

Résumé

James Ian Ebert
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Born: Washington, DC; June 30, 1948

ACADEMIC STUDIES:

BA Anthropology (cum laude): Michigan State University, 1971
MA Anthropology: University of New Mexico, 1977
Ph.D. Anthropology: University of New Mexico, 1986

1984-Present: Chief Scientist, Secretary, and Treasurer of Ebert & Associates Inc., 3700 Rio Grande Blvd, Suite 3, Albuquerque, NM 87107, (505) 884-4114.

EBERT & ASSOCIATES PROJECTS AND RESEARCH

National Park Service: Compilation of technical publication entitled *Measuring Archeological Site Erosion with Aerial Photographs*. Interagency Archeological Services, San Francisco, 1985-1986.

US Army Corps of Engineers: Environmental impact research focusing on *Reservoir Bank Erosion and Cultural Resources: Mapping and Predicting the Erosion of Archeological Sediments at Reservoir along the Middle Missouri River with Sequential Historical Aerial Photographs*. Environmental Laboratory, USAE Waterways Experiment Station, Vicksburg, Contract No. DACW39-86-C-0071, 1986-1989.

US Army Corps of Engineers: Contract for *Feasibility Study: Analysis of Erodibility and Rate of Erosion of National Register Archaeological Sites on the McClellan Kerr Arkansas River Navigation System*. Environmental Resources Branch, Tulsa District, Contract DACW56-88-M-0216, 1987-1988.

National Science Foundation: Small Business Innovation Research (SBIR) Phase I and II grants (ISI-8722878): *A System for Distributional Archaeological Survey, Mapping, Data Management, and Analysis*. SBIR office, 1988-1991.

Department of Justice/Zuni Tribe: *Photointerpretation, image analysis, photogrammetry, and GIS mapping in support of land and water rights litigation*, 1986-present.

Navajo Tribe: *Photointerpretation and photogrammetry in support of Navajo/Hopi land rights litigation*, 1985-1989.

US Army Corps of Engineers: Workshop instructor, *Archaeological Sites Protection and Preservation Workshop, 12 Aug-16 Aug 1991, Pierre, South Dakota*. Workshop directed toward physical and biological processes affecting cultural sites, including reservoir bank erosion along the Middle Missouri River (class and field). Environmental Laboratory, Waterways Experiment Station, Vicksburg.

Department of Justice/Bureau of Indian Affairs: *Photointerpretation and Mapping of Traditional Irrigation and Water Use within the Navajo and Hopi Reservations*.

USDA Forest Service and other federal and State of Alaska agencies: *Exxon Valdez Oil Spill Archaeological Assessment*.

Southwest Gas Corporation, Las Vegas, Nevada: *Mapping location and progression of fires and explosions at the Pepon plant, Henderson, Nevada, on May 4, 1988*.

State of New Mexico Historic Preservation Division: *The Integration and Automation of Spatial and Nonspatial Cultural Resource Survey Project Data for New Mexico within a Geographic Information Systems Framework*.

Sandia National Laboratories: *Mixed Waste Landfill Site Photointerpretation and Mapping*.

Bureau of Indian Affairs and Department of Justice: *Design and Implementation of Geographic Information Systems structure and database for the Little Colorado Water Rights Litigation*.

Tanzania, East Africa (6-8/1989): *Field investigations at Olduvai Gorge to determine the feasibility of conducting distributional archaeological recording for archaeological analyses; transect survey, excavation, in-field artifact analysis*. National Science Foundation grant, to Dr Robert Blumenshine (Rutgers U).

Micronesian Archaeological Research Services, Agana, Guam: *Laboratory Coding of Lithic Artifact Attributes using Ebert & Associates' DART (Data Acquisition and Retrieval Technology) Software System*. 1992 through present.

Sandia National Laboratories, Albuquerque, New Mexico [12/93-6-94]: *Spatial and Temporal Analysis and Mapping of Waste Disposal and Land Disturbance through Historic Aerial Photointerpretation and GIS Applications: Technical Area 2, Sandia National Laboratories*.

Tanzania, East Africa [1/94-1/98]: *Distributional Archaeology and Excavations at Olduvai Gorge*. National Science Foundation Grant with Robert Blumenshine, Rutgers University.

Sandia National Laboratories, Albuquerque, New Mexico: *Spatial and Temporal Analysis and Mapping of Waste Disposal and Land Disturbance through Historic Aerial Photointerpretation and GIS Applications: Tijeras Arroyo Environmental Restoration Area, Sandia National Laboratories*.

City of Pueblo, Colorado: *Mapping of the plaza of El Pueblo from historic terrestrial and aerial photographs*. February-July 1995.

Getty Conservation Institute, Los Angeles: *Geographic Information Systems and Related Digital Technologies for the Integration of Historic and Contemporary Photographic, Remote Sensing, and Mapped Data at World Heritage Cultural and Other Sites -- Demonstration Project*. Start date approximately March 1, 1996.

Bureau of Indian Affairs/US Department of Justice. *Photointerpretation of Historic Irrigation on the Mescalero Indian Reservation*. 1996-1997.

Bureau of Indian Affairs/US Department of Justice. *Photointerpretation and Mapping of Historic Irrigation on the Zuni Indian Reservation*. 1996-1997.

Bureau of Indian Affairs/US Department of Justice. *Analysis of evidence of Prehistoric Irrigation on the San Juan, San Ildefonso, and Santa Clara Indian Reservations and Traditional Use Areas in the Santa Cruz and Chama Watersheds*. 1996-1997.

Daniel B. Stephens and Associates (Albuquerque). *Photointerpretation and Mapping of Waste Disposal Sites at the Tucson International Airport from Contemporary and Historic Aerial Photographs*. 1993.

Adler, Murphy and McQuillen (Chicago). *Photointerpretation and Mapping of Waste Disposal Sites at the Hughes Aircraft Plant, Tucson, Arizona, from Contemporary and Historic Aerial Photographs*. 1996.

Lord, Bissell and Brook (Chicago)/Lloyds of London. *Photointerpretation, Mapping and GIS Database Design and Integration for Spill and Disposal Analysis at four Refinery Sites in Texas, Illinois, Indiana and Missouri.* 1996-1997.

Shapiro Mitchell & DuPont (Santa Monica). *Pacific Scientific. Historical aerial photointerpretation, mapping and environmental GIS database analysis for purposes of environmental litigation at two site in New Jersey.* 1998-1999.

Elam & Burke (Boise)/Ekotek Site PRP Committee. *Ekotek/Morrisson-Knudsen Maintenance Yard Site. Historical aerial photointerpretation, mapping and environmental GIS database analysis for purposes of environmental litigation at an industrial site in Salt Lake City.* 1997-1998.

Schiff Hardin & Waite (Chicago)/Kean Muller Hawthorne Darmond. *Lincoln Creosote Plant. Historical aerial photointerpretation, mapping and environmental GIS database analysis for purposes of environmental litigation at a lumber treatment plant site in Louisiana.* 1998.

Lord, Bissell and Brook (Chicago)/Lloyds of London. *Rohm & Haas Woodlands Sites. Historical aerial photointerpretation, mapping and environmental GIS database analysis for purposes of environmental litigation at two Superfund dump sites in New Jersey.* 1998-1999.

Porzio Bromberg & Newson (New York). *Keil Oil. Historical aerial photointerpretation, mapping and environmental GIS database analysis for purposes of environmental litigation at a fuel and heating oil transfer site in New Jersey.* 1998-1999.

Mendes and Mount (New York), Lord, Bissell and Brook (Chicago)/Lloyds of London. *TRW Semiconductor Plant Sites. Historical aerial photointerpretation, mapping and environmental GIS database analysis for purposes of environmental litigation at 9 sites in California, Pennsylvania, Illinois, New York, and Michigan.* 1998-1999.

Lord, Bissell and Brook (Chicago)/Lloyds of London. *Dow Chemical. Historical aerial photointerpretation, mapping and environmental GIS database analysis for purposes of environmental litigation at an industrial site in New Jersey.* 1998-1999.

Department of Justice/Bureau of Indian Affairs. *Archaeological survey, mapping, and hydrologic and ethnohistoric analysis of prehistoric and historic Native American agricultural fields and water use for purposes of water rights litigation in the Rio Chama and Santa Cruz River drainages, New Mexico.* 1998-1999.

Lord, Bissell and Brook (Chicago)/Lloyds of London. *Truck Insurance Exchange. Historical aerial photointerpretation, mapping and environmental GIS database analysis for purposes of environmental litigation at a site in Texas.* 1999.

Lord, Bissell and Brook (Chicago)/Lloyds of London. *Brio Refinery. Historical aerial photointerpretation, mapping and environmental GIS database analysis for purposes of environmental litigation at a refinery site in Texas.* 1999.

Lord, Bissell and Brook (Chicago)/Lloyds of London. *Mobil Refineries. Historical aerial photointerpretation, mapping and environmental GIS database analysis for purposes of environmental litigation at four refinery sites in California, New Jersey, Texas, and Rhode Island.* 1999-2000.

PREVIOUS WORK EXPERIENCE

Archeologist (Branch of Remote Sensing, National Park Service, 6/73-1/84): Research, development of remote sensing methods for cultural resource management, study. Dr. Thomas R. Lyons, supervisor.

GRANTS

"A System for Instrument-Assisted Distributional Archaeological Survey." National Science Foundation Small Business Innovation Program Phase I grant, June-August 1987, \$30,000.

"A System for Distributional Archaeological Survey, Mapping, Data Management and Analysis." National Science Foundation Small Business Innovation Program Phase II grant, September 1988-February 1991, \$207,174.

"A Study of the Feasibility of Developing Generally Applicable Methods and Techniques for Conversion of Existing State Cultural Resource Databases to Geographic Information Systems." Phase I Small Business Innovation Research (SBIR) grant, National Science Foundation; NSF Grant No. III-9360278 received February 14, 1994, grant period 2/15/94-10/31/94, \$64,993.

"Rock Art Data Recording, Management and Analysis: An Integrated System Incorporating 3 Dimensional Digitizing, Geographic Information Systems, Photogrammetry, and other Digital Mapping and Imaging Technologies." Phase I Small Business Innovation Research (SBIR) Grant, National Science Foundation, start date March 1, 1996. \$74,670.

"Olduvai Landscape Archaeology Project: Aerial Photography and Photogrammetric Mapping Support." Principal Investigator. Research grant, Committee for Research and Exploration, National Geographic Society, Washington, DC. June-December 1996. \$19,750.

"Use of Remote Sensing Images to Evaluate and Monitor Condition of Prehistoric Earthen Structures." Principal Investigator. Research grant, National Center for Preservation Technology and Training, National Park Service. September 1996-December 1997. \$40,000.

"Rock Art Data Recording, Management and Analysis: An Integrated System Incorporating 3-D Laser and Contact Digitizing, Geographic Information Systems, Photogrammetry, and Other Digital Mapping and Imaging Technologies." Phase II Small Business Innovation Research (SBIR) Grant, National Science Foundation, start date July 15, 1998. Award No. DMI-9801160. \$299,966.

FIELD EXPERIENCE:

Olduvai Gorge, Tanzania (6-8/89; 6-8/94; 6-8/95; 7-8/96; 12/97-1/98). Coordinator: mapping, cartography, and spatial database compilation and management; distributional archaeological survey and excavation. *Olduvai Landscape Archaeology Project* (funding by National Science Foundation, L. S. B. Leakey Foundation). Rutgers University and University of Dar es Salaam.

Oklahoma (1/88); field inspection for study of feasibility of using sequential aerial photographs for mapping site boundaries, erosion, and other impacts at sites at Corps of Engineers reservoirs along the Arkansas River. On contract with Tulsa District, Corps of Engineers.

North Dakota, South Dakota, and Nebraska (8/88-10/88); field inspection, survey and mapping of twelve reservoir-threatened archaeological sites along Middle Missouri River in conjunction with Corps of Engineers reservoir bank erosion study.

Tonque Pueblo, central New Mexico (6-7/87); surface distributional archaeological survey incorporating in-field computer data recording techniques, EDM mapping. Technique and software development and field research conducted under National Science Foundation SBIR Program award ISI-8660765.

Swaziland (6-8/86); ethnographic, environmental fieldwork for purposes of assessing environmental education and research needs and incorporating remote sensor data and methods into traditional sector environmental educational curricula.

Tuba City/Moenkopi, Arizona (3/86); ethnographic fieldwork in conjunction with Navajo-Hopi 1934 Land Dispute land use assessments.

Palm Springs, California (4/84-10/84); field checking of photointerpretations of prehistoric and historic irrigation and other features on Cahuilla Reservation with Cultural Systems Research, Inc.

Green River Basin, Wyoming (6/84-8/84); remote sensing-directed, nonsite survey and analysis around Fontenelle Reservoir; sample design, EDM mapping, distributional survey; principal investigator. Branch of Remote Sensing, National Park Service.

Shenandoah National Park, Virginia (8/79); archaeological survey assisted by remote sensor-derived predictive model. Branch of Remote Sensing, National Park Service.

San Juan Basin, New Mexico (10/78); ground-truth checking of ecologic/cover-type stratification in support of cultural resources prediction and sampling. Branch of Remote Sensing, National Park Service.

North Slope, Alaska (6/77-7/77); field reconnaissance in support of remote sensing-based sample stratification for cultural resource sampling and prediction in the National Petroleum Reserve in Alaska. Archaeology Area Office, National Park Service, Anchorage.

Botswana, southern Africa (6/75-9/76); archaeological, ecological, ethnological fieldwork in Central District of Botswana. Middle, Late Stone Age archaeological survey and excavation; ethnoarchaeology and development planning work with Basarwa (Bushmen). Department of Anthropology, University of New Mexico.

Chaco Canyon, New Mexico (5-9/73; 68/74); survey, excavation of Pueblo-period sites associated with prehistoric roadway system; aerial photo interpretation and analysis of prehistoric roadways, archaeological sites, structures. Remote Sensing Division, National Park Service.

Kenya, East Africa (8-12/69); archaeological survey and excavation, Turkana Region under NSF grant. Department of Anthropology, Michigan State University.

Northern Michigan (6-9/67;6-9/68); archaeological survey and excavation of Woodland and early Historic sites. Michigan State University Museum.

MEMBERSHIPS:

Society for American Archaeology
American Anthropological Association
American Society of Photogrammetry and Remote Sensing
(Member and Certified Photogrammetrist)
Society for Archaeological Sciences
Kalahari Peoples Fund (President)
American Academy of Forensic Sciences (Fellow)

ANTHROPOLOGICAL/DEVELOPMENT-RELATED EXPERIENCE

Remote sensing and GIS applications: Zuni Indian Tribe, New Mexico. For Institute of the North American West, Albuquerque, New Mexico. Photointerpretation, remote sensing, and GIS applications for Zuni Indian Tribe land damage and environmental resource assessments, specifically in areas of erosion and other environmental degradation, forestry and forest resource assessment and inventory, and analysis of historic terrestrial and aerial photographs. Mr. Richard Hart, Institute of the North American West.

Development Remote Sensing and Environmental Education (June-September 1986); develop curriculum for traditional-sector environmental education incorporating remote sensing in Swaziland; overview of conservation research needs in agriculture, range management, desertification control, drought response, erosion control, and recommendation of remote sensing-based solutions. Consultancy with Transcentury Corp., Washington, DC/USAID. Dr. Robert K. Hitchcock/Marilyn Richards, Transcentury.

Fieldwork with Basarwa (Bushmen), Central District, Botswana, June 1975 through September 1976. Ethnographic and ethnoarchaeological research on Basarwa settlement patterns, agriculture, education, and their relationship with other cultures, government and tourism in Botswana. Under auspices of National Science Foundation-supported research, Dr. Henry Harpending and Dr. Patricia Draper, Department of Anthropology, University of New Mexico. Continued research following fieldwork, to present. Co-president, Kalahari Peoples Fund.

Agricultural Training Consultant, Technology Applications Center, University of New Mexico/National Aeronautics and Space Administration, Albuquerque, April through August 1984. Conducted training

program for visiting agricultural scientists from Peoples Republic of China in the use of aerial photographs and satellite remote sensing data, interpretation and analysis for agricultural crop and rangeland monitoring and assessment. Dr. Stanley A. Morain, Director.

Remote Sensing Consultant, Brown and Bain, Attorneys at Law, Phoenix, Arizona. Photointerpretation, electronic image analysis and related supportive fieldwork concerning Navajo Indian subsistence, settlement, and land use in the Navajo-Hopi 1934 land dispute. Mr. Terry Fenzl.

FORENSIC QUALIFICATIONS

COURT APPEARANCES AND QUALIFICATION AS EXPERT WITNESS:

1. Johnny K. Moore vs. the State of New York, Hon. Dolores Denman, State Supreme Court of New York, Buffalo (April 1980)
2. Helen Sikes Homicide, State Supreme Court of New York, Queens (May 1981)
3. Superior Court of California, Santa Cruz, CA (September 1981)
4. Lemuel Smith vs. State of New York, State Supreme Court of New York, Poughkeepsie (February-March 1983)
5. David Wayne Spence vs. State of Texas, Texas Northern District Court, McLennan County, Waco, Texas, June 26, 1984.
6. State of Washington vs. Brett Kendrick, Washington Superior Court, King County (Seattle), January 28, 1985.
7. State of Texas vs. Muneer Mohammed Deeb, 249th District Court of Texas, Cleburne, Johnson County, Texas, March 4, 1985.
8. Gomez vs. Four Seasons [civil], State Supreme Court of New York, New York County, March 12, 1985.
9. State of Texas vs. David Wayne Spence, Bryan, Texas, October 11, 1985.
10. State of New Mexico vs. Hererra [Grand Jury], Santa Fe, New Mexico, November 26, 1985.
11. State of Texas vs. Mann, Gatesville, Texas, May 21, 1986. 52nd Judicial District, Coryell County, Texas. Judge Robert Yale.
12. State of New Mexico vs. Hererra, May 23, 1986. Estancia, New Mexico. District Attorney Chet Walter.
13. State of Texas vs. Clifton Eugene Belyeu, Waco, McLennan County, Texas. District Attorney Vic Feazell. August 2, 1986.
14. State of California vs. Noguera, Orange County, California; Superior Court, Judge Robert R. Fitzgerald, April 6-8, 1987.
15. State of Texas vs. Joe Sidney Williams, District Court, McLennan County, Waco, Texas, May 13, 1987. District Attorney Victor Feazell (court hearing).
16. State of Texas vs. Joe Sidney Williams, District Court, McLennan County, Texas, August 27, 1987. District Attorney Victor Feazell.
17. State of New York vs. Robert Chambers, New York Supreme Court, Manhattan. March 3-4, 1988. Defense attorney Jack T. Litman.
18. State of Texas vs. Graf, Texas District Court, March 1988. Mr. Vic Feazell, District Attorney, McLennan County, Waco, Texas.
19. Damiani vs. Tecumseh Engine Corp., Binghamton, NY, February 1989. Mr. James Goss, Dean & Fulkerson, Troy, Michigan. Civil case, involving image analysis and accident reconstruction and mapping.
20. Roger Bolduc v. Connecticut Light and Power. Waterbury, CT, December 5, 1989. Mr. George D. Royster, Halloran, Sage, Phelon and Hagarty, Hartford, CT (plaintiff's counsel).
21. United States and the Zuni Indian Tribe v. Earl Platt. US District Court, Phoenix. Mr. Hank Meshorer, Chief of Indian Affairs, US Justice Dept., plaintiff's counsel.
22. State of Texas v. Muneer Mohammed Deeb, Ft. Worth, TX, December 8, 1992. Special prosecutor Bill Lane, Lane and Lane, Ft. Worth, TX.
23. United States v. Joy Beth Hubbard. Raleigh, NC, June 2, 1993. Federal District Court, Eastern District of North Carolina, Judge Earl Britt. G. Neil Yarborough, atty. (defense).
24. Cramer v. Harley Davidson. Catskill, NY, February 3-4, 1994. Defense attorney Arthur Thorn, Thorn & Gershon, Albany, NY.
25. State of Arizona vs. Fulminante. Phoenix, Arizona; June 1994. Defense Attorneys Dennis Jones and Chuck Steese.
26. State of Arizona vs. John Henry Carpenter (Bob Crane homicide trial). Phoenix, AZ; October 11, 1994. Prosecutor Robert J. Shutts.
27. State of Texas vs. Kizer Kip Grays. Pampa, TX; November 8, 1994. Defense atty. Robert Comer, Pampa, TX.
28. The Ekotek Site PRP Committee v. Steven M. Self, et al. United States District Court, District of Utah, Central Division. Case No. 2-94CV00277L. William Dryden, Elam & Burke, Boise, ID, defense attorney.
29. Rohm and Haas, et al. v. United States Liability Insurance Co., et al., Superior Court of New Jersey, Law Division: Mercer County, Docket No. MER-L-004664-95, January 20-21, 1999, Princeton, NJ, AND Rohm and Haas, et al. v. AIU Insurance Co., et al., Docket No. L-87-4920, Superior Court of New Jersey, Law Division: Mercer County, January 20-21, 1999, Princeton, NJ.

30. Jerry Young and Marguerita Breen-Young, Plaintiffs, vs. Edmund Healy, Defendant and Edmund Healy and Trudy Healy, Counter-Plaintiffs/Third-Party Plaintiffs, vs. Jerry Young, et al., Counter-Defendants/Third-Party Defendants. Eighth Judicial District Court, County of Taos, State of New Mexico.No. 96-103-CV. Trial testimony May 18, 2000, Taos, New Mexico
31. Robert Starks, Plaintiff, vs. Randolph "Duke" White, William Logan, and Dave Cordova, Defendants. US District Court, State of New Mexico, Civ. No. 98-00630-JC/WWD. Warren W. Edginton, Senior US District Judge. Trial testimony December 19, 2000, Albuquerque, New Mexico

CERTIFICATIONS, CONSULTANCIES AND ADDRESSES

Invited Workshop presentation: Aerial photogrammetry in Environmental Forensic Investigations. First International Congress on Petroleum Contaminated Soils, Sediments and Waters, 14-17 August 2001, Imperial College, London.

Invited Keynote Address, Trimble Navigation Systems Users Conference, San Jose, CA, October 14, 1998.

Awarded the title of Certified Photogrammetrist, [ASPRS], (No. 534) by the American Society of Photogrammetry and Remote Sensing in recognition of professional experience and expertise in photogrammetry and remote sensing as applied to archaeology, anthropology, and forensic sciences

Photogrammetrist, New York State Police Medicolegal Investigations Unit, 1985-present.

Research Associate, Technology Application Center, NASA/University of New Mexico, Albuquerque, New Mexico, 1980-1994.

Consultant, US Army Central Identification Laboratory, Ft. Shafter, Hawaii; image analysis and photogrammetry for MIA and air crash victim identification, November 1986-1993.

Invited lecture on forensic image analysis, forensic photogrammetry, and the forensic use of geographic information systems for the American Society of Forensic Odontologists, at the annual meeting of the American Society of Forensic Odontologists, February 11, 1986.

Invited plenary address, National Association of Medical Examiners annual meeting, Tucson, Arizona, November 1986. Topic: Electronic Image Analysis for the Forensic Scientist.

Organizer, participant and moderator, workshop on "Hardware, Software, and Graphics: Photogrammetry, Photography, Image Analysis and Geographic Information systems for Forensics," Annual Meeting of the American Academy of Forensic Sciences, San Diego, CA, February 17, 1987.

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