

THE SMOKE SIGNAL

In a recent publication of the Smoke Signal our active member, Don Grey, explained the Carbon 14 Process as used in determining the approximate age of organic materials such as bone and wood. This process requires considerable care, time and expense. Just as soon as this process became known, persons so qualified to make such determinations were swamped with orders. Many of our very fore-most Archaeologists were required months before they could get a report upon some certain specimen that they considered important. Further delay came about in getting numerous and quick reports through the need of such Scientists by the Atomic Energy Commission. It can readily be seen that our Amateur Archaeological Society is going to find it difficult to obtain Carbon-14 reports on the many items we may discover. It is also enlightening to know that we now have proven our worth in the eyes of our professional Archaeologists and through their help we no doubt will be able to get C-14 reports on desirable items.

Fortunately Mother Nature has provided us with another less costly means of placing a quite accurate age upon certain materials. This means is known as PATINATION. The word is apparently of Latin origin and it means, -a low dish or pan. It is a special word used in description of colorative coatings on Cooper, Bronze, old woods and certain Siliceous Rocks. In bronze or other copper alloys, the patination will show as a dark green and of about the same chemical composition as Malachite, which is a copper ore. It is usually very thin on such objects, it imparts great beauty and it acts as a protection against further chemical oxidation. The term, "Patination" is also used in describing certain old wood objects such as tables, chairs, cabinets and etc. and especially some old violins.

In what we, as Amateur Archaeologists, are most concerned is the patination that may be found in certain rocks. Patination is a very valuable item to the Mineralogist and Geologist. We can hardly hope to be able to detect all the rocks that may show patination but we can easily detect this phenomena displayed in many of our rocks such as Chert, Flint, Jasper and Agate. PATINATION IS A DECIDED ALTERATION THAT HAS TAKEN PLACE WITHIN THE SPECIMEN THROUGH OXIDATION.

Much study has been made relative to the Time-Rate at which these numerous alterations take place. With much study as to thickness and in comparison with other known dated objects such as artifacts and other objects of human creation, it is sometimes possible to judge their age quite accurately.

Patination and Incrustation are two words that are often confused and the difference in the two phenomena overlooked. INCRUSTATION IS A CHANGE THAT HAS TAKEN PLACE FROM WITHOUT AND SOMETHING HAS BEEN ADDED. This discussion will come later in the Smoke Signal.

Submitted by Mr. R. E. Frison.

Our Society was well represented at the 16th Annual Plains Conference at the University of Nebraska over the Thanksgiving week-end with Bill Mulloy, Lou Steege, Glenn Sweem and wife and Ray Bentzen in attendance. Glenn gave the report on Kaufmann Cave and Ray gave the Medicine Wheel report, both of which had been prepared by Don Grey. We also had a fine table exhibit on our projects and showed colored slides on the Medicine Wheel. Our work was very well received, and of all the compliments paid, perhaps the best was expressed by one of the top Smithsonian men who said that in his opinion there are only three state societies which are doing an acceptable job in the field, namely, the Missouri, Texas and Wyoming groups.

While in Lincoln, your president and vice president laid the groundwork and made the proper contacts to enable our Society to be given consideration for participation in future archaeological salvage work in this area, particularly in the Yellowtail Dam region. It is hoped that through training already received by our members who actively participated in our projects to date, plus the members and future members who will avail themselves of the opportunity to learn excavation technic in the course to be taught in Northern Wyoming Community College this winter, that our Society will be able to field at least one and perhaps several crews under the direction of or in cooperation with the National Park Service and the Smithsonian Institution.

SOME ARCHAEOLOGICAL OBSERVATIONS IN FLORIDA, By Ray Bentzen.

While on a short vacation in Florida in December, your president took time out from fishing and quail hunting to do a little investigating in two areas where prehistoric man left evidence of his habitation. The southernmost town on the west coast of Florida is Everglades. A new highway and causeway has been built 4 miles southeast of Everglades to the island of Chocoloskee, which is the end of the road. About 2 miles southeast of Chocoloskee on a sea-level island is a series of mounds on the west side of a bay. They lie about 50 feet from the shore and are completely concealed from passing boats by a dense growth of mangrove trees. The mounds are solid hills of shells including many species of mollusks and shellfish, extending from sea-level to a height of 20 to 25 feet and averaging 50 to 75 feet in diameter. Many have trees up to 12" in diameter growing on the sides and tops. The mounds lie in a series, parallel to the shore and separated only by a narrow space of 3 to 5 feet. The vegetation is too thick to allow photographing. Seven or eight mounds were examined and the guide estimated the total number to be nearly a hundred. One mound showed evidence of a little excavation, with about 2 cubic yards of shell removed on the east side at an elevation of about 15 feet. A cover of fallen leaves from the dense foliage nearly covered the mounds. Mosquitoes were numerous and hungry. Temperature was hot and the air humid.

On the west border of Chocoloskee are more mounds of immense size. The entire motel and the dock area are built on one mound which was leveled off with a bull-dozer. Another mound 200 yards west had its south face removed for highway space, and still measures about 360 feet long and 100 feet wide. It is 15 to 20 feet high. A 5-room house and yard are on top of the north end and a small modern graveyard on the south end. Many potsherds were picked up including several from the tops of the modern graves which had been excavated into the shell midden.

The remains of the modern burials are of Spanish extraction (Lopez-1848-1932, etc.), but being buried in what is probably an ancient burial site, they could cause a merry mix-up for future archaeologists.

The Florida Power Commission is completing a large new power plant on the outskirts of St. Petersburg on Weeden Island, which is not an island but a peninsula covered with oak, pine and palm trees and palmetto. Just south of the plant is a group of mounds composed of loose deposits of shells consisting of many types of mollusks, oysters and shellfish. The mounds vary in size from small to large, with two of them being larger than half an acre in area and about 15 feet in height. One had been leveled off with a bull-dozer and a large warehouse constructed on top of the mound, the shell base giving perfect drainage. The oiled highway passes to the east of the warehouse to the power plant, and across the highway and adjoining it is another large mound from the top of which is growing a tree with a trunk diameter of 4 feet, which would indicate considerable antiquity.

About 100 yards northwest of the warehouse is a mound, covered with oak and palm trees, through the center of which a trench has been cut, apparently with a bull-dozer, to a depth of about 6 feet, a width of 12 feet and a length of 50 feet. At a point on the west side of the trench near the maximum height of the mound, I excavated a lateral trench to a horizontal depth of 3 feet and vertical depth of 4 feet, removing about 2 cubic yards of shells. The only artifacts recovered were a number of undecorated potsherds at levels of 12" to 42" below surface. At the 48" level, a fair quantity of charcoal was recovered and sacked along with shells of the same context. These may be used in fixing a date both for the age of the mound and in calibrating the new calcium carbonate method of dating.

Just two blocks outside of the city limits of St. Petersburg and about one mile airline from the new powerhouse is areal estate development project in which the land has been graded to remove palmetto and other shrubbery, leaving the sandy soil exposed and revealing the presence of any artifacts that might have lain beneath or near the surface. In an hour of searching over this area, two small end-scrappers and a handful of chips and flakes were picked up along with a large, crudely-flaked scraper and a fragment of a chopper. My host picked up a nice leaf-shaped blade and contributed it to the collection. A significant feature of these artifacts and flakes is the coincidence that their color matches perfectly with that of the shells and shell fragments that litter the area, so it is very difficult to detect the stone.

In spite of its heavy population, Florida offers a fertile field for investigation of archaeological remains by amateur student as well as professional.

OVER THE CAMPFIRE

Ruth and John Aubuchon moved from Crow Agency on December 17th and will sail from San Francisco on January 16th for Hilo, Hawaii, where John will be associated with the Hawaiian National Park. We are sorry to lose this valuable member, but wish him the best of success in his new position.

Missy Kleiber writes from Billings that Hans is making a wonderful recovery in Deaconess Hospital and feels stronger every day. We all hope and pray that Hans will be restored completely so that he and Missy can resume their normal life and work again with our society.

This is the last issue of the Smoke Signal for its first year of publication. The Editing Committee thank those who have submitted articles and wish the new Committee a successful 1959.