

The Role of the Bishop Museum in the Pacific

by

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A museum is a cultural institution, and its objectives should be judged by cultural standards. Museums do not all have the same objectives, obviously. Goals must be established on the basis of original intent, historical background, community needs, potentials, and a recognition of responsibilities relative to all of these factors.

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The Bishop Museum, one of the four* most important multidisciplinary museums in the nation, is a memorial to Bernice Pauahi Bishop. We must maintain the highest standards of integrity for the sake of this memorial trust. Just as the Kamehameha Schools, her own gift to the community, are providing a unique and purposeful education to young people, this memorial, for whose preservation we are responsible, must continue to enjoy an elevated international and community reputation. One of our accepted responsibilities is to serve as a depository for uniquely valuable family heirlooms relevant to our islands' history. Descendants of these donors often come to view these objects whether or not they are on general exhibition. These descendants now form our own principal constituency -- they are the voters, the taxpayers, the businessmen, the labor union members, the substance of our civic life.

four*. . . the other three are the Smithsonian Institution, the American Museum of Natural History, and the Field Museum of Natural History.

The local reputation of our museum for its role in preserving the Hawaiian and immigrant heritage is one of our great strengths and, of course, must be a basis for seeking local support. There is a parallel value in the cultural and natural history collections which attract support from the national agencies. This represents a substantial part of our funding. Thus, the Federal grants for research in our scientific departments have totaled \$471,000 in 1976 and \$519,000 in 1977.

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. . . the staff and the Trustees have a joint and awesome responsibility to set and achieve goals consistent with the Deed of Trust of Charles R. Bishop, not conflicting with the general definition of a museum which our contemporary, competing, and evaluating institutions have set; to preserve the trust of our community, both those of Polynesian ancestry and those who followed to achieve the blending of culture characteristic of our state today; and to participate in the national program of scientific research in ways uniquely fitted to our collections and our staff capabilities.

The Bishop Museum has five major research departments: Anthropology, including Archaeology and Ethnology; Botany, including the Herbarium; Entomology, including Acarology; History, including the Falls of Clyde; and Zoology, including Ichthyology, Malacology, and Vertebrate and Invertebrate Zoology. There are ancillary scientific functions, including the Library and the Pacific Science Information Center; community service functions, including Education, the Planetarium and Science Center; operational functions; and cooperative functions, including the Pacific Science Association, University of Hawaii, Polynesian Voyaging Society and others.

The mandate of the Department of Anthropology stems from the original

Deed of Trust which stated that the museum should be developed "as a scientific institution for collecting, preserving, storing and exhibiting specimens of Polynesian and kindred antiquities, ethnology and natural history . . . and the publication . . . of the results of such investigation and study." In his founding of Bishop Museum in 1889 as Hale Ho-'ike'ike o Kamehameha (The Treasure House of the Kamehamehas), the intention of Charles R. Bishop was to honor the Hawaiian heritage of his wife, Princess Pauahi, and to encourage Hawaiians to take pride in their Polynesian heritage. He also intended that Bishop Museum would "rank with the museums of the world."

In the 87 years of Bishop Museum's history, the anthropological collections have grown from a nucleus of the personal collection of Princess Pauahi and her relatives to a vast collection of more than 100,000 ethnological and historical specimens, of which half are Hawaiian. Many of these objects were obtained by scientific expeditions to many islands of the Pacific in which the objects were studied in relation to their social and cultural context. Others were obtained in Europe and America by staff members and friends of the museum searching for objects that were taken from their homelands to other nations during 200 years of trade. Still other objects were given to Bishop Museum by Hawaiians themselves to ensure the preservation of these objects for future generations. In addition, the archaeological specimens number in the thousands. They have been excavated from archaeological sites in Hawaii and throughout the Pacific. Only a small number of objects in these collections are on exhibition. The balance are in storage where temperature and humidity are controlled. These objects form a world-famous research collection that is studied by scholars from Hawaii and throughout the world.

In this research department, scientific studies on the cultural history of Hawaii and other Pacific Islands have been conducted from shortly after the museum's founding through the present. This basic research has focused on ethnology, archaeology, linguistics, traditional history, music and dance particularly in Hawaii, the Society, Marquesas, Tuamotu and Cook Islands, Kapingamarangi, Futuna, Uvea, Samoa, and Tonga. Research has also been carried out in Micronesia, and particularly Melanesia, where teams have recently investigated the archaeology and ethnobotany of the Solomon Islands. Studies on contemporary society in Hawaii have also been carried out, as well as historical research on the Monarchy period.

The department publishes Pacific Anthropological Records and the Departmental Report Series which emphasize data-rich reports of current research. Research of the anthropology staff is also published as monographs and articles by Bishop Museum Press and in scholarly journals throughout the world.

The natural history collections (Departments of Botany, Entomology, and Zoology) of more than 18,000,000 specimens of animals and plants, and the library, files, and staff form a reference base regularly used by state and Federal agencies, individual scientists the world over, and students. The collections of Hawaiian flora and fauna are the largest existing, but research is by no means restricted to Hawaii. Natural sciences at the museum cover the entire Pacific Basin, and many of the collections extend beyond this area. The programs in biological sciences have been recognized by numerous research, curatorial, and facilities grants from Federal agencies. Biological museum collections are now recognized as natural resources, since all other biological fields, including agriculture, health, and conservation, must have identifications based on them.

The three departments are staffed by 14 research/curatorial scientists and about an equal number of technicians, clerical personnel, scientific illustrators, and others. This averages one curator and one assistant per one million plus specimens. In addition, there are more than 45 scientists with honorary appointments, some in residence and regularly working with the collections.

The botany collections, designated the Herbarium Pacificum, contain more than 420,000 prepared plants. This is the largest source for Pacific botanical material and the only major reference for Hawaii. Well over 500 research papers have been published on the collections. Materials are available and basic work has been done for floras (botanical monographs) of Hawaii, Fiji, Micronesia, Tahiti, Samoa, and Tonga. Material is accumulating for an alpine flora of New Guinea.

Entomology is the largest natural history department, matching the fact that the kinds of insects and relatives (mites, spiders, etc.) far outnumber the kinds of all other animals and plants. There are over 11,000,000 specimens mounted on pins or microscope slides or stored in alcohol. Early material goes back to a large part of that from the Fauna Hawaiiensis survey (published 1899-1913) and earlier, as well as major Bishop Museum expeditions to Wake (1923), Fiji and central Pacific atolls (1924), Marquesas and Society Islands (1929-1932), Micronesia (1936), Samoa (1940), and many others. Growth of the collections accelerated with the survey of insects of Micronesia (1953-present), published in 19 volumes and with parts still being added. Special studies in recent years include Antarctic entomology, insect carriers of disease, research on Hawaiian ecosystems (International Biological Program), and the 'ohi'a decline endangering Hawaiian forests. A field station in New Guinea was established in 1961 for insect studies,

and these continue at the station which is now an ecological institute affiliated with the museum. Entomology maintains its own publishing program: the staff edits the internationally recognized Journal of Medical Entomology, Pacific Insects, Pacific Insects Monographs, and others.

The fish collections cover the tropical Indo-Pacific region, the largest aquatic province in the world. The 20,000 lots of fishes now catalogued represent a four-fold increase during the past ten years, and these now may be the largest representation of species from the Indo-Pacific area. The photographic file of tropical marine fishes is unexcelled. Grant-supported expeditions-- most recently to the Red Sea -- contribute to collection growth. The recently acquired collections of the National Marine Fisheries Laboratory more than double the Museum's collections.

The mollusk collections (snails, bivalves, etc.) comprise 6,000,000 specimens, of which 2,000,000 are marine shells with primary representation for Hawaii, many central and south Pacific islands, and Japan. The unmatched Pacific land snail collections of 4,000,000 specimens from every island group of the inner Pacific Basin represent what is itself a "living museum" tracing the evolution of the oldest land shell families. In addition to the shells of these snails, specimens with their soft parts are preserved intact for at least two-thirds of the species, greatly increasing research value. A monograph has been published on two of the Pacific families, and anatomical research is proceeding on a third and fourth.

The invertebrate zoology division encompasses all invertebrates except entomology and malacology. There is a strong emphasis on marine invertebrates. The Edmondson materials (1920-1960), more than 20,000 specimens, form a nucleus for the collections. Some groups with major

representation are crustaceans (crabs and relatives), echinoderms (starfish and relatives), marine worms, and corals. Geographic representation includes the Antarctic, Caribbean, and Indian Oceans, but mainly the Pacific. The division has been particularly active in studies needed for environmental impact statements, both in Hawaii and in the south and central Pacific. A revision of the Reef and Shore Fauna is being supervised, and the first volume has just been published.

The vertebrate zoology division includes mammals, birds, reptiles, and amphibians. Among the 20,000 bird specimens, there is a large pre-1910 collection of Hawaiian birds, one of perhaps three in the world, with nearly all extinct as well as living native species. Holdings of New Guinea-Solomon Island birds are among the few significant avian collections from these areas. Approximately 15,000 mammal specimens are on deposit. Representation for New Guinea and the Solomon Islands is matched at only one other institution. The Yoshimoto collection of mounted big game animals is an important holding. The major collections of reptiles and amphibians are from the New Guinea region and the Malayan Peninsula, in addition to Hawaii and other isolated Pacific islands. Research is concentrated on New Guinea mammals, and a field guide to these is in preparation.

Although a Department of History was not formally authorized until 1928, some of the earliest specimens in Bishop Museum were historic objects and memorabilia associated with the Hawaiian monarchs. In recent years collections and research in history have also focused on immigrant groups that have made Hawaii their home. In addition, railroad locomotives, sailing ships, and industrial equipment of Hawaii's past show the impact of Western technology on Hawaiian life.

The museum has engaged in the restoration of the world's only surviving

full-rigged, square-masted ship, the Falls of Clyde. Work is still in progress on the ship, but it is near enough to completion to serve as a fascinating attraction that tells the story of a very important historical epoch in Hawaiian history.

The divisions included in the museum's ancillary scientific functions aid the scientists in carrying out its mandate. The Library has grown to become perhaps the world's best known reference collection on the subjects which fall within the museum's major sphere of interest. It is one of the three great Pacific libraries (the other two in Australia and New Zealand). Both the Library and the Photo Collection are open for public research.

The Pacific Science Information Center features maps of the Pacific area, including the thousands of islands that are found there, and can provide contemporary as well as historic information about them. It is also a clearinghouse for reference data regarding the oceanic Pacific area.

The recently established Pacific Regional Conservation Center, housed at the museum, helps to preserve and restore museum artifacts, books, and objects of art, using modern techniques for careful restoration of damaged articles. The Center has now grown to 52 members.

The end product of scientific research is the publication of its results. Since the beginning of this century, Bishop Museum Press has been publishing the results of the investigation and study of Polynesian and kindred artifacts, ethnology, and natural history.

Bishop Museum regards its services to the public, to residents and nonresidents alike, as among its major obligations. A large portion of museum space is given to exhibits and other public service facilities.

Over the years of its existence, the museum's exhibits have been largely concentrated upon Hawaii's history, ethnology, and anthropology. Secondary emphasis has been upon similar aspects of other areas of the Pacific ocean and islands. A recent exhibit gives much space and ample coverage to the natural history of Hawaii. This exhibit displays and explains features of native Hawaiian plants and animals, many of which are unique in the world.

Classes from the schools of Hawaii regularly come to the museum, each year 30,000 students visit the exhibits. Arrangements are sometimes made for tours of the research departments, and some secondary school students work on special projects under the supervision of scientists.

In 1961 the museum extended its area of science education by building a Planetarium and astronomical observatory. This facility has been well received and has attracted ever-growing numbers of interested visitors. Present attendance exceeds 65,000 per year. Special Planetarium programs are arranged for school classes, with a choice of several subjects available to the teachers. The Planetarium lends itself to use as a classroom. Annually two or more courses in each of two subjects, Elementary Astronomy for the Layman, and Celestial Navigation, are available and well patronized. On occasion, classes are offered at the museum in anthropology, archaeology, and the natural history of Hawaii.

A flourishing educational activity of the museum is its Arts and Crafts School, which offers a large number of classes in both fine arts and more practical arts and crafts. Associated with this operation is the "Yarn Shop" where materials of many kinds are available for work in the crafts.

In 1972 a branch of the Bishop Museum known as Heritage Theater was opened in Waikiki in the King's Alley complex. A number of exhibits are on

display there pertaining to the monarchy period of the history of Hawaii. A small intimate theater presents programs on a wide variety of ethnic cultural arts. The museum operates several London double-deck buses to transport visitors to and from the three facilities: the museum and Planetarium, the Falls of Clyde, and the Heritage Theater in Waikiki.

The activities of the museum's staff devoted to other than scientific or scientific-supportive duties are essentially involved with the day-to-day operations of the museum in terms of visitors, physical equipment, buildings, and grounds. Key departments or sections include: Reception, Gift and Book Shops, Engineering and Maintenance, Public Relations (pertaining to the visitor industry), Promotion, Advertising, Sales, and certain personnel duties. While the prime goal of Operations is to provide the mechanics of serving the public, another principal concern is to generate income for the institution. Such monies support various of the museum's research and educational projects by contributing to the general fund. While many in Operations are of part-time status, the department averages about 60 employees.

As any public service organization, the museum must limit its activities to fit roughly defined boundaries. These boundaries will originate, partly from historic behavior which has resulted in unique or near unique collections, and significantly from our geographic location. Here geographic must be used with a broad interpretation based not on political or necessarily convenient definitions, but in a way that logically suits the historic or scientific content of the phenomena to be exhibited and studied.

For example, the diffusion of ancestral Polynesians throughout a large part of the Pacific Basin makes it meaningless scientifically to concentrate on just one island group, for it is only through the comparative studies

of diversified but related cultures that a total picture of the response of human activity to these environments can be generated. As is often true in research, the differences in characteristics of similar classes often provide the best clue to understanding the similarities of the classes.

The Bishop Museum is thus a strong leader in research, education, and exhibition for the entire Pacific Basin.