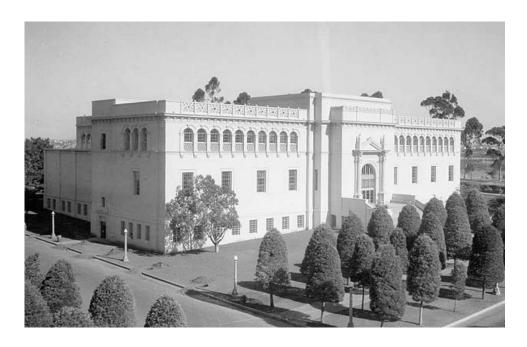
Chapter 17

HISTORY OF THE SAN DIEGO NATURAL HISTORY MUSEUM

Ah, how glorious! Green leaves, young leaves Glittering in the sunlight.

Mitsuo Basho (1644-1694)



Drawing of Natural History Museum, Balboa Park, San Diego

Forty-three years before the San Diego Natural History Museum came into being, San Diego had a Natural History Society and a Lyceum of Natural Sciences. They were both formed and incorporated in the same year, with the Natural History Society being the first, on October 9, 1874, and the Lyceum being the second, on December 11, 1874.(1)

It is a mystery why people in the New Town of San Diego in 1874, with a permanent population of a little over 2,000, should have established two societies with almost identical aims. Was there a latent source of rivalry or jealousy among members of the competing organizations?(2)

The founding officers of the Natural History Society were Daniel Cleveland, O. N. Sanford, Dr. George W. Barnes, E. W. Hendrick, and Charles Coleman.(3)

The Lyceum officers were Henry Hemphill, L. L. Locklin, A. J. Owns, George N. Hitchcock, Dr. Robert J. Gregg, H. H. Wildy, Dr. P. C. Remondino, Dr. D. Cave, and L. I. Roberts.(4)

Members of both groups pursued their separate programs with zeal. Looking back from 2006 one is struck by their intelligence. Many of these people were well-educated and had successful careers in other parts of the country before they came to San Diego, frequently for health reasons. Not only were these people involved in their private businesses, they were deeply concerned about the cultural and educational advancement of the community.(5)

Attorney Daniel Cleveland (6) and Dr. George W. Barnes, (7) who were the spark plugs of the Natural History Society, gave talks on a variety of subjects, as did Dr. Gregg and Dr. Remondino of the Lyceum of Natural Science. (8) These talks were well attended. Scientific institutions throughout the country wrote to the Natural History Society and the Lyceum of Natural Sciences for information about local conditions.

The Society of Natural History helped to establish a United States Signal Service Branch Weather Station in San Diego in 1875. (9) Ten years later, in 1885, the Society petitioned the City and County to protect the Torrey Pines area, a petition that was granted and led to the establishment of the Torrey Pines State Reserve.(10)

Papers written by members of the two societies include: (11)

"The Wild Coffee Plant," by Dr. George W. Barnes (Society of Natural History)

"The Hillocks and Mounds of San Diego County," by Dr. George W. Barnes (Society of Natural History)

"The Best Way of Collecting and Preserving Specimens," by Daniel Cleveland (Society of Natural History)

"The Ferns of San Diego County," by Daniel Cleveland (Society of Natural History)

"Bee Range and Pollen Producing Plants of San Diego County," by Daniel Cleveland (Society of Natural History)

"The Early History of Man," by Dr. P. C. Remondino (Lyceum of Natural Sciences)

"Elements of Natural History," by Dr. P. C. Remondino (Lyceum of Natural Sciences)

"An Explanation of the Theory of Evolution," by Dr. Robert J. Gregg (Lyceum of Natural Sciences)

"The Mission Indians of California," by Benjamin Hayes (Lyceum of Natural Sciences)

"The Longfellow Copper Mine," by Theodore F. White (Lyceum of Natural Sciences)

While members listened attentively to lecturers, members had their special interests. Daniel Cleveland, an authority on ferns, gave his area of expertise as botany; G. W. Barnes and Charles Coleman, Jr. concentrated on geology; O. N. Sanford indicated his primary interests were conchology and entomology; and George W. Marston confessed to or was given the field of ornithology.

The Natural History Society persevered while the Lyceum, despite its grand beginning, collapsed. Many of its members joined the Society of Natural History, including A. E. Horton, Henry Hemphill and Frank Stevens. E. W. Morse, president of the Lyceum in 1877, was the most important of the migrating members, for, in 1887, he gave the Society free a lot on the west side of Sixth Avenue between B and C streets.(12) Members continued to meet in the business offices of directors of the Society until 1912 when they met in a room of the Hotel Cecil that had been built on part of the donated land. In 1987, the Society sold the property to the Trammel Crow Company, with proceeds going to the Museum of Natural History's endowment fund.(13)

According to Joseph Sefton, Jr., who wrote a brief history of the Society in 1936, the Society narrowed its focus between the years 1899 and 1919 "from a community institution to a more or less closed scientific corporation" because of the growth of other service organizations in the city and of government bureaus that dispersed information formerly dispersed by the Society. This is surprising for the Society had grown in stature. Perhaps it was the pressure of their business and other civic endeavors that compelled members to limit their participation in the Society's activities. Could Sefton have been thinking of the Marine Biological Association (now Scripps Institution of Oceanography) founded in 1903, the San Diego Zoological Society, founded in 1916 by members of the Society, and the San Diego Floral Association, founded in 1907, which attracted Society members interested in botany.(14)

From its inception Society members collected specimens, publications and scientific apparatus. Storage problems were a headache as the Society lacked a facility large enough to hold and display its artifacts. Minutes of meetings and newspaper accounts sometimes refer to the collection as "a museum of curiosities." Even so, the Society had not achieved genuine museum status. Artifacts were consigned to a basement in the B Street School, to the Society's meeting rooms at the Hotel Cecil, and to the offices of members. (15)

The Natural History Society did not play a role in the formation or operation of the Panama-California (International) Exposition of 1915-1916. Members were, however, enthusiastic supporters of the Exposition. Joseph Sefton, Jr., the Society's main spokesman, was a vice president of the Panama-California Exposition Corporation.

After the Exposition, the Society paid \$500 to the Panama-California Exposition Corporation to acquire the Nevada Building.(16) Though the Society paid money for the building, as long as it remained on Balboa Park land, the Society did not actually own it for the City of San Diego holds title and is responsible for the maintenance of buildings in Balboa Park. When the Society moved into the Nevada Building in February 1917 the San Diego Natural History Museum came into being. The Society celebrates the anniversary of its incorporation, October 9, 1874, but it is unclear as to the exact date the Museum as a centralized enterprise came into existence.

The Nevada Building on the Alameda, east of today's Zoo, was designed in a simplified Spanish-Renaissance style as a temporary building. It was a two-story building with arcades in the central lower portion and with flanking wings containing Spanish-Renaissance trim around the windows. The building's charm came from its Spanish decoration. After this was removed, the building was unappealing.

With Frank Stephens, formerly a member of the Lyceum and an authority on mammals and birds, as its first director, the newly-constituted Natural History Museum soon found the Nevada Building was not suitable for museum uses because of its layout and the expense of keeping up a building that was falling apart. Therefore, Museum officials, asked the Park Commission for permission to move into the 1915 Foreign Arts Building on the southeast side of the Plaza de Panama.(17)

Permission being granted, the Museum in 1920 remodeled the interior of the Foreign Arts Building, putting in a Children's Corner with a backdrop of mountains and forests painted on the walls by Charles A. Fries, and setting up display cases and wall mounts for its growing collections, including the Charles H. Sternberg collection of Mesozoic fossils of dinosaurs, reptiles and fish, the J. F. Anderson collection of shells, and the A. E. Hornbeck collection of minerals and corals. The Sternberg collection included a gigantic plaster-mounted Hadrosaur, or duckbill dinosaur, that was mostly plaster.(18)

It took only two years for the Museum to discover that the Foreign Arts Building was too small for its purposes. (19) The Museum then asked and was granted use of the 1916 Canadian Building (1915 Commerce and Industries Building), where, on December 9, 1922, it opened its doors to the public. The Museum had only temporarily forsaken the Foreign Arts Building as it planned to join both buildings, thus extending the space the Museum would occupy.(20)

Between 1920 and 1930 Anthony and Vandruff-Reinholt collection of minerals, the Wright collection of butterflies, the first Brower Artic collection, the B. P. O. E Elk Group, and three large University of California habitat groups were added to the Museum. To balance the presence of so many motionless animals, cages containing live chipmunks, snakes, and lizards added enough "wiggle" to arouse curiosity about the dead animals.(21) Once more the pattern repeated itself.(22) As with the Nevada

and Foreign Arts Buildings, the Canadian Building proved inadequate because of its flimsy and flammable construction. Like the Museum of Man and the Fine Arts Gallery in Balboa Park, the Museum of Natural History had acquired exhibits of great value. In the event of fire, these exhibits would be lost.(23)

Ironically, a fire did occur about a block north and across the street from the Museum of Natural History. On November 25, 1925 the Southern California Counties Building burned down, just prior to the holding of a Fireman's Ball. Rather than dancing, city firemen were called to put out the fire, which they could not do. The Southern California Counties Building had become a heap of charred timbers and ashes.(24)

Directors of the Museum of Natural History saw their opportunity. Their chief benefactor, Ellen Browning Scripps, promised to donate \$125,000 for a replacement museum. Another \$25,000 came from public subscription. Architect William Templeton Johnson received a commission to design a reinforced concrete museum that would be fire and earthquake proof. The building would consist of an east wing and a west wing, joined by a great arch and a second story crossing over Calle Cristobal (so named in 1915), A parking lot for automobiles would take the place of the Avenida and of gardens north of the arch.

The 1915 Varied Industries and Food Products Building (then used as a County Fair Building) would have to be demolished to provide space for the west wing, which would contain a library, laboratories, workshops, a Children's Museum, and an auditorium.(25)

The east wing was to house museum exhibits. As the east wing was the only section constructed, the Natural History Museum has suffered from a shortage of space since January 14, 1933, the date the east wing was officially dedicated.(26)

While most San Diegans refrain from describing Johnson's Natural History Museum, those few who do have not been enthusiastic about the design. Nor have the building's occupants who have been cramped inside the building.

Architect Bertram Goodhue had an advisory role when the Southern California Counties Building was constructed. This was a giant building with an imaginative entrance patio at ground level, gracefully-arched second-level windows flanked by *estipite* pilasters. derived from convents in Mexico, and talavera designs on towers, derived from tile designs on buildings in Puebla, Mexico. As in all of Goodhue's buildings—in Balboa Park and throughout the country—the Southern California Counties Building was accessible and hospitable. It was designed on a human scale for the convenience and comfort of pedestrians. Unlike Neo-Classical buildings in Chicago, Buffalo and St. Louis (inspired by the example of World's Fairs) Goodhue's buildings were never intended to be formidable and overpowering.

Johnson's Natural History Museum was another mater. He was a Beaux-Arts architect acquainted with French Neo-Classical styles. Whatever its source, he decided to put the entrance on the second floor so that the approach would be from a grand staircase, a miniaturized version of the monumental staircases in front of the Metropolitan Museum of Art in New York City and the Institute of Art in Chicago. Thus the rhythmic ensemble effect that Goodhue had planned for the Panama-California Exposition was disrupted. All sense of internal-external connections made possible by arcades offering glimpses of inviting gardens was jettisoned.

The south façade of the Natural History Museum became a rectangular, three-layer wall with awkwardly placed windows. Its windows, stairs, doors, friezes, cornices and balustrade were unevenly proportioned. Even its colors were ineffectual as they were scattered and were so small they seemed irrelevant.

Johnson had been handicapped because he was told to make use of ready-made sculptures. These sculptures of Egyptian cats, that may be cheetahs, together with heads of bison and bighorn sheep were supposed to give the Museum an air of dignity and to arouse interest in its collections. Such expectations were out of touch with reality. Johnson, whose knowledge of natural history appears to have been minimal, supplemented the prominent figures with hazy mythological characters including a double-headed spread eagle, griffins, sea horses (or are they salamanders?), and small quadrupeds. As a result the main façade of the Natural History Museum is a hodgepodge of inharmoniously related trivia that does nothing to dramatize contents inside the building.(27)

Though few people in San Diego have seen them, it is instructive to look at buildings designed for the St. Louis Zoo by architect John E. Wallace between 1925 and 1930.(28) These buildings are in a Spanish-Renaissance style with details that are recognizably Spanish and with mosaic and sculptural depictions of animals and birds inside the buildings. The St. Louis Zoo has added many new buildings of modern, slimmed-down design but it has kept the facades of its 1920's buildings, even after redoing their interiors.

Collections added to the Natural History Museum after its 1933 opening include the George H. Field collection of insects, the Ingersoll collection of birds' eggs and nests, the Bumstead collection of game heads, a model of the Pacific Ocean bottom, the Valentien wild-flower paintings, the Bancroft collection of birds, the Moore collection of beetles, the Glassell collection of crustacea, the Fuller collection of birds' eggs, the Cleveland collection of minerals, the Beckwith collection of shells, the Lowe collection of shells, the Sharp egg collection, the Bancroft egg collection, the Purer botanical collection of 4,000 sheets, the Jewett collection of birds and mammals, the B. Bailey collection of birds and mammals, and the Graham shell collection.

Following Ellen Browning Scripps' death in 1932, her monthly contributions to the Museum stopped, thus forcing the Museum to lay off members of its trained staff. Works Project Administration (WPA) funds were used to rehire these workers and others, augmenting to 25,(29) who were put to work constructing exhibits of bird life on the Coronado Islands and of American birds; eggs and nests. To keep the eggs from fading, they were placed in dark cases. When a visitor wished to see them, he or she lowered the front of a sliding case which automatically turned on an electric light. WPA workers also put aquariums for tropical fish in the assembly hall, mounted a giant devil fish and a 200 lb. model of a swordfish on the walls, and rigged up an electrical device to make the rattles of a stuffed rattlesnake rattle.(30)

As a participating organization in the California-Pacific International Exposition of 1935-1936 the Natural History Museum became the Palace of Natural History. Exhibits were not exceptional. Guidebooks described the exhibits but newspaper ignored them. At the entrance to the basement or first floor, curators arranged a display of wild flowers bearing blossoms. They replaced the flowers as they faded. The remainder of the floor contained

representations of "the waters under the earth," with minerals, fossils, whales, reptiles and amphibians in cases and dioramas. The second or main floor was devoted to birds and mammals. The top floor displayed plant, butterfly, and insect specimens.(31)

The Museum proudly set before the eyes of visitors a hydrographic relief map prepared by the staff of the *USS Ramapo* that showed the way the Pacific Ocean would appear without water. The map's contours lent support to the hypothesis that eons ago a bridge of land extended from China to Mexico and a lost continent of Mu extended from Hawaii to the north of New Zealand and to the northeast of Australia.(32)

The only exhibits in the Palace of Natural History that were not "business as usual" were mounted by young men in the Civilian Conservation Corps (CCC) in the ground or basement floor of the museum. The CCC exhibit occupied about 5,000 sq. ft. of space and contained relief maps and farm and forest exhibits. Motion pictures showed the young men were helping themselves and the environment by fighting forest fires and insects and by constructing erosion-prevention dams and truck trails. In a section devoted to live displays, 24 CCC workers carved candlesticks, mahogany propellers and similar objects, made signs to be used on plants and trees, and worked on a huge relief map showing the Cleveland National Forest.(33)

Following the December 7, 1941 Japanese attack on Pearl Harbor a specimen-collecting party in Baja California, headed by Lawrence Huey, curator of mammals and birds, returned hurriedly to the Museum.(34) Conditions quickly changed as land and buildings around the Museum were converted into barracks for soldiers and sailors and into hospital facilities for the wounded. The Museum donated the samples of Philippine rubber in its collection to a rubber salvage campaign and provided information to the fighting services regarding insects and other conditions in the tropics.(35) After the Pacific campaign accelerated and casualties mounted, the U.S. Navy took over the Museum building on March 8, 1943, along with the Museum of Man and the Fine Arts Gallery, also in Balboa Park.

With U.S. Navy help and at government expense, the Museum packed its exhibits for storage. Immobile displays were left in place behind protecting walls. Displays too large to move were stacked together behind partitions.(36)

Clinton G. Abbott, Director of the Museum, and his staff of four were confined to close quarters in a wing in the basement.(31). They were the only museum people who were allowed to remain within the hospital compound in Balboa Park. Captain Josiah Green, formerly of the Museum staff, sent collections of insects and snakes from Guadalcanal.(37) Director Abbott said the Museum building contained 960 beds, which were three times as many as were in San Diego's Mercy Hospital.(38)

On July 1, 1949, the Museum of Natural History resumed its regular operations in Balboa Park.(39)

Developments since the reopening that are worthy of mention include the Joseph W. Sefton gift of a Foucault Pendulum in 1957 (40), the installation of a seismograph, a gift from Norman Larson in 1958 (41), the donation of the Klauber rattlesnake collection in 1965, (42) the formation of a Women's Auxiliary Committee (the "Covey") in 1967, the organization of the Canyoneers, who conducted tours of Florida Canyon, in 1973 (43), the opening of the Sefton Hall of Shore Ecology in 1974 (44), the opening of the Sefton Hall Gallery for temporary exhibits in 1982 (45), the opening of the Major Chapman Grant Hall of Desert Ecology in 1988 (46), and the Mary Hollis Clark Desert Discovery Laboratory in 1988 (47), and the opening of the Josephine L. Scripps Hall of Mineralogy in 1991.(48)

Director Richard P. Phillips secured San Diego City Council permission for the Museum to charge a 50 cent admission in April 1968 after promising that children under 15, servicemen and adult leaders of groups would be admitted free, and that one day a week would be a free day. The money raised would finance Museum improvements and cut down on vandalism.(49)

Since 1964 Directors have held office for shorter periods because of difficulties with the Board of Trustees and the Museum staff stemming from a scarcity of funding and disputes over Museum priorities. Michael W. Hager, appointed director in 1991, has broken the trend. Directors of the Museum since its establishment are:

Frank Stevens . . . 1917-1920

A. W. Anthony . . . 1921

Clinton G. Abbott . . . 1922-1946

Colonel Arthur F. Fischer . . . 1947-1955

Dr. George E. Lindsay . . . 1956-1963

Dr. E. Yale Dawson . . . 1963-1964

Dr. Richard P. Phillips . . . 1966-1969

Dr. William A. Burns . . . 1970-1973

Rear Admiral John B. Davis, Jr. . . . 1973-1978

Arthur C. Allyn . . . 1979

Chester A. McLaughlin . . . 1979-1986

Harold Mahan . . . 1987-1989

Allan Shaw . . . 1990

Michael W. Hager . . . 1991-

Taking one consideration with another, a director's lot is not a happy one. He must be informed about the natural sciences and successful at raising funds, promoting public relations, and overseeing business arrangements, while keeping staff, trustees, politicians and the public content. Because they come from business backgrounds, trustees frequently consider the raising of funds to be the Director's most important task. (Actually, it is the trustees' most important task.) (50)

Clinton G. Abbott, Director for 24 years, from 1922 to 1946, had a crucial impact on the Museum and on the public parks of San Diego County.(51) He helped bring about the move of the Natural History Museum to its present home, and along with Museum members Dr. Walter T. Swingle and Guy Fleming he promoted the purchase of land and the establishment in November 1932 of Borrego Palms Desert State Park. After being enlarged by federal donations and additional purchases, the California Department of

State Parks, in 1957, renamed the park the Anza-Borrego Desert State Park.(52)

Presidents of the Board of Trustees from the Museum's beginnings as the Society of Natural History are too numerous to mention. The number expanded after the president's term of office was limited to two years beginning with the presidency of Mrs. J. Dallas Clark (1974-1976). Presidents who because of the force of their character, interest in natural science, and executive capabilities, have had a decisive impact on the Natural History Society and Museum are:

George W. Barnes . . . 1874-1888

Daniel Cleveland . . . 1888-1890 and 1893-1894

Brigadier General Anthony W. Vogdes . . . 1904-1920

Joseph W. Sefton, Jr. . . . 1922-1947

More than any other museum in Balboa Park, the Museum of Natural History has created leaders dedicated to the causes of natural science, as these causes apply to the Southwestern part of the United States and to the peninsula of Baja California.

The Museum has, however, experienced difficulties which may be itemized as (1) the inadequacy of physical space, (2) the difficulty of reconciling the functions of departments of research, education and exhibits, (3) the need of the Museum to secure funding and to generate public support; and (4) the uncertainty as to the Museum's mission. (53)

Attempts to redress the problem of space are ongoing. An attempt to expand into a reconstructed Electric Building (former Canadian Building) in 1977 to set up exhibits illustrating the natural history of the Pacific Ocean, including islands and land masses, came to naught.(54)

A plan drawn up by architect Richard Bundy and announced in 1997 to double the Museum's floor space from 65,000 to about 140,000 sq. ft., add classrooms, meeting facilities, a 300-seat auditorium, and laboratory space was eventually implemented, unlike the previous expansion plans of William Templeton Johnson (55) Drawing of east and west wings in

Museum News, January 1, 1932, 1) and Frank Hope and Associates (56), were much discussed and much deferred. Ground for the Bundy-designed building was broken on November 15, 1998 and the building was dedicated on April 6, 2001.(57)

The new 90,000 sq. ft. wing, on the north side of the existing building, accommodates additional uses, such as a 300-seat Charmine and Maurice Kaplan IWERKS/IMAX theater, while a glass-enclosed atrium provides an entrance as well as exhibit space. The plan replicates design features on the south façade minus some of the bogus ornament. It is asymmetrical. Raised steps on the south side have been abandoned in favor of a recessed entrance leading to a 50 ft. high, light-filled lobby. In its liberal use of open-space, the glass atrium is dramatic, more so on the inside than the outside.

Whatever else it may be, the polyglot style of the now Janus-face Natural History Museum is not Spanish-Colonial; therefore it does not harmonize with the east elevation of the Casa del Prado a few steps away. What makes a Spanish-Colonial palace distinctive is the intense play of light and shadow on many-textured and incised wall surfaces. These do not exist in the Natural History Building. Nonetheless, the general articulation, scale, outline and texture of the north annex does not clash with the 1915-1916 Spanish-Colonial complex as does William Templeton Johnson's static 1933 south façade, the sleek Timken Gallery (built in 1965) and the obtrusive West Wing annex to the San Diego Museum of Art (built in 1966). The plan entails the loss of a small portion of Balboa Park, but as this space is confined to the old Museum's L-shaped configuration, its impact upon the park is negligible, A possibility exists that the additional space gained will temporarily ally rather than permanently relieve the Museum's space needs.

Exhibits inside the building have been rearranged to fit into the four floors and two basements. It is not clear to this author how many of the permanent installations on the Plaza de Balboa side have been retaimed, or if the Museum's enormous collections, gathered since 1874, have been culled.

The difficulty of reconciling the aims of the Museum's many departments is related to the need for acquiring funding. It is a thorny problem. Research is both general and applied. The pioneer founders were interested in both, though as practical people they expected that research would produce tangible benefit.(58)

Findings in general research do not, in the short run, yield results that benefit governmental agencies or private businesses, Accordingly, these institutions are unlikely to support it. The San Diego City Council got so worked up in the matter that in September 1951 it refused to fund "pure" scientific research.(59), Again, it might be questioned why corporations, government agencies, and foundations should give money to a small regional Natural History Museum for research of any kind rather than to larger Natural History Museums in New York City, Washington, DC, and Chicago.

Nevertheless, research scientists at the San Diego Museum of Natural History have been outraged by what they regard as a slighting of their work by Museum trustees. Before applied research can benefit people, basic research must be conducted that investigates the malign or benign possibilities that can result from the application of discoveries. For example, what are the consequences of expanding human development on the climate, environment and other species and how and when do these consequences imperil human beings? (60,)

Scientists must publish the results of their research to stimulate further research and to attract the interest and the investment of bureaucrats, businessmen and laymen curious about the ways the research can be put to use.

Education is an important function of the Museum. The Museum has historically fulfilled this role by organizing field trips, including whalewatching tours and overnight camping trips in the Southwest and in Baja California, and giving hands-on instruction to City and County schoolchildren. Museum members can enroll in a variety of Museum courses at minimum cost.

It is in its choice of exhibits that the Museum of Natural History is most vulnerable to criticism. The nature of exhibits has changed over the years due in part to the appointment of directors each of whom had his own areas of interest. Since government funding has fluctuated with economic conditions and the mood of the taxpayers, the Museum has resorted to crowd-pleasing exhibits that stray far from its own stated purpose.

The purpose of the Society of Natural History as stated in the Charter Constitution published in 1878 was "the study of nature, the acquirement and diffusion of scientific knowledge and the collection and preservation of materials pertaining thereto." (61)

The purpose has been rephrased over the years. In 1946, the purpose was expressed as follows: "The Natural History Museum stresses the natural history of the southwestern United States and northwestern Mexico, with emphasis on San Diego County. This field includes exhibits, study collections, and publications on birds, fishes, fossils, insects, mammals, marine invertebrates, minerals, plants, reptiles, shells, and geology." (62)

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In 1997 the purpose was: "To interpret the natural world through research, education and exhibits; to promote understanding of the evolution and diversity of San Diego and Baja California, and to inspire in all people respect for the environment." (63)

The extended purpose of the Natural History Museum, as stated by Dr. Michael W. Hager and Robert F. Smith in the *Strategic Planning 2002-2012* document is as follows:

Mission

To interpret the natural world through research, education and exhibits, to promote understanding of the evolution and diversity of southern California and the peninsula of Baja California, and to inspire in all a respect for nature and the environment.

Our Purpose

To emphasize this unique and diverse region while maintaining a global perspective.

To collect and preserve scientific specimens for research and as a continuous record of the changing world for future generations.

To serve as a center for scientific study of biological diversity and evolution.

To provide dynamic leadership in natural history and environmental education through exhibits, publications, and educational programs, striving to make the outreach relevant to all the people of the San Diego region.

To foster cooperative efforts in natural history research and education throughout our region.

"The devil is in the details." How this amplified purpose differs from the old is not apparent. It appears to broaden its scope but the emphasis is still on interpreting the "evolution and diversity of San Diego and Baja California" while inspiring visitors with a salutary respect for the environment.

A salient indication of the ups-and-downs of the Museum's sense of purpose was the exhibit of a live elephant in January 1977. (64) In 1949 a stuffed elephant was returned to the San Diego Zoo because the Museum was "devoted to the flora and fauna of this area and Baja California." (65)

A display that was so stunning that for a while it became the Museum's cynosure was that of a duckbill dinosaur reconstructed from fossil remains in Alberta, Canada, dating from the Jurassic period, 140 million years ago. The dinosaur was not entirely hoax; again, it was not entirely dinosaur. Part of the Charles H. Sternberg Collection, it was mounted in plaster on the east wall of the main floor of the 1933 building. (66) In 1987, the Museum purchased a replica of a full-size, free-standing Allosaurus excavated in Emery County, Utah and dating from the Jurassic period, made up of 338 cast bones. (67) The Allosaurus upstaged the imaginative and fragile Hadrosaur, which is now hidden from view.

Though, until the opening of "Fossil Mysteries" on July 1, 2006, the Museum exhibited the fossil remains of only one dinosaur from its official area (68)—a Nodosaur discovered in 75-million year old Cretaceous siltstones near Palomar Airport in North San Diego County in 1987—it would be stupid to quibble as scientific knowledge is interrelated. By showcasing the history of all dinosaurs, the Museum has supplied San Diegans with one of the most provocative lessons to be learned from the extinction of species.

The actual symbol or logo of the Museum is not the Hadrosaur, Nodosaur, or Allosaurus. It is the California Quail.(69), after which a women's auxiliary organization called the "Covey" was formed in 1967. The Covey act as hostesses for Museum activities and they assist the Museum's various departments.

The Museum of Natural History could not hold tenaciously to its regional purpose because it kept receiving gifts it had to accept that had nothing to do with its role as a regional museum. The first such gift from the citizens of Old Town was the cannon, "El Jupiter," cast in Manila in 1798. Not knowing what to do with it, Society members placed it in a room used by the San Diego Chamber of Commerce. Finally in 1930 the Society of Natural History transferred custody of the cannon to the San Diego Historical Society.(70)

Of the two directors fired by the Museum's Board of Trustees, William A. Burns was fired in 1973 (71) at the instigation of trustees, Joseph Sinnott and Burt Raines, who became Society of Natural History presidents.(72) These men wanted to put in Burns' place John B. Davis, Jr., who retired from the U.S. Navy one day before his appointment. They thought Davis would bring a businesslike practicality to the job that an ivory tower scientist lacked.(73) Ironically, Davis resigned in September 1978 because research staff were unhappy with his punitive economics and because a newly-elected pro-research group of trustees, seeking to undo Burt Raines' heavy-handed measures, appointed Albert Anderson, doctor of dentistry, president.(74)

Again intimidated by staff accusations of "incompetency," the trustees fired Director Harold Mahan, another scientist with prior museum leadership experience, in 1990.(75) Mahan, who was responsible for the change of name from Natural History Museum to San Diego Natural History Museum, had the misfortune of mounting a blockbuster Tropical Rainforest exhibition that failed to generate a profit.(76) Although, like Burns, Mahan had been an expansionist, research people feared that the programs he favored would diminish their work.(77) Staff fears proved to be too real when Allan Shaw, president of a temporary employment agency, whom trustees appointed interim director to replace Mahan, fired four employees from the eleven-person research staff and eight employees from other departments, giving the recession and a \$100,000 deficit as his reasons. Having experienced the thrill of wielding the budget axe, Shaw clamped down on research and

suspended the publication of *Environment Southwest*, a journal for research writing.(78)

With the appointment of Dr. Michael W. Hager in 1991 (79), who was, like Burns and Mahan, a scientist and a museum administrator, some of the dissension over shortages of funding were resolved, grants from foundations were obtained, popular and profitable exhibitions from outside the Museum increased, and the Museum received accreditation from the American Association of Museums. With a curator in paleontology and a curator in botany on board in 1997 and with curatorships in geology, vertebrate zoology, invertebrate zoology, and entomology vacant, staffers became quiescent. Hager said he would fill curatorial positions only if and when they are endowed. Ideally, a solvent museum should be able to support its research, education and exhibit activities.

The prospectus for the north annex to the Museum of Natural History referred to a Biodiversity Center of the Californias and an Environmental Education Center that would become features of the enlarged museum. (80) The Biodiversity Center, which had its official start in 1996 will amalgamate the work of the Museum's departments.

Dr. Exequiel Ezcurra, from Mexico's Autonomous National University, served as director of the Biodiversity Center from its beginning in 1996 to 2001 and again in 2006 onward. During his second tenure as director Ezcurra was also given the responsibilities of Provost of the Museum. He was co-producer of the wide-screen film *Oean Oasis* which had its first screening in September 2000. The Center has picked up the slack caused by the discontinuance of *Memoirs* in 1986, *Transactions* in 1989 and *Environment Southwest in* 1990. Curatorial staff at the Museum can now publish their writings in venues supported or approved by the Center. A partial list of such publications, including names of the San Diego Natural History authors in boldface and dates of publication include:

Robles Gil, P., **E. Ezcurra**. E. Peters, E. Pallares, and A. Ezcurra (eds.), 2004. *The Great Tamaulipan Natural Province*. Conservation International Washington, and Agrupacion Sieera Madre, Mexico, 360 pp.

Roeder, M.A., P. Gensler, and G. T. Jefferson (in press) *The fossil lower vertebrates, the fish, amphibians, and reptiles* in: G. T. Jefferson and

L. Lindsay (eds.) Fossil treasures of the Anza-Borrego Desert: The Last Seven Million Years, Sunbelt Publications, San Diego.

Salyon, A.M., D.A. Dierig, **J.P. Rebman**, and D. Jasso de Rodriguez, 2005, Evaluation of new *Lesquerella* and *Physaria* (Brassucaceae) oilseed germplasm. *American Journal of Botany* 92:53-62.

Savage, J.M., **B.D. Hollingsworth**, K.P. Lips, and A.P. Jaslow, 2004, A new species of rainfrog (genus *Eleitherodactylus*) from the Serrania deTabasara, West-Central Panama, and reanalysis of the *fi tzingeri* species group, *Herpetologica* 60(4).

Unitt, P., 2994, San Diego County bird atlas. *Proceedings of the San Diego Society of Natural History*, 39L, 1-1ii, 1-639.

The Environmental Education Center, launched in 1998, supplies buses, mobile laboratories, and field classrooms for the children's and young adults' outreach programs. Borrowing philosophy and techniques from the Chicago Academy of Sciences and the San Francisco Exploratorium, the Education Center explores nature in an urban setting, learning about water quality and quantity, for example, by examining storage distribution and conservation problems, or about the role of fires in maintaining plants, trees, insects, birds, reptiles and animals. Students will be able to apply the discoveries of natural science to urban developments. Whatever careers these students may pursue, their thinking about social issues will be influenced by environmental concerns.(80) This critical overview of the relation of urban growth to natural ecosystems is not what the founders of the Society of Natural History meant by "the acquirement and diffusion of scientific knowledge." It is, however, a response to potentially threatening situations the founders could not have foreseen.

Ordinary museum visitors are drawn to colorful and entertaining exhibits of a Walt Disney cast that ignore the extent and character of San Diego's natural scenery and resources The pace of rotating exhibits—some frivolous, some sober—has picked up in recent years as shown by the following representative list, drawn from the San Diego Natural History Museum Exhibitions webpage.

Feathered Dinosaurs	February 7, 2004
through January 2, 2005	
Fossil Hunters in San Diego	March 30, 2004
through September 5, 2005	
Chocolate Tour	February 5, 2005.
through, May 1, 2005	
Backyard Monsters!	May 28, 2005
through January 1, 2006	
Wildlife Art (Ordover Gallery)	August 12, 2005
through January 1, 2007	
Dinosaurs, Real and Robotic	May 27, 2006
through January 1, 2007	
Earth, Wind and Wildfire	April 11, 2006
through April 11, 2007	
Tapestry of Creation (Ordover Gallery)	January 13, 2007
through March 11, 2007	
Dead Sea Scrolls	October 29, 2007
through December 31, 2007	

On July 1, 2006 the Museum of Natural History opened a permanent exhibit that occupies most of the second floor of the north wing, or original portion, of the building prior to its expansion in 2001. The 9.700 square feet exhibit, titled "Fossil Mysteries," attempts to show how species evolved and became extinct in the San Diego and Baja California regions during the Cretaceous (144 to 65 million years ago), Eocene (34 to 55 million years ago), Oligocene (24 to 34 million years ago), Miocene (5 to 24 million years ago) Pliocene (1.8 to 5 million years ago), and Pleistocene (10,000 to 1.8 million years ago) Periods. Based on surveys, the exhibit from the Cretaceous Period will appeal to most visitors. Here pictures, replicas and fossil bones of such regionally-found dinosaurs as the Albertosaurus, the Lambeosaurus and the Ankylosaur are featured, along with egg fossils and facsimiles from these and other dinosaurs that were found in the San Diego and Baja California regions.

It is intimated, rather than affirmed, that the mass extinction of dinosaurs at the end of the Cretaceous was the result of a massive meteor impact. Bird, animal and marine life extinctions occurred at varying times during subsequent periods. The decline and loss of species is attributed to the moving of tectonic plates and to climatic changes, including the expansion and contraction of glaciers that took place during the Pleistocene.

It is not suggested that flesh-eating animals may have been a factor in the extinction of vegetable-eating species, though this appears to have happened during the Holocene Period (10,000 years ago to today), with the rise of *homo sapiens*. Exhibits are interactive and are, for the most part, touchable. While some answers are proffered, displays are meant to stimulate questions. Though people of all ages will find the exhibits interesting, an assortment of chirps and grunts and a "Ring of Fire" map on the ceiling with 3,000 flashing fiber-optic lights that show the location of volcanoes and earthquakes will appeal most to teenagers.(82)

Despite shortcomings, the prognosis of the Natural History Museum in Balboa Park is good. Not only has it inspired leaders who have helped to advance San Diego, the Southwest and Baja California, and provided a place to display scientific knowledge, it has made visitors, members and students aware of the disastrous consequences of the disregard for natural balance on which the fate of homo sapiens depends.

NOTE: Expansion of the Natural History Museum into its south wing in 1998, changes to the floor plan for the Museum and plans for new exhibits have required the placing of the Josephine Scripps Hall of Mineralogy and the Joseph Sefton Hall of Shore Ecology exhibits in storages. It is not known if these exhibits will be mounted in the new Museum.

Original manuscript January 1997; Revised July 2006.

NOTES

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- 7. "Dr. Charles W. Barnes, Biographical Sketches, *The City and County of San Diego*, 171-172.
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