

Book Review

The Coronado Project Archaeological Investigations. The Specialist's Volume: Biocultural Analyses. compiled by Robert E. Gasser. 278 pp. Coronado Series 4, MNA Research Paper 23. Museum of Northern Arizona Press, Flagstaff, 1982. \$12.50.

Analyses of prehistoric pollen, and plant and animal remains have become part of the "new ecological orthodoxy" central to many large archaeological projects in the last two decades. All too often these analyses are based on very few samples and their results are relegated to the obscurity of appendices of various site reports. If their results are incorporated into the interpretation of site history and function it is usually as a passing note such as, "The occupants of this site grew corn, gathered wild plants, and hunted game." Hopefully this will not be the fate of the excellent work by Robert Gasser, Jannifer Gish, Richard Hevly, and Nicholas Czaplewski as they have provided extensive and detailed clues to understanding forty-seven sites located in railroad and transmission line right-of-ways associated with the Coronado Generating Station at St. John's, Arizona. It is now up to the archaeologists to fully utilize these results.

Gasser presents data from 339 flotation samples (272 of these produced plant remains) which, when combined with an additional 78 samples analyzed by Hevly, produces probably the largest published flotation data base available anywhere. Gasser also includes published and unpublished data from another 334 flotation samples from five other archaeological projects in the Anasazi area. Gasser has presented a creative solution to the problem of "what was eaten and in what proportions" in his comparison of 155 Anasazi coprolites and 417 Anasazi flotation samples. Future applications of this approach will help answer many of the unresolved questions in archaeobotany. With a data base of such magnitude one can truly address the problems of preservation, under-representation, and relative importance of various plant resources.

Gish analyzed 317 pollen samples. Major strengths of her approach are a concentration on pollen aggregates as a potential source of economic information and the integration of results from both pollen and flotation. All too often these two techniques are treated as being unrelated, but Gish has demonstrated that their results can complement each other quite nicely, providing both independent corroboration and also filling in many gaps.

Czaplewski's analysis of (both avian and mammalian) remains confirms what is becoming a now common conclusion in studies of bones from the sites of sedentary agriculturalists, that significant amounts of animal protein came from rodents and lagomorphs. Deer and antelope may have been occasional luxury foods, but small game was a protein staple. Agriculture is a subsistence adaptation that involves not only domesticated plants, but which also produces beneficial increases in useful weeds and "weedy" animals.

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Book Review

Etnobotanica en el Estado de Morelos. Bernardo Baytelman. Instituto Nacional de Antropología e Historia. Mexico, D.F. (no publication date) 287 pp. illus. 220 pesos (paperback).

Bernardo Baytelman has integrated data from the early Spanish chroniclers Bernardino de Sahagun, Martin de la Cruz, Juan Badiano, and Francisco Hernandez with contemporary information on the use of medicinal herbs in the northern part of the State of Morelos in Mexico. In a style characteristic of recent scientific work in Mexico, Baytelman included an explicit and detailed research design in this monograph along with five questionnaires that he used in his interviews. These should stand as models for other investigators doing research on medicinal plants. He also included detailed interviews with three herbalists from Tepoztlan, Oaxtepec, and Cuernavaca. Supplemental information was collected from herb vendors in the market at Cuernavaca.

This volume contains detailed information on fifty medicinal plants, arranged by local common name, cross-referenced with the early Spanish herbals, and illustrated with drawings from the Hernandez' *Obras Completas*. Additional data is presented on 173 species along with methods of preparation and administration, something often lacking in works on medicinal plants. Finally all plants are cross-indexed according to the part of the body and diseases they are used to treat.

In a nation with thirty million people living in rural areas, herbal medicine is still an important part of primary health care. Baytelman has provided an interesting and useful summary of a medical system that began in the Prehispanic era, was modified by an influx of European ideas, and has flourished into the Twentieth Century.

Book Review

Photomicrographs of World Woods. Anne Miles. 233 pp. illus. Department of the Environment, Building Research Establishment. Her Majesty's Stationery Office, London. 1978. 20.00 Pounds Sterling.

Although this volume may not appeal to the entire readership of the *Journal of Ethnobiology*, it will be a welcome discovery for the archaeobotanist, paleoecologist, plant anatomist, wood technologist, dendrochronologist, or plant taxonomist. Miles has assembled photomicrographs of over 450 species in more than 375 genera of important Angiosperm and Gymnosperm timbers. Each species is illustrated in transverse, radial, and tangential views at 25 to 60 magnifications in black and white photographs. The resolution is so fine that pit structure can be determined on the individual vessel elements. One could do a detailed phylogenetic study of wood evolution, using only the photographs in this book.

Of course it is impossible to illustrate all woody plants found on earth but Miles has included enough species to give a detailed picture of the range of variation within individual families and genera. This volume is slightly biased toward Old World species, but there is excellent coverage of both temperate and tropical, as well as northern and southern hemisphere genera. In any problem of plant identification, there is no substitute for reliable comparative material, but this volume should prove to be a good starting point and an invaluable reference tool.

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Book Review

Medicinal Uses of Plants by Indian Tribes of Nevada. Percy Train, James R. Henrichs, and W. Andrew Archer. 139 pp. Quarterman Publications, Inc., Lawrence, MA, 1981. \$25.00.

Medicinal Uses of Plants by Indian Tribes of Nevada began as a Depression-era project with three major objectives: recording the medicinal uses of native plants, collecting sufficient material for pharmacological screening, and accumulating herbarium specimens for a flora of Nevada. Percy Train collected data on the medicinal uses of 194 species of plants by the Moapa Paiutes, Paiutes, Shoshone, and Washoe along with native plant names. One hundred and nine of these plant species were screened for bactericidal properties, chemotherapeutic effects, alkaloids, ascorbic acid content, effect on blood pressure, and effect on rabbit smooth muscle. Standard extracts of 83 species were also tested for toxic effects and minimum lethal dose.

A volume on medicinal plants with detailed pharmacological data is a rare find indeed and herein lies the major utility of this work. Species or genera are common to most of the surrounding states so researchers outside the borders of Nevada will appreciate this book. This volume should be added to the libraries of Poison Control Centers in the western United States.

The basic botanical data in this volume first appeared in *Contributions Toward a Flora of Nevada* No. 33, 1941. An edited version with a summary of the pharmacological research was published by W. Andrew Archer as *Contribution* No. 45 in 1957. The Quarterman edition is a facsimile reproduction of the 1957 publication. Unfortunately, \$25.00 is a little expensive for a typescript copy of an earlier work.

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