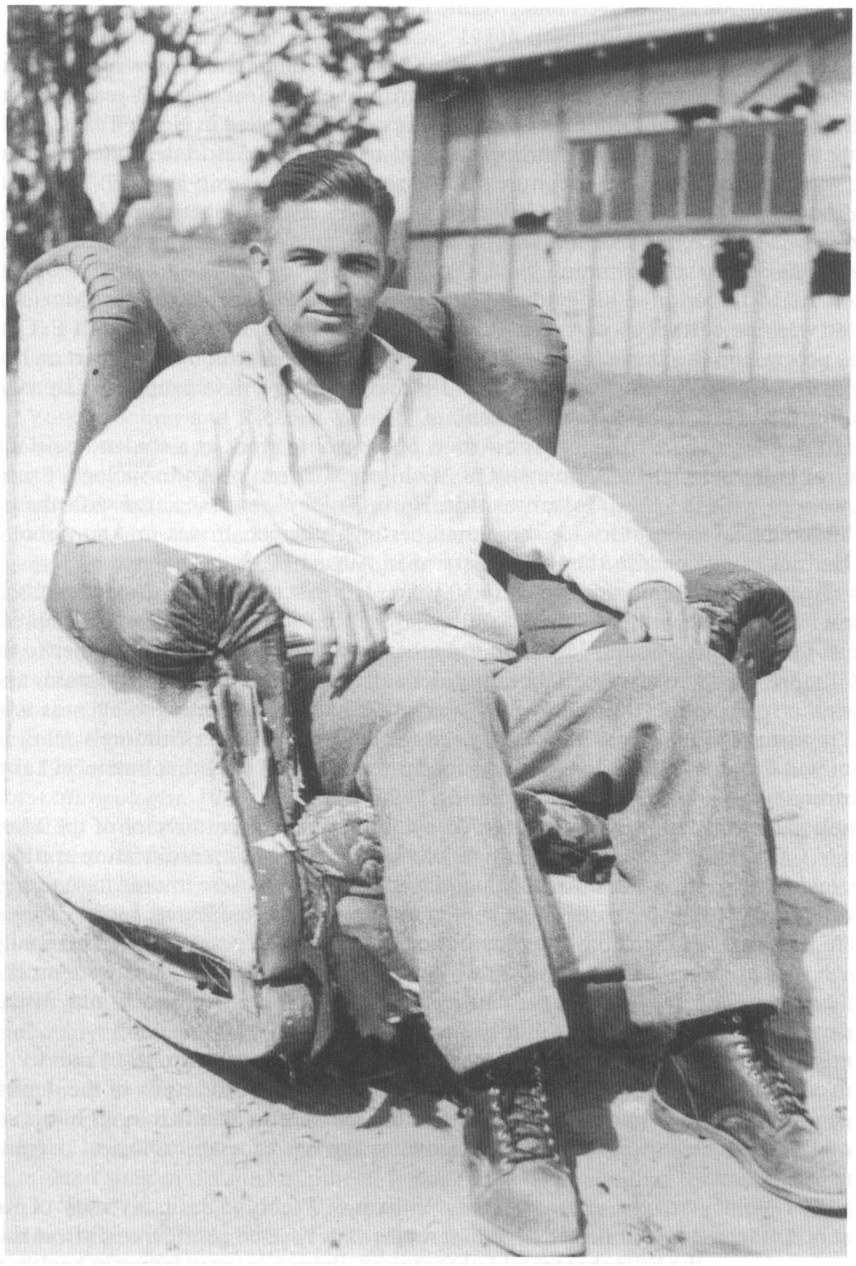

VOLNEY HURT JONES
1903–1982

American Antiquity, 53(3), 1988, pp. 455–460.

After a brief illness, Volney H. Jones died on December 12, 1982, in Ann Arbor, Michigan. He was a founding member of the Society for American Archaeology and a pioneer in the field of ethnobotany. Directly or indirectly, Volney trained most of today's practicing ethnobotanists and paleoethnobotanists in American anthropology.

Volney was born April 30, 1903, in Comanche, Texas, to Ella Jones Jones and Arthur Willis Jones. His childhood years were marked by frequent moves, and he was 20 years old when he graduated from Grosbeck High School in Grosbeck, Texas. He enrolled in North Texas Agricultural College (now the University of Texas, Arlington), and received an Associate in Science certificate in 1927. He was awarded a B.A. in agriculture from Texas A&M University in 1929. While attending that institution he worked with Robert G. Reeves, the pioneer corn geneticist. (Volney was quick to point out, however, that he was not involved in any of Reeves's corn research; instead he studied the genetics of the Japanese persimmon.)

Volney left A&M to continue his graduate education at the University of New Mexico. In Albuquerque he was one of a group of fortunate students to be associated with Edward E. Castetter's ethnobotany program in the Department of Biology. His master's degree, based in part on his thesis, *The Ethnobotany of Isleta Pueblo,* was awarded in 1931. His thesis work was supported by a Graduate Fellowship from the National Research Council.

Volney left New Mexico in 1931 for Ann Arbor, Michigan, to work as a student assistant in the Ethnobotanical Laboratory at the University of Michigan Museum of Anthropology. Except for a brief wartime stint with the U.S. Government in Haiti, Volney was associated with the museum and the Ethnobotanical Laboratory for the remainder of his career. It was in Ann Arbor that he met Joyce Hedrick, a mycologist; they were married in August 1933.

Volney's career at Michigan spanned nearly 50 years. His first appointment—student assistant—brought him into contact with Melvin R. Gilmore. At the time, Gilmore was the preeminent ethnobotanist in the United States; Jones, on the other hand, was a relative newcomer to the field. Although Gilmore was active in the laboratory, he suffered from Parkinson's disease, and often spent his winters "taking the waters" at Hot Springs, Arkansas. Increasingly, even as a student, Volney had to assume Gilmore's responsibilities in the laboratory. Upon Gilmore's death in 1940, he was appointed Curator of Ethnology and assumed directorship of the Ethnobotanical Laboratory, the dual positions he held until his retirement in 1969.

The Ethnobotanical Laboratory was conceived by Gilmore and then director of the Museum of Anthropology, Carl Guthe, to serve as a clearinghouse for the taxonomic identification of ethnological and archaeological plant specimens. Archaeologists and ethnologists were invited to send specimens to the laboratory, where they were identified and, in most cases, curated for use by other researchers. Reports were prepared for the submitting institution, and over the years Volney personally wrote over 350 such reports. Sometimes they were only a page or two in length; others were much longer. More often than not, Volney's analyses were mentioned in a final site publication and, just as often, without formal recognition of his contribution.

Importantly, Volney conceived of ethnobotany as more than just compiling "laundry" lists of plants. In an early article Jones (1941a:220) defined ethnobotany as "the study of the interrelationships between primitive man and plants." This was the message he instilled in all of his students; he was one of the first American scholars to recognize the need for an ecological perspective in anthropological studies.

Not long after Volney arrived in Ann Arbor, William S. Webb of the University of Kentucky Department of Anthropology submitted several samples of desiccated plant remains from an eastern Kentucky rockshelter to the Ethnobotanical Laboratory. Gilmore, by now fading in health, gave the materials to Jones for analysis. The results of Volney's analysis of these materials from the Newt Kash rockshelter provided the basis for the study of the development of prehistoric agriculture in eastern North America.

Volney's (1936a) report on the Newt Kash materials is a landmark in the history of paleoethnobotany. Although tucked away in an obscure publication, the description and interpretation of the Newt Kash Hollow plant materials is one of the most cited studies in American paleoethnobotany, and with good reason. Volney described the differences between the modern and archaeological

seeds of a group of indigenous plants—sumpweed (*Iva annua*); goosefoot (*Chenopodium*); sunflower (*Helianthus annuus*); maygrass (*Phalaris caroliniana*); and ragweed (*Ambrosia trifida*). Following a lead provided by Gilmore in "Vegetal Remains of the Ozark Bluff Dwellers Culture" (*Papers of the Michigan Academy of Science, Arts, and Letters,* 1931), Jones noted that some of the seeds were much larger than their wild counterparts. Comparing these with the remains of supposed tropical cultigens from the site (squash, gourd, corn), Volney wondered if these could be the remains of cultivated plants. Further, he noted, if these plants could be shown to be older than the squash and gourd remains, "we could hardly escape the startling conclusion that agriculture had a separate origin in the bluff-shelter area" (Jones 1936a:163).

Furthermore, by examining some of the human paleofeces from the site, Volney was able to state positively that the Newt Kash occupants had eaten these plants. His analysis on the Newt Kash coprolites represents one of the earliest attempts to study human diets from coprolites—another landmark.

With a few exceptions, Volney's hypotheses were largely ignored until the early 1960s. As the American archaeological community became aware of the contributions that the study of biological remains could make to the interpretation of the past (largely due to the work of two of Volney's students, Vorsila Bohrer and Richard Yarnell, interest in the relatively dormant field of paleoethnobotany began to increase, As flotation began to be widely employed to recover archaeobotanical specimens, Volney's early questions centering around the Newt Kash materials came to the forefront.

Volney's initial suspicions concerning these plants—now called the Eastern Agricultural complex—repeatedly have been confirmed by numerous researchers such as D. L. and N. B. Asch ("Chenopod as Cultigen: A Re-evaluation of Some Prehistoric Collections," *Midcontinental Journal of Archaeology,* 1977); C. W. Cowan ("The Prehistoric Use and Distribution of Maygrass in Eastern North America: Cultural and Phytogeographical Implications," in *The Nature and Status of Ethnobotany,* edited by R. I. Ford, University of Michigan, Museum of Anthropology, 1978); B. D. Smith ("*Chenopodium* as a Prehistoric Domesticate in Eastern North America: The Evidence from Russell Cave, Alabama," *Science,* 1984); B. D. Smith and C. W. Cowan ("Domesticated *Chenopodium* in Prehistoric Eastern North America: New Accelerator Dates from Eastern Kentucky," *American Antiquity,* 1987); and R. A. Yarnell ("*Iva annua* var. *macrocarpa*: Extinct American Cultigen?", *American Anthropologist,* 1972). It should come as no surprise that nearly all of this work has been spearheaded by Volney's former students. Volney's Newt Kash analysis dutifully is acknowledged in each of these publications. In recognition of his important contributions, an extinct, domesticated form of goosefoot recently was named in his honor—*Chenopodium berlandiere* spp. *jonesianum* in "A Newly Described Subfossil Cultivar of *Chenopodium* (Chenopodiaceae)" (B. D. Smith and V. A. Funk, *Phytologia,* 1985).

In addition to the role that Jones had in initiating research devoted to the origins of plant husbandry in eastern North America, he also was active in southwestern North American paleoethnobotany and ethnobotany. Publications on southwestern cotton (1936b), tobacco (1944, 1960), corn (1954), and lima beans (1941b), as well as a host of shorter papers on other aspects of paleoethnobotany, established Jones as one of the pioneers of southwestern paleoethnobotany.

The list of projects of which Jones was a part includes some of the classics in southwestern archaeology—Jemez Cave, the Basketmaker caves in the Durango, Colorado, area, the Abo and Awatovi mission sites, and a host of others. It was at the latter site that Jones made one of the first attempts to "float" archaeological sediments to recover plant remains. Following the lead of architectural historians working at California missions, Volney noticed that the adobes from Awatovi often contained bits of plants and other debris. He experimented, immersing several bricks in a five-gallon bucket. As the adobes fell apart, the seeds, straw, and other plant debris floated to the surface of the bucket. The collections at the Ethnobotanical Laboratory at Michigan still contain these materials, "floated" nearly forty years before the widespread use of the technique.

Volney especially was interested in the evolution of maize in North America and, with Hugh Cutler of the Missouri Botanical Gardens, examined the majority of the corn excavated from North American sites between 1930 and 1960. His major publications on the topic (1949, 1954, 1971) are important historically since they stand in sharp distinction to the work of Cutler.

In all of his work with corn, Jones emphasized the tremendous variability inherent in a natural population, and the need to be careful in interpretations based upon often fragmentary specimens. He was one of the first to point out that the so-called Eastern complex corns could have evolved in situ from early southwestern stock. By rejecting the notion that various "races" of corn diffused from Mexico into North America at different times, Volney revealed his strong belief in evolution (perhaps nurtured by his friendship with Leslie White) and his early genetic work with Reeves.

While he primarily will be remembered for his publication record in the field of paleoethnobotany, Volney was keenly interested in the ethnology and ethnobotany of Native Americans. Besides his master's thesis on the ethnobotany of Isleta Pueblo, Volney also published articles on plant use by numerous eastern Woodlands, Plains, and southwestern groups.

Soon after arriving in Ann Arbor in the early 1930s, Volney spent the summers of 1933 and 1934 conducting research on the Ojibwa of Walpole and Garden islands in Ontario, Canada. His papers on the manufacture of wooden brooms (1935), sweet-grass use (1936c), basswood twine preparation (1937), and rush (1942) and cedar (1948) mats are excellent examples of the study of Native American technology.

Volney's knowledge of useful plants was encylopedic. He used it to provide both identifications and comparative information on the ethnobotany of the Comanche of Oklahoma in a paper he wrote with Gustav Carlson (1940). Other comparative ethnobotanical papers were devoted to southwestern ethnobotany (1941b, 1942, 1948b). At the time of his death, he was preparing a paper on tobacco use among Native Americans for publication in the *Handbook of North American Indians.*

Volney also was interested in hallucinogenic plants. Although his publication record does not reveal this interest until late in his career, his extensive files on the uses of the red, or mescal, bean (*Sophora secundiflora*) were made available to researchers in the late 1970s, resulting in an important monograph, *An Investigation of Ethnographic and Archaeological Specimens of Mescal Beans* (Sophora secundiflora) *in American Museums* (W. L. Merrill, University of Michigan, Museum of Anthropology, 1977).

The breadth of his interests also is reflected in his papers on what might be termed "ethnoentomology." Two papers on the gathering of insect "honey dew" by western groups (1945, 1948) and one on the use of lac produced by two species of the genus *Tachardiella* (1956) are illustrative of his curiosity. An unpublished, annotated bibliography entitled "The Interrelationships of the Indians of North America and Insects" (1967) is further evidence of this interest.

His research established Volney as one of the authorities on Native American paleoethnobotany and ethnobotany, but his training of students is perhaps his greatest legacy. If one were to construct a "family tree" of practicing American ethnobotanists and paleoethnobotanists, Volney would be the "founding ancestor." His students include Alfred Whiting, James Howard, Vorsila Bohorer, Richard Yarnell, and Richard I. Ford. Volney chaired the dissertation committees of Yarnell and Ford. These scholars in turn spawned other generations of ethnobotanists and paleoethnobotanists: Mollie Toll, Robert Gasser, Karen Adams (Bohrer); Gary Crawford, Gayle Fritz, Gary Crites, Jefferson Chapman (Yarnell); Paul Minnis, David and Nancy Asch, C. Wesley Cowan, Naomi Miller, William Merrill, Michael Brown, Timothy Johns, Bruce D. Smith, Deborah Pearsall, Wilma Wetterstrom, Margaret Scarry (Ford).

A simple review of Volney Jones's career and publication record does little justice to him as a person. He was a warm and generous man who was a genuine source of inspiration for both students and faculty alike. My years in Ann Arbor were immeasurably enriched by my association with Volney. When I arrived at Michigan in the winter of 1977 to begin my studies, Volney took me over to the bank of file cabinets containing his personal files and suggested I should help myself. His library (which included Melvin R. Gilmore's extensive library)—a fixture in the Ethnobotanical Laboratory—similarly was made available for student use. I quickly discovered that similar invitations were extended to other colleagues in the Ethnobotanical Lab. Invariably, when faculty members or graduate students failed to find an obscure paper or monograph in the university library system, they came to Volney; more often than not they found the work they were seeking, either from his library, or with a reference Volney carried in his head. His knowledge of American Indian

ethnology was extensive. His class in North American Indians was one of the most popular courses offered by the Department of Anthropology.

Although he officially assumed emeritus status in 1969, Volney continued to come into the Museum and Ethnobotanical Laboratory five days a week until shortly before his death. Volney's contributions to ethnobotany and the Unviersity of Michigan were honored in 1978 with a festschrift entitled *The Nature and Status of Ethnobotany* (R. I. Ford, editor, University of Michigan Museum of Anthropology, 1978). Volney was characteristically modest about the volume, preferring to point out how delighted he was with the papers it contained, and downplaying the homage it paid to him as a person. *The Nature and Status of Ethnobotany* has been reprinted three times, making it the best-selling Anthropological Paper ever issued by the University of Michigan Museum of Anthropology. It is the most widely used ethnobotany text on the market with national and international audiences.

Those of us who shared the Ethnobotanical Laboratory with Volney remember the puns, the cigars, the dressed fleas, and "Jones's Law," prominently posted on the bulletin board: "With any given society, the amount of energy obtained in overall subsistence activities must equal or exceed the amount of energy expended in those activities."

Two informative aricles on Volney's personal and professional life appeared in *The Nature and Status of Ethnobotany* (R. I. Ford, editor, University of Michigan, Museum of Anthropology, 1978)—"Volney Hurt Jones: Biographical Background," by K. C. Ford (also contains a complete bibliography of his publications), and "Volney Hurt Jones, Ethnobotanist: An Appreciation," by J. B. Griffin.

Acknowledgments. I am grateful to Richard I. Ford and James B. Griffin for reviewing the manuscript; both provided helpful comments and anecdotes.

C. WESLEY COWAN

SELECTED BIBLIOGRAPHY OF VOLNEY HURT JONES

Jones, V. H.

1935 A Chippewa Method of Manufacturing Wooden Brooms. *Papers of the Michigan Academy of Science, Arts, and Letters* 20:23–30.

1936a The Vegetal Remains of Newt Kash Hollow Shelter. In *Rock Shelters in Menifee County, Kentucky,* edited by W. S. Webb and W. D. Funkhouser, pp. 147–165. Reports in Archaeology and Anthropology 3(4). University of Kentucky, Lexington.

1936b A Summary of Data on Aboriginal Cotton of the Southwest. In *Symposium on Prehistoric Agriculture,* edited by D. D. Brand, pp. 51–64. Bulletin No. 296 and Anthropological Series 1(5). University of New Mexico, Albuquerque.

1936c Some Chippewa and Ottawa Uses of Sweet Grass. *Papers of the Michigan Academy of Science, Arts, and Letters* 21:21–31.

1937 Notes on the Preparation and the Uses of Basswood Fiber by Indians of the Great Lakes Region. *Papers of the Michigan Academy of Science, Arts, and Letters* 22:1–14.

1940 Some Notes on the Uses of Plants by the Comanche Indians (with G. G. Carlson). *Papers of the Michigan Academy of Science, Arts, and Letters* 25:517–542.

1941a The Nature and Status of Ethnobotany. *Chronica Botanica* 6(16):219–221.

1941b Prehistoric Lima Beans in the Southwest (with C. R. Steen). *El Palacio* 48(9):197–203.

1942 Notes on the Manufacture of Rush Mats Among the Chippewa (with V. Kinietz). *Papers of the Michigan Academy of Science, Arts, and Letters* 27:525–537.

1944 Was Tobacco Smoked in the Pueblo Region in Pre-Spanish Times? *American Antiquity* 9:451–456.

1945 The Use of Honey-Dew as Food by Indians. *The Masterkey* 19(5):145–149.

1948a Notes on the Manufacture of Cedar-Bark Mats by the Chippewa Indians. *Papers of the Michigan Academy of Science, Arts, and Letters* 32:342–363.

1948b Notes on Frederick S. Dellenbaugh on the Southern Paiute from Letters of 1927 and 1928. *The Masterkey* 22(6):177–182.

1949 Maize from the Davis Site: Its Nature and Interpretation. In *The George C. Davis Site, Cherokee County, Texas,* by H. P. Newell and A. D. Krieger, pp. 239–249. SAA Memoirs No. 5. Society for American Archaeology, Washington, D.C.

1954 Plant Materials from Sites in the Durango and La Plata Areas, Colorado (with R. L. Fonner). In *Basket Maker II Sites Near Durango, Colorado,* by E. H. Morris and R. F. Burgh, pp. 93–115. Publication 604. Carnegie Institution of Washington, Washington, D.C.

1956 Hermetic Sealing as a Technique of Food Preservation Among the Indians of the American Southwest (with R. C. Euler). *Proceedings of the American Philosophical Society* 100(1). Philadelphia.
1960 A Seventh-Century Record of Tobacco Utilization in Arizona (with E. A. Morris). *El Palacio* 67(4): 115–117.
1967 The Interrelationships of the Indians of North America and Insects. Ms. on file, Museum of Anthropology, University of Michigan, Ann Arbor.
1971 Corn from the McKees Rock Village. *Pennsylvania Archaeologist* 38(1–4):81–86.