwi (yucca fiber), and were used as torches to give light in houses and to carry from house to house. Hano used the bark also to chink the walls and roofs of log houses and hogans. In New Mexico the wood was used for making bows. Small ceremonial bows of cedar branches are carried by some katsina at Hano during the k'awot'o. At Santa Clara the leaves of the juniper were used by women the third day after childbirth. The leaves were boiled in water, a little cold water added, and the teas was for the woman who was left alone. She would bathe herself with the tea and drink small quantities of it. The leafy twigs, hukala, are heated on the embers of a fire and wrapped over a bruise or a sprain to reduce swelling. The juniper gum is used for filling decayed teeth. The berries properly fixed, hupege, are eaten by children and young people. It is an active diuretic. Juniper branches are used in some ceremonies. At Hano and Sichomovi they are used in January for tsonekatina.

16.) He'sho tsi'tonne - Pinus Edulis - Pinon. This is also prominent in forest growth. The needles are grouped into bundles of two or three, short needles 1 1/2 in. or 4 cm. long and are waxy. Smoke of the sap is used as protective medicine. The timber is used for construction, fuel, and charcoal. Pinon pine is the most common tree on lower mesas in this area. It was used for firewood. The nuts, generally roasted for eating, were formerly an important food. After corn harvest, about Oct. 15, many of the people go to the mountains for several days to gather

pinon nuts. Tokwae (gum, balsam) is used for mending cracked water jars, also for keeping the air from cuts and sores. The resin of pinon was smeared over cooking ware canteens to make them watertight. The pinon nut is said to be the oldest food of The People. The young shoots are eaten by members of the Sword Swallowers of the Fire Society. They eat this at the end of the ceremony when they wished to have their women bear female children.

17.) 'Abe - *Papus melanocarpa*. This grows in moist areas, produces small white flowers. The fruit is small, dark red, juicy, and has a large pit. Jicarilla Indians use 'Abe to make jams, jellies, or sweet cakes which are stored for winter. The wood is used to make bows. The berries are boiled or eaten raw. Jicarilla grind the berries to make the meal into round cakes, six inches in diameter and one inch thick. They are blackish and taste sweet and good. The Tewa call this 'abebuwa, or chokecherry bread. Pojoaque called the bread 'abenbua, which was taken from the northern Tewa. Chokecherry is called Abe in Tewa.

18) Kwaewku'n'f (*Quercus gambelli*) grows in moist areas, and has large deeply lobed leaves which grow densely to 10" in height. Acorns are edibles for birds, mammals, and man. The wood was used for digging sticks, bows and war clubs. The oak was used also for rabbit-sticks, embroidery stretchers, and utensils. The myth is of a certain oak that is called Kawetowa at Hano which was said to have been brought by Asa clans settled in Hopi.

19.) Qwae - *Cercocarpus montanus*. Mountain mahogany grows in shallow soil, prevents erosion and provides browse for deer. The flowers are small and have no petals. The silver plume makes red-brown dye for wool and leather. The wood is used for weaving battens and combs. Powdered leaves are used as a laxative. Paqwae're'e are rabbit-sticks of the best kind, made from mountain mahogany.

20.) Ko'tse otsi - *Rhus trilobata* - skunkbush sumac. This means biting man. The juice from the stem of the plant is pungent and is said to bite the tongue. The twigs are used by members of the Sword Swallowers clan. They are attached to plume offerings, et'tow, and are a sacred fetish. It has a strong odor, used to make lemonade, deodorant, and perfume. The twigs are used in baskets and cradles. It is referred to as K'un by Tewa people.

21.) Tsi'posho - *Ephedra nevadensis*. The plant minus the root is steeped in hot water and drunk as a beverage. Chlorophyll stems are used in food, and tea is used to cure venereal disease, kidney infections, stomach troubles, and cough. The tannin is used in tanning animal skins.

22.) O'tipoli - *Phorandendron Juniperinum* - Juniper mistletoe. This parasite receives nourishment from the host juniper. Tea of this is used to hasten the cessation of catamenia after childbirth.

23.) Nwansabewaku - *Mamillaria Sp.* - ball cactus or Navaho Testicles, (Nwan means Jemez, Sabe means Athapascan, Waku means testicle). Spines were burned off and the entire plant is eaten raw.

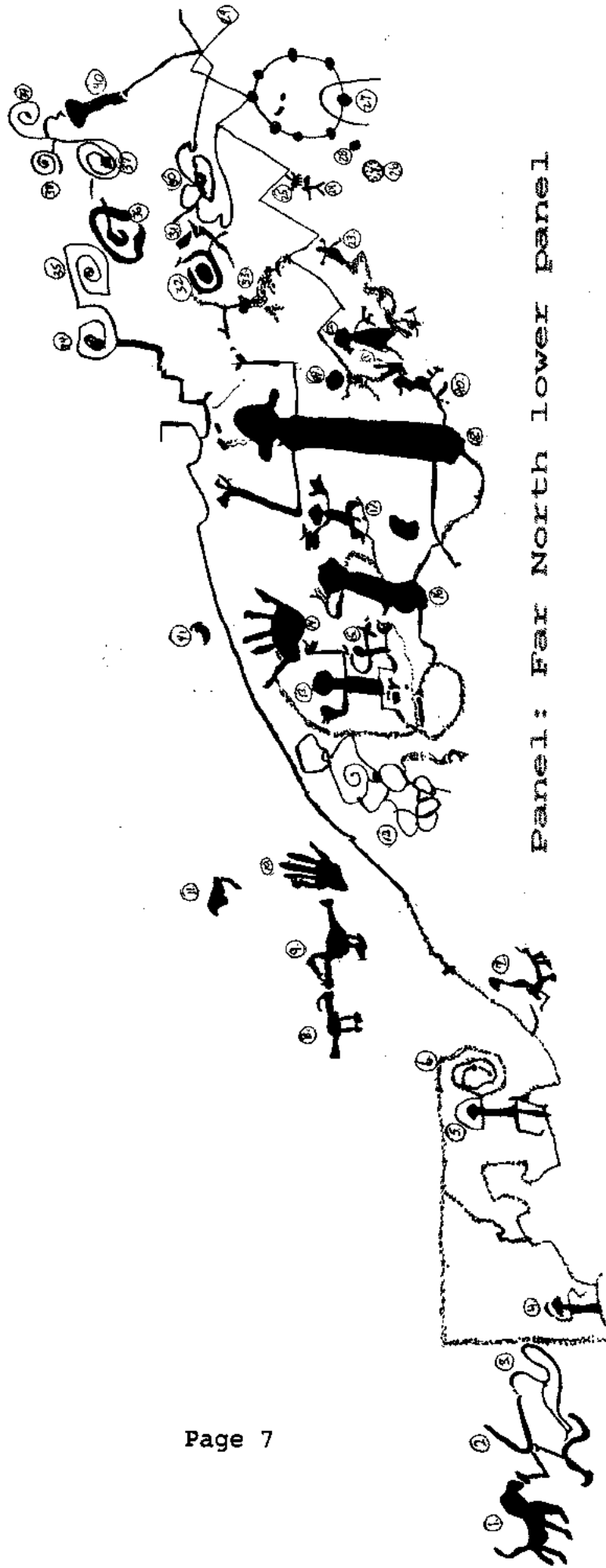
24.) 'Ko'shi - *Opuntia arborescens* - cactus. This cactus is the special property of the 'Ko'shi clan. The plant now thrives about three miles from Zuni, but is said to come from the place of the Beginning. No one is allowed to go near this cactus area. The ceremony of this clan has a decorating of the cactus with fluffy white eagle feathers and the sprinkling of corn meal on the part bearing the feathers. The plants are also used for whipping the bodies of the clan members during ceremonies.

25.) Ho'kiapa - *Yucca baccata* - yucca. The central stalk of the yucca plant is carried in the hand of each of the katsina impersonators and was used for whipping people for various reasons. Some were asked to be whipped to be relieved of bad dreams, some whipped for being derelict in performing their religious duties. Whipping was done prior to initiation into the Ko'tikili clan. The fibers of the leaf are prepared by the Priesthood of the Bow and used to show respect to the Gods of War at the winter and summer solstice ceremonies. The cords were used to tie prayer-plume offerings planted them to the Spirits. The yucca leaf was worn around the head by the dancers and usually could not be seen for the masks would cover it. Yucca is used ceremonially for a great variety of purposes. Brides are bathed in yucca lather by the groom's mother. Yucca fruit was eaten; it was call p'ape. It causes diarrhea and was eaten by women in labor to have a quick painless birth. Fishing was done with the threads of palmilla ancha. These were stretched across the river, weighed down by stones, and kept floating by gourds and inflated skins. Women gather the fruit in September or October and bake it until the skin can be taken off and the fiber removed.

26.) Chu'we - *Aea mays* - corn. Zuni and Keres people observe the ritual for corn and ceremonial purposes to help make it grow. There is a color of corn for each of the cardinal points. Ears of corn are used in dances, and by many of the katsinas. Ribbioned corn husks are worn in the hair and skull caps of the Ne'wekwe Galaxy clan, one of the oldest clans. Corn meal is used in healing, the mush is made by a male member of the family and pushed down the throat of a dying Rain Priest that he may have enough food for his four day journey to Ko'luwala'wa, through which he passes to reach the world from whence he came, which is supposed to be in the depths of the lake.

POSTULATE

Alignment of an extension created by using a tree branch or trunk, in our estimation, will upon the solstice date of June 22, 1991, cast an alignment shadow upon Panel A, portion emergence hole #1 at or near the noon zenith which will prove that this is a solar observation site. (Dated September 2, 1991. John A. Delong. Post URARA Symposium, Green River, Utah.)



Panel: Far North lower panel

PHYSICAL FEATURES

This petroglyph site is unusual due to the fact that most petroglyph sites face south or southeast. This site faces due west. There is no clear point of reference on the western side of Spruce Tree Canyon, which gives indication that this site may in fact be a solar observatory.

Solar graph data will assist in determining the most likely occurrence. As there is a Corn Plant Symbol present, we primarily suspect June due to late frost date which is pertinent to this area and elevation relative to planting of corn.

NEW OBSERVATION (September 22, 1991)

Today we accomplished one part of our goal of understanding the solar observation portion at the DeLong Site. The sun line had moved even further from the "in this place" marker. We also received additional insight into the solar nature of the site as we discovered a sequence in Panel A which indicates a solar eclipse had occurred and that the sun watcher, shaman, or medicine man was successful "in causing the sun to return".

Additional solstice dates must be investigated to determine if other points in the petroglyph panels are relevant to solar observatory related activity.

The westward facing of both the petroglyphs and so many of the dwellings poses the possibility that the people from the area migrated westward, a direction which had been primary to them all their lives. Are there petroglyph symbols on what appears to be the directional Panel which could confirm this theory?

POSSIBLE HYPOTHESIS

1.) Solar eclipse of the total scope may have had serious inroads into the leadership of the Lizard clan. They may have been pictured as the dancers, supplicating the sun to return, or they may be the dead having lost the opportunity to continue to lead and control the lives of the pueblo.

Archeoastronomy studies conducted in conjunction with these observations raise additional questions. Examination of similar sites situated relatively close to Mesa Verde was done in an effort to obtain insights into the petroglyphs at the site. Rather than providing any clear answers, these questions and findings promote the need for additional studies and observations.

Previous studies conducted at Chaco Canyon, New Mexico, which is situated less than one hundred miles to the south, dealt with a similar culture. Question: What was the relationship of the Supernova of A.D. 1054 to the (A) creation of the petroglyphs at this site or (B) exiting of the Mesa Verde site by its residents? Both aspects of this question are distinctly

possible. First, the portrayal of the Lizard clan leaders attempting to cause the sun to return during a solar eclipse may also possibly be interpreted as an attempt to subdue this sudden, brilliant continuous light which filled the sky both day and night. The figures representing death beneath them may indicate their fate when they failed to accomplish this. It is reported that the brilliance of the Supernova lasted for about ten days, ample time for the fears of the people to be magnified to the point of panic. Secondly, the Supernova panic phenomenon would have caused a rapid exit from the site. This theory can be substantiated by the presence of full granaries found during the early excavations. This may not substantially prove the Supernova theory, but it would eliminate the drought or famine theories which have been set forth.

Fact: Solar eclipses were feared as possibly causing the death of children. It was believed that children born during an eclipse were susceptible to the entry of evil spirits via the fingers and toes. These members were cut off by the Pu'fona (delivering baby doctor) at birth. This would, in most instances, cause the infant to die from loss of blood.

This solar observatory site has the location of the dwellings beneath the rim of the canyon, set underneath overhangs, and sheltered by the stands of Douglas Fir. This makes it extremely unlikely that any structure within the community would be used as a solar observatory.

Further, solar observatories were essential for agricultural communities. It was necessary for the Diaminye or head of the organizations within the Pueblo, who is sometimes referred to as the cacique or tiamunyi, to know when to call the people to plant. Other ceremonies within the culture were also linked to the seasons.

The ceremonies for the sun are referred to by the Keres as the H'a-niyko and H'anyikikya Time. The H'a-niyko is the sun ceremony for winter and the H'anyikikya is the ceremony for summer. Both ceremonies are concerned with the turning point of the sun. The autumn sun progresses and with it winter comes. As the sun rises farther and farther to the south on the eastern horizon until it reaches its house of winter change which is in the middle to end of December. Some say it is December 15th; some say it is December 21st. After this point of "housing" it moves to the north. The actual dates for H'a-niyko and H'anyikikya do not correspond with the solstices. At Cochiti it is believed that the ceremony for the sun is in November and this would be H'a-niyko. At San Felipe it was been done between November and December, whenever the last of the corn is in and the crops are ready for the cold winter. At Santa Ana the H'a-niyko ceremonial has been held around November 12 or 13 after the Jemez Fiesta and the food is in. All these Pueblo people speak



Section 11

the Keres language and belong to the Six Southern Pueblo group of the Rio Grande Region.

H'anyikikya is held in February at Cochiti and also at Santo Domingo, but in San Felipe it is held in late January or until the sun appears to be standing still. Tsia Pueblo has held H'anyikikya as late as March or April. According to The People the ceremonies take place regardless of solstices, for they have ceremony when the sun tells them to, not when the calendar points to the day. The People appear to have the solar ceremonies rather than the solstice ceremonies.

H'a-niyko is also known as Sahan-yiko. This is the time the Cacique determines when the sun is ready to receive respect. The Cacique is warned of this time by knowing when the harvest is totally finished. The ceremony takes place only when all of the food is off the field, corn braided and hung to dry, squash put away in cold niches, and the beans put away in pots. It is the War Chief or the Sun Watcher's duty to see that the Cacique has enough food to have clear vision and is not in hunger. When the Cacique has decided upon the date, he calls a meeting in the Hotcanitsa of the leaders of all the societies who will take part. The Societies who are involved are the Flint, the Koshairi, Kwiraina, Giant, Fire and Snake Societies. Sometimes the Caiyeik Society participates, sometimes not. It depends on the position of the sun and the other duties the Caiyeik are involved in at that time. When the leaders of the Societies are gathered they follow the same procedure, the deer meat is distributed to them and they are told that the time for ceremony has come and they are requested to perform their Societies' ceremonies.

The leader of each Society calls a meeting of his members in their own ceremonial house in the evening following the meeting with the Cacique. He distributes the deer meat to his people so they will not be hungry and tells them it is time for the H'a-niyko ceremony.

The next morning the members of each society purge themselves. They do this for four mornings. On the first day of the four day period each member may fast if they wish, but they are not required to do so. If one does fast, they must not eat or drink until noon of the following day. The meal at noon the second day is made by special women who bring corn meal mush cooked without salt or grease. The Healers are not to spend the four days and nights in the ceremonial houses, but are free to go about and do what is needed of them. They must observe sexual continence during this eight day period. On each evening of the four days the Healers gather in their ceremonial houses. They sing and chant. On the morning of the fourth day, each Society sets up a slat altar, makes a sandpainting, and lays out its sacred tools. During the day they make prayer sticks, giving

thanks for the warmth of the sun. On the evening and night of the fourth day, the Societies hold a public ceremony which may be attended by all. The Cacique goes to the Society house of his choice. The Fire and Kapina Societies visit each others' houses and give demonstrations of stick swallowing. The ceremonies last all through the night to welcome and give respect to the rising sun.

The People bring things to the houses as offerings, wrapped in blankets, to the spirits. Early in the morning, about dawn, the Healers take these offerings, the prayer sticks, and the wicpi (ceremonial items) outside the pueblo area and bury them just as the sun appears at dawn. This concludes the ceremony.

Grandfather Rosetta says, "The Sun is a Spirit that burns in each one's soul. The Spirits keep the soul strong. When we pray at H'a-niyko we send our respect to Tsityostinako, the Mother of all People. She birthed The People, Masewi, Oyoyewi, the warriors, the birds, animals, and the other spirits of this place who are gathered up in the strong arms of Mawakana Gacdyats-kai, at the southeast corner of the world. The prayers are for rain that falls from the loins of the Sky Father. The prayers are for crops that grow from the union of the Sky Father and Earth Woman. The prayers are for the game that was brought here by the Sisters. The prayers are to help the people get along and not argue or fight. Our souls are strong from these prayers."

H'anyikikya is held in March or maybe late April. The Cacique again is the caller for the ceremony. He watches the sun and follows its path. The time for the sun to start back toward the north brings shadows of information to the Cacique. The Cacique does not call the Leaders of the Societies. He takes each Society to his concern. He goes to each one of the Societies houses and brings then emetic with which to purge. They do this for four mornings. On the fourth day they make prayer sticks. On the evening of the fourteenth day they meet in their houses and sing. When they have finished they take their prayer sticks out and bury them as the sun sets.

ASTRONOMICAL PRACTICES OF THE PEOPLE

In order for one to better understand the importance of solar ceremonies it is helpful to have some knowledge of the terms used and their relationship to each other and to the ceremonies.

First to be examined are the kivas which are the centers of religious life in the pueblos. Certain specific groups meet in designated kivas and perform specific ceremonies for purposes assigned to the particular clans involved.

Kiva Worship:

- 1.) All pueblo people worship the sun, moon, and other celestial bodies and have a reverence for them.
- 2.) The eastern kiva worships the turquoise stone, while the western kiva worships the wren.
- 3.) Each kiva has at least two holes. The common kiva has one hole which is called aomiyuh (rain cloud). The largest hole is the second hole and its average height is ten feet. The alignment is such that it illuminates the opposite wall where the figures of the sun, moon, morning star and evening star are located. Each symbol has a parallel recognition to an animal or object i.e., buffalo, pumpkin, corn, deer, horse, thunder, clouds, lightning, snake, sea serpents, etc.
- 4.) Symbols of the Agriculture Kiva include:
Sun, moon morning and evening star, which are a parallel recognition to an animal or object, i.e., turkeys, two eagles fighting, rabbit, which again parallels the morning star, moon, dipper of seven stars. Other pictographs were on Solar Observatory walls or escarpments when they watched the moon, dipper of seven stars, morning star, sunspots, thunder, lightning, corn, etc...

The Mad-jan-yi is the father of the Kapina who lives in the south at Daotyuma. Mad-jan-yi brings the things that Kapina produce magically in the winter kiva ceremony. The Kapina badge is the white eagle or turkey feather dyed yellow, which is the color of the winter sun. The Kapina were believed to have been a Society that existed at Mesa Verde prior to the development of the Six Southern Pueblos, which are a Keres speaking people. Kapina is defined as those who are strong of heart, or those who eat too much. The Kapina Society was the first Society organized in the underworld by the great Sussisstinanako, who was the first creator, represented as a spider. They are the door keepers of the sun and are known as very mysterious persons.

Contrary to the mistaken belief that the estufa is primarily used for ventilation, the actual use is to channel the sunlight into the kiva where it is used by the Mad-jan-yi for ceremonies and other activities. Hoebel (E. Adamson), in his report on underground kiva passages in the American Antiquities, Vol. 19, p. 76, 1953, states; "Two high-ranking society officers of the Kapina clan from Jemez Pueblo accompanied me to Mesa Verde where they told me that the open spaces between the round kiva walls and rectangular walls enclosing them ... (and) tunnels leading into some of the ... kivas which were used in the performance of magical ceremonies and that these things go on in our pueblo right now."

The importance of the underground secret chambers is that it is concealed from both outsiders and some pueblo people as well. The roof of this sacred chamber is called iwas, which in Keres means "children". No one is allowed to walk on this area. Only

the head of the Society may enter the secret chamber alone; everyone else must enter in numbers of two or more. This is true at Acoma, Laguna, Santa Ana, and Zia (Tsia or Sia) Pueblos. It is also used by the Kwiraina Society for their ceremonies. No women are allowed to enter these sacred chambers.

Hoebel's informant went on to refer on the miraculous things that the Kapina do in the dowahi ceremonies such as making corn to sprout, grow, and ripen before your eyes. These ceremonies would take place in above ground kivas or protrusions made from cliff sites. The estufas were used regardless of location and used in both summer and winter. They used two masks of Hililiho Katsina (not to be confused with the Hopi Kachina) Society.

A similar altar is located at the top of Panel A because it represents lightning, clouds, rainbow, birds, and indicates when it is going to rain. This denotes the symbol for a kiva that is rectangular with underground tunnels. This relates to the Kapina Society.

The Kacaidime or Rain Summer Ceremony has a ceremony which, when depicted in sandstone, has rounded squares that show the path of the runners. There are four squares all united by a middle line. The ceremony includes the Flint, Koshari, Kwiraina, Giant, Fire and Kapina Societies. The ceremony usually takes place between June 10th and the end of July.

The Flint Society is represented in this panel using the probable or possible symbols used in curing: a knife head with an arrow represents the Flint Society's ability to point to the direction of the sun. Curing was done through heart songs and their important ritual for the dead. The dead are represented below the floor of the tunnel as they are dispatched back to the underworld by the members of the Flint Society.

The Koshari are primarily involved with fertility. They obtain their power directly from the sun, were created by the sun, and get their medicinal powers from both the sun and the moon. They complement the Kwiraina Society for they were both made at the same time and are both door keepers of the sun. The Koshari dance at the Corn Ceremony; their spirit home is in the east, Koakute, or the place of the sunrise. This place is also the same as the Kwiraina's where their katsinas live on the far eastern horizon which is know as Gyitihanyi. Both the Koshari and Kwiraina take part in summer and winter ceremonies and in the rain ceremonies. Both involve men and women in the process.

Drawing of the Kwiraina:



The Giant Society

One could be a member of both the Kwiraina and Giant Societies. The Giant society is also known as the Ckoyo Society. Their home is in the northwest and is known as Gytibo-kai or "the home of the dead". The Ckoyo was created in the underworld first as a woman. The Giant Society participates in their rituals: cure by sucking, heart cleansing, communal cures, and in the ritual for the dead. The Giant Society shares a kiva with the Koshari. The cures are effected through the magic of Society animals. The Giant participates in the summer, winter, and rain ceremonies. The Giant Society does the preparation of the deceased for their journey to the underworld.

The Fire Society

The Fire Society's house is A Mawakana which is underground between the rainbow and the Kai house. This Society is called in to the ceremony on the fourth day of a cure. They eat flaming sticks; removing the charred wood from their mouths they rub the patients's body with it. They then return to their place behind the altar. It is believed they eat the fire to obtain its power, and that the power of the fire come from the sun and is called "Maiyani" which is the spirit power of the sun. The Fire Society is also involved in these rituals, cures by sucking, heart cleansing, effects communal cures, and does the ritual for the dead. They work both wet and dry ceremonies, which correspond with summer and winter. They use the corn ear fetish, the slat altar, and with the stars and the seasons.

The Kapina Society

This Society lives in the southwest corner in Buniyana, which is the "resting house" of the sun. Kapina was originally created as a woman. The installation of the corn clan is officiated by the Kapina, then the Flint, and finally the Koshari. Kapina cure by sucking, sometimes they do communal cures, and participate in the ritual for the dead.

The pueblo calendar is determined by noticing the point at which the sun rises. The sitings are related to racecourses or marking the rising place of the sun on the outline of the eastern mountains. It is believed the sun has a house in the east with a wife who lives there. The sun knows all that transpires on earth at all times, so due respect must be given to it. The Fire Society has its home in the middle southeast mawakana ceremonial chamber, Gacdiy'ats'kai (Rainbow house). The chamber at Carlsbad Caverns, New Mexico is used for bringing rain, crops and game. North and Middle east is Gyi'tihaniy, home of the Kwiraina, which is south and is the Snake Society healing place.

KERES WORDS THAT RELATE TO THE SUN OBSERVATIONS:

I-niyatsa: Spirits that look like humans or take on spirits (human form).

Mai-Ya-nyi: Spirits in animal form. Human forms do things for animal forms. Animal forms (spirits) make plants grow and animals live. These include Santiago and Christ because high spirit people become animal spirits when they die. The sun priests show respect by throwing shells from their mouths over the cliff. The most powerful spirit of conception is the sun. Chosen women are celebrate until blessed by the people and led out and washed and left for the sun's conception. All sacred human shaped spirits are conceived within a virgin by the sun.

K'ohik: is the place of sunrise, where men go to meet their fathers. Sun is given thanks by the men and men receive strength from the sun.

CALENDRIAL NAMES IN REGARD BOTH TO ETYMOLOGY AND NEOLOGISMS:

a'hina: a dance to celebrate the taking of a scalp.

actitco'mi: the "pole" carried in the dance for the Blessed Virgin on August 15.

atcin: wooden slat altar of a curing society.

atse'edanyi: ceremony performed for a scalp taker to free him from supernatural danger, in which he has been placed by taking the scalp.

Bewits'a: ceremonial word for food, opewi is the ordinary word.

caiye-ik'a: the Hunter's society.

cocgaina: a guard, doorwatcher, who keeps unwanted people from entering the ceremonial house.

critsi: raw food, used for uninitiated ceremonial people.

Diaminye: head of the organizations within the Pueblo, sometimes a cacique or a tiamunyi.

Dyaiyatcra'nyi: sacred mountain word, ordinary word is Ko-t'.

Gacpyti'c: retreat time in summer to bring rain and crops.

Gaodyac: person who is taking purging, fasting, and observing continence before a ceremony. He is not to be touched or spoken to and is to be left alone.

Gaotcanyi: war chief helpers or initiates.

Gawai-aiti: food that is eaten at ceremony such as grains, seeds, beans, nuts, berries, corn, etc.

Goyaiti: wild game animals.

h'a'atsi: The earth: sand to make sand paintings with, or meal to use in sacred ceremony, the actual substance.

h'a-daw'e: pollen used in ceremony, from any plant.

H'a'di: corn which has been ground to meal and parched brown over a fire.

Hadi: obsidian.

h'a'tcaminyi: prayer sticks.

h'awirana: grain. made from corn or wheat.

hicami: two eagle wing feather used by medicine men in treating illness, cleansing, and ridding of evil spirits.

ho-nawwai-aiti: the highest holder of spirit medicine within the society of those who are wise in medicine.

ho't'can'yi'i: head of the whole group, chief.
hotcanitsa: the home or place of dwelling of the tiamunyi or cacique.
iariko: corn ear fetish symbol of Mother of all Indians.
iniyatsa: people in their highest spiritual capacity.
kacai-d'me: summer solar ceremony.
k"andyaiya: a person who purposely does or says things to injure others, also known as a witch.
Kaot's'in'yi: a person who "magically" brings good.
k'atsina: anthropomorphic spirits who bring rain, impersonated in masked dances, also called ciwana by the Keres and "Kachinas" generally in misrepresented literature.
ko'oko: an ugly hideous woman corpse, either dead or alive.
k'obictaiya: sacred place, places of high spirits.
K'otcinnako: Yellow woman of the North.
ko't: ordinary word for mountain.
ma'aca'inyi: skins of the forelegs of a bear worn by tiamunyi during curing rituals and initiations.
naow'e'ta'nyi: preparations made to spiritually meet the ceremony.
owadyami: pueblo council.
petana: cornmeal used by the yayatitcra for the ceremony called yaya g'aco, which is cornmeal from my flesh, used to heal.
shiwana: katsina.
si'cti: common person, not a priest or a healer.
tcaiya-nyi: medicine man, the one who holds the iarikos.
tcika: one of the two above ground ceremonial houses used by women. They are above ground kivas.
tsapac'oma: a sacred spot or shrine.
tsa'ts: soul, breath, wind of life within the body.
tsipanyi: refers to cold, dry winter ceremonies when there is full curing.
winock: heart that can be stolen.
witcatse: quartz crystal used for curing and maintaining balance.

Mera (1935, pp.35-39) suggested the Keres once lived in the Mesa Verde region. Wendorf and Reed (1955 p. 159) wrote there is still significance to the Mesa Verde-like pottery which include the present Keres area. The Frank Waters' version of Mesa Verde, (Book of the Hopi, 1963) shows a gross distortion of the figures. The local story-holders deny it is Hopi at all and they insist that it is Keres or Queres in origin and was done by their ancestors.

Mera (1940 p.26) wrote there are seven sites of former villages located within some 6 miles of Sia. Similarities between Hopi and Keres people show that ceremonies were copied or the same. There are some Societies represented in the panel that could co-relate to both Hopi and Keres such as the Snake Society symbol. The Fire Society at Hopi and at Keres must be included in all Winter and Summer Ceremonies. Queres or Keres terms are much like Hopi. The Keres' sword swallowed by the Fire Medicine Man

is very similar to the symbol in the center of the petroglyph panel. Some say it is the Fire Medicine Man who took over at the death of the Sun Watcher. Others say it is the path of the Sun as it traveled before the times of trouble.

Winter Solstice: Haniyko

Summer Solstice: Hanyikikya

Turning point of the sun in winter solstice

June 21st and December 21 are the solstice ceremonies.

GEOLOGICAL HISTORY OF MESA VERDE:

Sixty million years ago this area was occupied by a shallow sea. By the early Cenozoic Era these sediments became a thick series of sandstone and shales as the sea retreated. Beginning in the late Miocene and continuing into the middle of the Pliocene, about 25 million years before present, this series was uplifted and tilted to the south. The uplift became the escarpment along the north edge. The edge of this escarpment rises now at 2,000 feet above the valley floor. The highest northern point of the mesa slopes to the south. The elevation at the park entrance is 6,500 feet.

The southern edge of the mesa has a uplift as the Mancos River flows along the south edge of the mesa. The great block of Mesa Verde is made up of three major geologic formations. The top most formation is the Cliff House made of sandstone which is the surface of most of the mesas. This is composed of a series of brown to red brown sand and one foundation of shale. These were some of the last layers of sediment left by the ancient Cretaceous sea. Below the Cliff house formation is the Menafee formation which is dark shale and coal. This formation forms the talus slopes which lie below the great cliffs of the Cliff House sandstone. The third formation, the Point Lookout Sandstone, underlies the Menafee formation.

The sandstone provided for two basic requirements of the farmers who dwelt here. One was the impermeable shale layers of this formation, which stops the downward percolation of ground water from the overlying sandstone. Once the water from rain or snow soaks into the sandstone it reaches this layer of shale and it can go no further. It begins to move laterally along the surface until it emerges from the cliff face as seeps and springs. These areas provided an invaluable water resource for the prehistoric inhabitants, and they contributed indirectly to the solution of the problem of shelter.

Wherever the seepage happens, it tends to weaken the overlying sandstone. The weakened sandstone erodes away to leave an area available to be made into a cave dwelling or an alcove. The third requirement was arable land. The wind blown silt was deposited, creating soil for farming land.

The ruins have been dated using dendrochronology, which is the study of annual growth rings in trees and aged wood, to date events and variations in environment. The dating was then checked using archaeomagnetic dating, which is a technique allowing one to establish a date within a small bracket of years in which the immobile sections of clay were heated. Clay-lined fire pits are one of the most successful sources of dating. Clay contains minute particles of iron. When the clay is heated the iron particles become fluid and line up pointing to the magnetic north. Over the centuries the magnetic north pole has migrated and the specialists can tell which way the iron points and tell the age of the iron.

The ethnographic analogy is the passing down of traditions, structures, folklore, ceremonies, from one generation to another.

The earliest American Indian occupancy of the Colorado Plateau dates approximately 10,000 years ago. These Paleo-Indians hunted large animals and became known as the Early Big Game Hunters. On the Colorado Plateau the period from about A.D. 1 to A.D. 450 is sometimes referred to as the Basketmaker Period. The people who lived here were also placed in the En Medio Phase, which would give them the tradition of following migratory trails, nomadic farming, simple structures for shelters, storage pits, fire-cracked cobble, use of projectile points with a tendency of using long stemmed corner notches. This brought about the increase use of stone tools and the development and growth of storage pits. This would place these people in the En Medio Phase at B.C. 800 to A.D. 400. They would have fall and winter base camps with nomadic summer farming, placing them in seasonal encampments making solar observatories an absolute must for farming, migrating, and surviving.

Petroglyph point location, Spruce Tree Canyon at Chapin Mesa, exhibits characteristics parallel to those displayed or solar observations at URARA Symposium 1991, Green River, Utah.

SUMMATION

In order to understand the material relative to the solar observatory site, one must become aware of the importance of the sun in the life of the Indian people. It was the focal point of their lives and culture; their origin, their religion, and their sustenance. The sun-watchers signaled the leaders of the pueblo to initiate the various activities of pueblo life.

The sun was necessary for the establishment of night and day, of seasons and ceremonies. It is also known as the Germinator, Father Sky, who makes it possible for Mother Earth to receive the seed which will continue life.

The importance of the sun in the development of culture is reflected in the way of The People who use the products of sun

and earth. The flora and fauna of the Mesa Verde site are in both the language and the culture of the Six Southern Pueblos and are common to both areas. The strength received from the fauna and flora is reflected in the form of worship and ceremony. The present-day Keres language contains terms for those plants indigenous to Mesa Verde. These plants are relative to the spiritual life of the Indians for they are used in the ceremonies of today as they were in the ancient past, and they are necessary for survival now as they were then. The source of all is, again, the sun.

The clans represented in ancient times are parallel to present day clans with the exception of the Cougar Clan and Galaxy Clan (or Star Clan) which are believed to be extinct. The clans carry on the ancient traditions and teachings; a means of maintaining continuity, unity, and harmony. A spiritual union among The People and their total environment was therefore necessary.

The present-day Keres language incorporates terms for all of the life processes which are controlled by the sun: The process of germination and fertilization (the relationship of Father Sky to Mother Earth), the birthing process which involves both the father and the mother is the expression of this unity, the preparation and planting of crops nurtured by Father Sky and Mother Earth, germination producing food for the people to sustain themselves and their clans. Medicinal applications of herbs found at Mesa Verde in ancient times are contemporary with those found today, as in the areas inhabited by the descendants of the Mesa Verdeans. All of these functions are controlled by the sun.

The people were barely emerging from a nomadic lifestyle, having been at the mercy of the elements for all their basic life-needs. They realized they were vulnerable to the effects of nature which came from the sky. The occupant of the sky was the sun, thus Sun became their focal point.

As Sun became an item of primary importance, it is logical that considerable time and effort was invested into observing Sun and factors attributed to it. Sun-watchers became a part of ancient pueblo life and remain a part of the culture. In some pueblos, Sun-watchers use points of reference constructed for the purpose of tracking the sun and seasons as they change. At Mesa Verde a natural formation of stone was observed, probably for many years, before the petroglyphs and markers were placed there. Due to the unusual alignment of the petroglyphs (they face west, not the usual south or southeasterly orientation) the intent of the sun-watchers to use an available site appropriate to their intentions demonstrates a remarkable and creative perspective toward the observation of the paths of sunlight as they moved across the stone.

The notation that the (solar observatory) marker we located occurred within seven minutes of the zenith of the sun (12:07 P.M. MST) is coincidental as the ancients had only rough approximation of time relative to our accurate means.

The use of more than one section of panel in the same area demonstrates the purposefulness of the ancients.

The occurrence of an alignment on the autumnal equinox, September 22, 1991, has been observed and documented with the help of present day Keres speaking Puebloans, who state that the Indian calendar was not necessarily coordinated with the non-Indian calendar. Actual dates for feasts, ceremonies, hunts, and other activities were connected to Native American seasonal activities. These are set either using luni-solar positions, lunar positions, or arbitrary decisions of the leaders of the communities.

Further observations will be conducted to determine connections to the present day solstice calendar. It appears there may be a number of solar observatory markers present. What other secrets may be discovered remain to be seen.

INFORMATION RECEIVED

From informant and noted reference material placed in text. John A. DeLong is a published author, poet, and teacher who lives in Algodones, New Mexico. He deciphers petroglyphs with the Pueblo people and is working on a site on San Felipe Pueblo Reservation. He is also founding the School of Human Ties, a Multicultural School, in Algodones with Teresa Pijoan.