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THE WASHINGTON ARCHAEOLOGIST

WASHINGTON ARCHAEOLOGICAL SOCIETY, WASHINGTON STATE MUSEUM, SEATTLE 5, WN.

NEXT MEETING Seattle Chapter - June 14, 1961 - 8:00 P.M.

MEETING PLACE: Washington State Museum
4037 15th Avenue N. E.
Seattle 5, Washington

SPEAKER: Dr. Robert Greengo

TOPIC: "Archaeological Sequence on the Columbia River"

This is the paper read by Dr. Greengo at the Annual Meeting of the Society for American Archaeology in Columbus this spring. Slides will accompany the discussion.

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THIS WILL BE THE LAST REGULAR MEETING OF THE SEASON

At this meeting plans for summer digging will be announced and members unable to attend may get information about summer activities from any of the members listed below:

TED WELD	1752 North 122nd	EM 3-5887
JACK THOMSON	18022 25th N. E.	EM 2-7222
DEL NORDQUIST	10421 26th S. W.	CH 2-5602
TOM BEDDALL	5400 N E Windermere Rd.	LA 4-0514

REGULAR MEETINGS WILL RESUME ON SEPTEMBER 13, 1961

45SN100, A SNOHOMISH COUNTY SITE EXCAVATED BY THE WASHINGTON ARCHAEOLOGICAL SOCIETY

(Abstract of paper read at Northwest Anthropological Conference, April 15, 1961)

The Washington Archaeological Society spent most of the past summer excavating a new site in the Snoqualmie River valley. Although the site was known to the inhabitants of the Duvall-Monroe area no scientific investigation had been done in the past. The investigation may well prove to be one of the most significant contributions to Western Washington archaeology because of the presence of perishable materials, e.g. basketry and cordage. It had been the concensus that such fragile materials would seldom be found west of the Cascades. Moulds or impressions and small fragments might be expected, but hardly the actual basketry in almost whole specimens. If, from the example set at 45-SN100, that water saturated deposits need to be re-examined for evidence of material culture, a precedent may have been set by the current investigation. The yield of basketry has been quite great.

The site appeared to have been a promontory or abutment extending into the river. Once composed of deposits from the Snoqualmie flood plain, the bank had been severely eroded by recent fluvial action until very little of the earlier formation existed. A shallow gravel bar extended into the river from the foot of the site attesting to the promontory described by early inhabitants of the area. The midden itself, so far, extended into the river as far as it has been possible to excavate.

Behind the area excavated near the river's edge the site was overlaid by a silted deposit of sand of 10 to 12 feet in depth. The overburden lessened to about 2 feet 50 feet inland. Actual materials deposits along the river varied from 3 to 4 feet in depth. Although, the total geographical extent of the site has been only tentatively explored, it has been found continuous up and down the river for approximately 300 yards. Whether or not the site was a permanent or seasonal one is not known at present; yet it is obvious that the aboriginal occupancy was extensive and essentially continual. No contact goods have been found and it seems unlikely that they will if we assume that the very deep overburden constitutes a stratigraphic indication of age.

Most of the digging was carried on along the river's edge because of the hindrance of the thick overlay of river silt inland. Even in the driest part of the season excavation was done below the water level of the river, necessitating constant bailing of water seepage and banking the river side to prevent overflow into the pits. Autumnal rains flooded the lower site and subsequently the upper area was opened to investigation. The midden deposits excavated were in a water soaked condition. This factor may account for the preservation of fibrous materials since all basketry recovered was inter-logged.

The types of basketry found may be classed as the work basket or open-weave techniques. Plaiting, twilling, and twining examples have been found. The plaiting is by far the most frequent technique noted with large and almost complete specimens recovered. Other technical methods found, used in conjunction with the aforementioned baskets were lattice and three-strand twining.

Chipped stone artifacts represented a surprising assortment of materials, including obsidian, chalcedony, petrified wood, jasper, jasp-agate, opalite, and basalt. There were about as many types of points and blades as there were materials. Scrapers were frequently found; among which the small trapezoidal scraper seemed most common. Points exhibited a variety that seemed peculiar for any site unless it had actually been a crossroad of trade. Actually, this may have been the case for ethnographic data about the tribal groups living in the foothills of the Cascades designate them as mediators of exchange both east and west over the mountains. A complete cataloging of point typology is not feasible here. Among the established types are the leaf-shaped, both bipointed and with convex base; the diamond shaped with a flat base; and stemmed varieties. Among the latter were both proportionately long and short types and wide and narrow bodies. The straight and laterally sided points were those most frequently found. The parallel-sided and expanded stem types also appear common. One type had the singular feature of assymetrical tanging--one tang is very rudimentary or much shorter than the other. This type has been reported along the Middle Columbia River. Other chipped stone work included drills and choppers. A jadeite chisel, an oval ornament made from lignite, a stone mortar, and whet stones were found. Net weights were found in number and deserve special description.

Had these weights been found unhafted they would have been ignored since they were unworked cobbles. It is remarkable that they came from this site which has given so many otherwise perishable materials intact to the investigator. The type of weight is the same throughout: an oval stone fitted into a V-shaped stick bent in the middle and both ends wrapped around the stone by cherry bark. The stone was securely held and the V-shaped handle was probably used to facilitate stringing to lines or nets.

Wooden fishhooks were found. Most other items of wood were unidentifiable, although working was apparent. Among items noticed most frequently were numerous chips from wood-working industries and poles or rods which may have served some constructional purpose. One post hole was found; although a shelter or house may be supposed, this evidence is too tenuous to presume it was part of a dwelling rather than a weir or anchor for a fish trap or seine.

Excavation in 45SN100 will continue as weather and the river allow. A tentative summary of the materials found indicate the site was definitely used for fishing as the incidence of fishing hooks and sinkers, the type of basketry, and the location of the midden along the river support such a hypothesis. Hunting and gathering are indicated by the chipped stone points and the identification of fresh water mussels in the midden. One disappointing feature of the excavation was that animal remains were usually too decomposed to be recovered. Only the fragile outer membrane of mussel shells were found. Bone, unless charred, was reduced to a viscid state of fatty ooze that could neither be preserved or identified. Frequent encounters with bone remains were noted by the diggers but, except for one example found in excavating the inland midden, bore no distinguishing features that might give evidence of what animal remains were brought to the site. The example found above the river was antler, not retrievable, but recognized by its configuration in the soil as it was excavated. Except for the mussel shell the only other animal materials identified were beaver teeth. It is impossible to say whether they were part of beaver remains or the wood working tools.

Del Nordquist

PHOTOGRAPHING ARTIFACTS

Jack Thomson

For black and white negatives as well as color slides of artifacts, particularly chipped stone artifacts, without shadows but with critical definition of detail and with a suitable scale to show size, a simple and inexpensive arrangement which has proved to be successful is described.

A light table is made by mounting three 20 watt daylight fluorescent tubes, F20T12/CW, so that they have only 1/4" clearance between them and with a suitable reflector finished with appliance white enamel behind them. Over this place a 3/16" thick sheet of translucent white plastic with about 1½" clearance between the surface of the tubes and the diffusing material. The platform for the artifacts is a piece of 3/16" crystal glass mounted about four inches above the plastic. Provisions should be made so that this distance can be adjusted. The light table should be mounted on legs and boxed in so that it will be convenient to use a tripod with a right angle extension as in a copying stand. Plate I shows the general arrangement of the light table with the camera and top lighting in place. While the color value of the back light can be changed by using different shades of fluorescent tubes, colored crepe paper placed on the plastic will produce a larger variety of back lighting. The top lighting is done by using two reflector type flood lights. The problem is to get the correct balance of back lighting to top lighting, depending on the color and composition of the artifact and the type of photograph being taken. A clear or transparent centimeter scale in the proper relation to the artifact, the lights adjusted, and the exposure is ready to be made. There is no need to use the double exposure technique.

The top lights which have worked out best for me are the 3400 Kelvin reflector lights, one placed at about 10 o'clock and the other at 2 o'clock. This position of the lights throws the shadows out of the camera range. For example, an artifact with a vitreous luster was photographed using Panatomic X film with an exposure of 1/15 sec. at f 22, two top lights and white back lighting. The results were very pleasing, the flake scars were high-lighted and in sharp focus; the artifact appeared to float in space; the scale figures appeared in the picture without the body of the scale showing. The same exposure made at 1/8 sec. at f 22 produced about the same results.

However, for dull finish objects, a sense of a third dimension is achieved by placing the top lights both on one side so as to throw the low places into relief. Again the same camera setting seems to be satisfactory, in fact you can hardly distinguish between the two exposures. If the object is dark the longer exposure will be better and if it is lighter in color then the shorter exposure is in order.

For color slides the exposure technique is similar, however, the lighting is more critical since this is the key to accurate color reproduction. Assuming that you have the proper lighting for a given type of color film, the overall quality of the slide is governed by the back lighting. As mentioned before

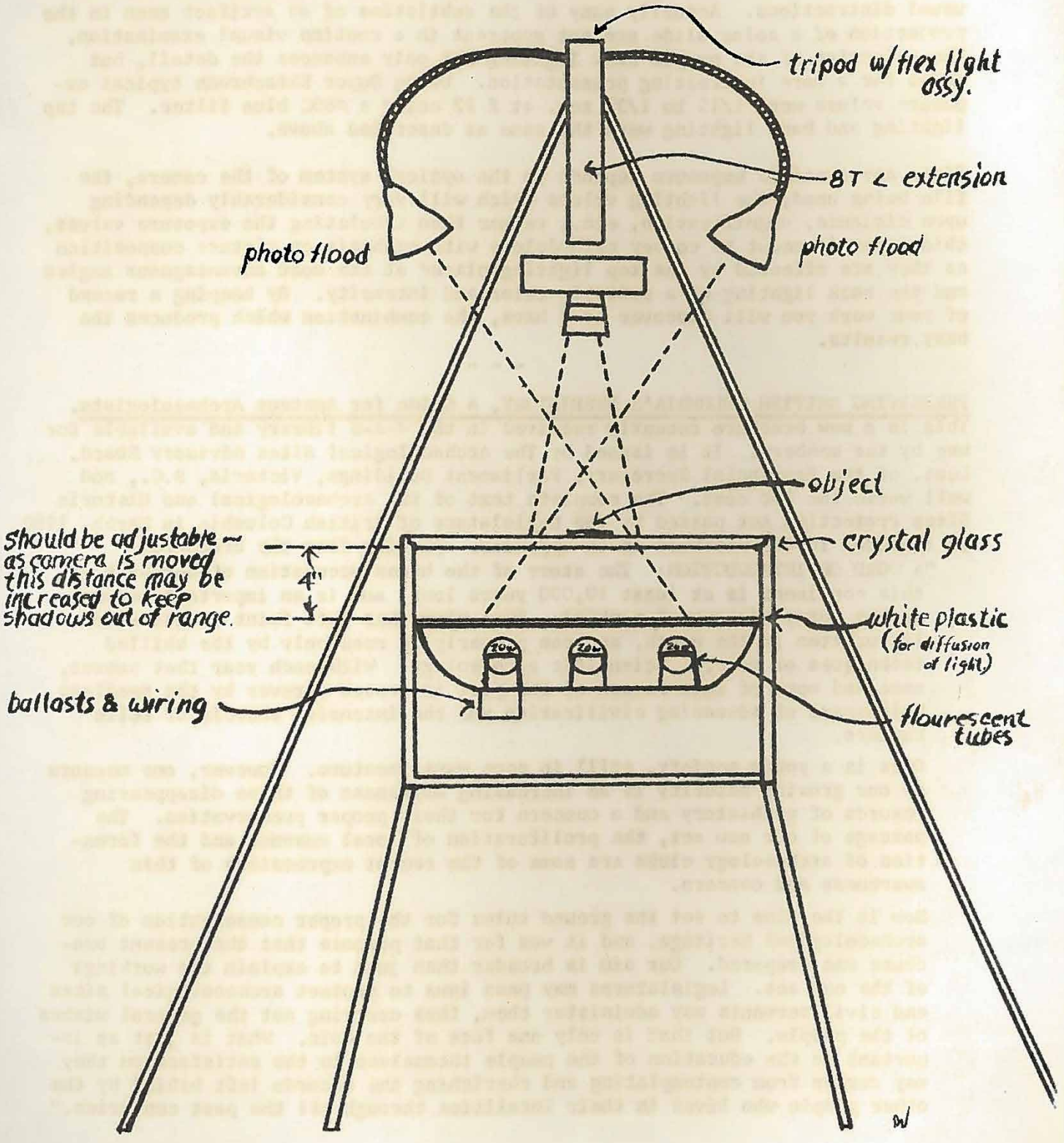
tripod w/flex light assy.
8T ∠ extension
photo flood
photo flood
object
crystal glass
Should be adjustable — as camera is moved this distance may be increased to keep shadows out of range.
4"
white plastic (for diffusion of light)
ballasts & wiring
flourescent tubes

Plate No. 1

you can use various colors of crepe paper to create the particular shade of color required. A color which is in contrast or compliments the color of the artifact will result in a presentation of the artifact which is free from the usual distractions. Actually many of the subtleties of an artifact seen in the projection of a color slide are not apparent in a routine visual examination. The selection of the proper back lighting not only enhances the detail, but makes for a more interesting presentation. Using Super Ektachrome typical exposure values were 1/15 to 1/30 sec. at f 22 using a #80C blue filter. The top lighting and back lighting were the same as described above.

Since any specific exposure depends on the optical system of the camera, the film being used, the lighting values which will vary considerably depending upon distance, magnification, etc., rather than tabulating the exposure values, this paper is meant to convey methodolofy with emphasis on picture composition as they are affected by the top lighting placed at the most advantageous angles and the back lighting of a suitable color and intensity. By keeping a record of your work you will discover as I have, the combination which produces the best results.

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PRESERVING BRITISH COLUMBIA'S PREHISTORY, A Guide for Amateur Archaeologists. This is a new brochure recently received in the W-A-S library and available for use by the members. It is issued by The Archaeological Sites Advisory Board, Dept. of the Provincial Secretary, Parliament Buildings, Victoria, B.C., and well worth the 15¢ cost. The complete text of the Archaeological and Historic Sites Protection Act passed by the Legislature of British Columbia in March, 1960, is included in the brochure as an appendix. Quoting from the brochure:

"A WORD OF INTRODUCTION: The story of the human occupation of our part of this continent is at least 10,000 years long, and is an important segment of the total history of mankind. That story has left faint traces which lie written in the earth, and can properly be read only by the skilled techniques of modern, scientific archaeology. With each year that passes, more and more of this record of the past is erased forever by the needless bulldozers of advancing civilization and the intensive shovels of relic hunters.

Ours is a young society, still in some ways immature. However, one measure of our growing maturity is an increasing awareness of these disappearing records of prehistory and a concern for their proper preservation. The passage of our new act, the proliferation of local museums and the formation of archaeology clubs are some of the recent expressions of this awareness and concern.

Now is the time to set the ground rules for the proper conservation of our archaeological heritage, and it was for that purpose that the present brochure was prepared. Our aim is broader than just to explain the workings of the new act. Legislatures may pass laws to protect archaeological sites and civil servants may administer them, thus carrying out the general wishes of the people. But that is only one face of the coin. What is just as important is the education of the people themselves to the satisfaction they may derive from contemplating and cherishing the records left behind by the other people who lived in their localities through all the past centuries."

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