

DON E. CRABTREE

Research Associate in Prehistoric Technology
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Don was born in Heyburn, Idaho on June 8, 1912 and raised in the Salmon River country which was still very much occupied by local Indians. Young Crabtree became interested in these people and the artifacts he found in the nearby deserts, but was unable to learn anything of their manufacture from the Indians. Apparently, even at that time, flintknapping was a lost art.

When he was seven and had gathered quite a collection of artifacts, he began to experiment with duplication. He tried many methods with no help and little success and much failure. But he persisted and by the time he was twelve he had learned to use a deer antler for the percussion work and a deer tine for pressure and could make a fair imitation. However, he was not satisfied with the results for he realized that the technique was not the same and what he was producing was an imitation and not a duplication.

While hunting suitable material for experiments, he realized that the debitage found in the Indian campsite was more vitreous and showed a color change from the raw material nearby. It occurred to Crabtree that the Indians were altering their flint in some way and he began to experiment with alteration of lithic material. After much failure, he was successful in duplicating alteration by burying the stone in sand under a campfire and slowly heating and cooling the material. The obsidian, of course, needed no alteration, but the thermal treatment of the flint allowed greater control of detaching flakes and he was able to duplicate many more techniques. Since this thermal alteration has now been published by Crabtree, Dr. Francois Bordes and Dr. Jacques Tixier of France have also experimented with the process and Dr. Bordes now finds that the alteration can be traced to Solutrean and it may well be that pressure work is contemporaneous with thermal alteration.

For many years Crabtree continued the lithic experiments, each experiment an attempt to duplicate a different typological point technique, until he had successfully determined the techniques of many peoples in time and space. During this time he made copious notes of platform preparation, amount of force, angle of seating the tool, angle of detachment, etc. until he was able to interpret many techniques both of the New and Old World.

Having studied paleontology at Long Beach Junior College, he was employed in the late 30's by Dr. Charles Camp and Dr. Ruben Stirton as supervisor of the vertebrate and invertebrate laboratories at the University of California at Berkeley. During the summer months he was assistant to Dr. Stirton in field work in California and Nevada.

While at Berkeley, he was privileged to work with Dr. A.L. Krober and Dr. Gifford who, together with Camp and Stirton, were intensely interested in Crabtree's flint technology and encouraged him to continue the experiments and to eventually publish the results. Crabtree had devised his own techniques of manufacture, so was much encouraged when Dr. Krober told him that his holding and manufacturing techniques were duplicate to that of Ishi.

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In 1939, Don was stricken with cancer and returned to Twin Falls, Idaho for surgery. The surgery and subsequent X-ray treatment left him weighing a mere 70 pounds and with phlebitis of the left leg. To overcome the pain, learn to walk again, and regain his health, Don concentrated on his flintknapping and it was during this time he learned to replicate the Folsom point both by percussion and pressure. In 1941 he received an invitation to demonstrate to the American Association of Museums in Columbus, Ohio. He was subsequently employed by the Ohio State Museum to continue his experiments in their lithic laboratory. Here he work^{ed} with Dr. Henry Clyde Shetrone and H. Holmes Ellis who further encouraged his work. Later he served as adviser on lithics at the University of Penn. and on the Lindenmeier collection at the Smithsonian.

The war intervened and Crabtree interrupted his work to serve as supervisor for Bethlehem Steel Company and later returned to Idaho as County Supervisor for the Department of Agriculture. In 1962, Dr. Earl Swanson, Idaho State University invited Don to open the first conference of Western archaeologists on problems of point typology. His work at the conference interested the participants and, as a result, the National Science Foundation sent him to attend the Lithic Technology conference in Les Eyzies, France in November 1964. There he worked with Dr. Francois Bordes and together they lectured and demonstrated to the fifteen participants. Subsequently National Science Foundation has issued grants to Dr. Earl Swanson, Idaho State University to employ Don in his present capacity and record his work in publications and on films. Dr. Swanson and Don are presently working on four films which will cover the techniques of pressure work, the cone principle, blademaking and percussion work.

Attached is a list of Don's activities with other institutions and his publications.

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