



SAN DIEGO NATURAL HISTORY MUSEUM

ANNUAL REPORT



2008-2009



October 2009

Dear Museum Friends:

This year's Annual Report ushers in another milestone for the San Diego Natural History Museum—the start of our 135<sup>th</sup> anniversary. We enter this landmark year on the heels of presenting what I believe are some of the most educational exhibitions we have ever offered. *Water: A California Story* and *Water: H<sub>2</sub>O = Life* could not have been more timely as we enter into mandatory water rationing. We closed the fiscal year with Gunther von Hagens' *BODY WORLDS & The Brain—Our Three Pound Gem*. This groundbreaking exhibition had 300,000 visitors and reached an unprecedented number of students with its outreach and programming.

As importantly, as we move into the anniversary year, we reflect on the theme from our successful capital campaign, *Full Circle*, which referred to the Museum's return to its original mission and vision as a repository and research organization focused on our amazing region. Our first comprehensive strategic planning process, initiated in 1991, led us back to the motivation for our founding: a fascination by early San Diegans with the extraordinary biodiversity of the southern California and Baja California region.

It is worthwhile to reflect on the past year's accomplishments and on how our mission has consistently guided our efforts in research, education, and exhibitions. The Biodiversity Research Center of the Californias' contribution to the Annual Report focuses on an exciting centennial project in the San Jacinto mountains. This expedition unites each of our research disciplines as we revisit pioneering work done 100 years ago, collect new data and compare changes. It represents the highest value of what our Museum can accomplish in providing unbiased scientific research which can inform and influence communities and the decisions of policy makers.

On a personal note, I returned from my first sabbatical renewed and invigorated. Working with Board President Eleanor Navarra and the Museum's Senior Management Team, we have met the challenge of these difficult economic times and "trimmed our sails." None of these decisions were easy, but I am confident that we have positioned the Museum to weather the ongoing downturn.

We are motivated to strive for excellence by each of you. It is our volunteers, members and donors who have invested in the mission of the Museum and it is our obligation and honor to put into action plans and dreams that will last another 135 years. Please accept our most sincere thanks for your continued commitment to the San Diego Natural History Museum.

Sincerely,

**Michael W. Hager, Ph.D.**  
President and CEO



**Eleanor A. Navarra**  
Chair, Board of Directors

research





The Museum's collections represent a rich and vital source for investigations in many of the fundamental arenas of modern biological sciences.

### The Biodiversity Research Center of the Californias

The Biodiversity Research Center of the Californias (BRCC) is the research division of the Museum, and includes Birds and Mammals, Botany, Entomology, Herpetology, Marine Invertebrates, Mineralogy, Paleontology, and the Research Library. BRCC scientists actively pursue independent research projects, which range from investigating the systematics of *Heteroptera* (plant bugs) to conservation biology research of amphibians and reptiles in Baja California. The BRCC receives project funding from the National Science Foundation and other respected research-granting foundations.

Each curator is entrusted with caring for a collection of irreplaceable specimens. The Museum's collections

total approximately 9.2 million specimens, some of which date from the 1800s. They represent a rich and vital source for investigations in many of the fundamental arenas of modern biological sciences, such as climate change, evolution, biodiversity, and ecology.

BRCC staff members work collaboratively with universities in the U.S. and Mexico, and are involved in studies that inform local as well as binational decisions about endangered or threatened species, land use, and conservation. This is the tradition that started with the forming of the San Diego Society of Natural History in 1874, and is still being carried out today. We are proud to present examples of such investigations in the following pages.





**The San Jacinto Centennial Resurvey is the quintessential example of the quality of research at the San Diego Natural History Museum.**

### San Jacinto Centennial Resurvey

In 1908 the Museum of Vertebrate Zoology of the University of California, Berkeley, mounted an expedition to the San Jacinto Mountain region of Riverside County, pioneering the exploration of southern California's biology. On the 100<sup>th</sup> anniversary of this expedition, from 2008 to 2011, the San Diego Natural History Museum (SDNHM) is retracing its path to see how the area's wildlife has changed over the last century. The expedition of 1908 represented a unique benchmark, allowing our scientists today to analyze how the wildlife and habitats of southern California are responding to environmental change, using the longest historic perspective possible.

The San Diego Natural History Museum's research team has been visiting the same 19 sites as those surveyed in 1908, collecting data on all species of vertebrates in the region so that comparisons can be made. The original expedition, led by Joseph Grinnell, Harry Swarth, and others, was documented with numerous specimens, photographs and copious field notes that allow today's scientists to design the current effort as a true comparison. Starting in

2008, Curator of Birds and Mammals Philip Unitt has spearheaded our team of ornithologists, mammalogists, herpetologists, ecologists, and support staff as they have made expeditions into such areas as Tahquitz Valley, Carrizo Creek, Palm Canyon, and Lake Hemet, collecting specimens and data, and photographing each region. Analysis of the data may reveal how multiple factors such as urban development, agriculture, wildfire, fire suppression, decreased rainfall, and global warming have affected the area's birds, mammals, reptiles, and amphibians over the past 100 years.

Notable discoveries so far include the little brown bat (*Myotis lucifugus*) at Tahquitz Valley (it was known previously in southern California only from the San Bernardino Mountains), nesting of the Hermit Warbler (*Dendroica occidentalis*) at Fuller's Mill, and the Savannah Sparrow (*Passerculus sandwichensis nevadensis*) at Lake Hemet (both birds not previously known to nest south of the San Bernardino Mountains), the invasion of the Rufous-crowned Sparrow (*Aimophila ruficeps*; absent from the San Jacinto

region in 1908 but aided by wildfire and the spread of exotic grasses), spread of the desert cottontail (*Sylvilagus audubonii*) and cactus mouse (*Peromyscus eremicus*) to elevations considerably higher than known in 1908. The discovery of a Mountain Yellow-legged Frog (*Rana muscosa*) in Willow Creek, a new locality for that severely endangered species, was welcome news for the conservation of one of southern California's rarest amphibians.

The San Jacinto Centennial Resurvey is the quintessential example of the quality of research at the San Diego Natural History Museum. It is a multi-disciplinary, broad-based, long-term research project which, when completed, will provide environmental scientists, ecologists, community planners, and other stakeholders with invaluable data—facts which, while being of immediate use, may very likely play a completely unknown role for those who reside in California long after we are gone.

## Research Without Borders

In April 2009 Dr. Jon Rebman, Curator of Botany, made a collecting trip on muleback into one of the most remote regions of Baja California, the Sierra de la Libertad. This area is practically uninhabited and inaccessible, and thus represented a chance for the botanists to find and collect plants that might be newly documented as occurring in the peninsula, or potentially even plants unknown to science. As he rode in on muleback, he carried that most venerable and basic implement of the botanist's tool kit, the wooden plant press.

In sharp contrast to the humble plant press, our researchers also increasingly rely on sophisticated digital information as one of the best tools to advance their cause and to share their expertise. As interest grows in conserving biodiversity and promoting environmental protection, the data we can compile from collections, such as those found in academic and museum herbaria, are very significant. Specimen data gleaned from a range of herbaria such as our own at the San Diego Natural History Museum can be pooled and the resulting information

used to determine what species are found in what areas, what plants are flourishing, what species may have declined over time, and how scarce a particular species may be. This comprehensive aggregation of information is enormously important for the "big picture" it can provide.

In December of last year, Dr. Rebman initiated the establishment of the Baja California Botanical Consortium (BCBC), a group including four institutions from both sides of the border, in addition to the SDNHM, to combine their data to provide just such a "big picture" of what is happening with the plants of Baja California. This information is available to researchers on our Baja California website at [bajaflora.org](http://bajaflora.org). Although tools are still being developed to make the database fully searchable for the public at large, a wealth of the Museum's own resources are already available, including photographs of plants, images of regional habitats, a database of historic place names of

Baja California, and scanned and indexed field notes from the historical collections of former curator Reid Moran.

Information technology is allowing our researchers to squeeze ever more knowledge out of specimens that continue to be brought in by the tried-and-true techniques of field work and collecting.



Paleontological salvage operations at the Thomas Jefferson School of Law yielded some amazing finds this past winter.





## Local Discoveries

The Paleontology and PaleoServices departments have been busy over the past fiscal year. A significant achievement was the hosting of a mini-conference about the nature of a partial mastodon skeleton originally excavated by Museum paleontologists in 1993 along State Route 54 in National City. The Pleistocene-age fossil and the sedimentary rocks preserving it appear to provide intriguing evidence relevant to the question of when humans first reached the Americas. This controversial subject was a key element of the conference, which was attended by scientists from the University of Michigan, the Denver Museum of Nature and Science, the University of Illinois, Anza-Borrego Desert State Park, and other institutions, along with the San Diego Natural History Museum.

Conference activities involved fieldwork to reopen the original quarry site and recover samples for dating the strata. Conference lab work examined fossils and associated rocks recovered from the quarry and reviewed original quarry maps, photographs, and field notes. Discussions focused on patterns of bone and rock breakage found in the quarry, possible processes responsible for the breakage patterns, and the age of the site. The conference was a success and resulted in a series of recommendations for future work and publications.

Paleontological salvage operations at the Thomas Jefferson School of Law in the East Village community of downtown San Diego yielded some amazing finds this past winter. Pleistocene-age fossils, including a partial mammoth skeleton, remains of

smaller terrestrial mammals such as rabbit and horse, a partial gray whale skeleton, and shells of subtropical mollusks were discovered in a sequence of strata exposed between 10 and 40 feet below street level. Diagnostic fossils of the mammoth included both tusks, a partial skull, four molar teeth, the atlas vertebra, and bones of the forelimb, while diagnostic elements of the gray whale recovered included a scapula, a complete lower jaw, portions of the rostrum, and numerous ribs and vertebrae. The age of these fossils is estimated to be 200,000 to 500,000 years old.



## Scientific Publications

- Archibald, J.D. 2008. Edward Hitchcock's pre-Darwin (1840) "Tree of Life." *Journal of the History of Biology*. Online First.
- Archibald, J.D. 2009. The Age of Mammals: How It All Began. Review of *The Beginning of the Age of Mammals* by Kenneth D. Rose. *Journal of Mammalian Evolution* 16:117–118.
- Austin, D.F. & R.S. Felger. 2008. Sichuan Peppers and the Etymology of Fagara (Rutaceae). *Economic Botany* 62(4):567–573.
- Beier, P., D.R. Majka, and W.D. Spencer. 2008. Forks in the road: Choices in GIS procedures for designing wildland linkages. *Conservation Biology* 22:836–851.
- Berta, A. 2008. Systematics. In: W.F. Perrin, B. Wursig, and J.G.M. Thewissen (eds.), *Encyclopedia of Marine Mammals*, Second Edition. Academic Press, Burlington, MA, USA. Pp. 1148–1152.
- Berta, A. 2008. Pinnipedia, Overview; In: W.F. Perrin, B. Wursig, and J.G.M. Thewissen (eds.), *Encyclopedia of Marine Mammals*, Second Edition. Academic Press, Burlington, MA, USA. Pp. 878–885.
- Berta, A. 2008. Pinniped evolution; In: W.F. Perrin, B. Wursig, and J.G.M. Thewissen (eds.), *Encyclopedia of Marine Mammals*, Second Edition. Academic Press, Burlington, MA, USA. Pp. 861–868.
- Berta, A. and **T.A. Deméré**. 2008. Mysticetes, Evolution. In: W.F. Perrin, B. Wursig, and J.G.M. Thewissen (eds.), *Encyclopedia of Marine Mammals*, Second Edition. Academic Press, Burlington, MA, USA. Pp. 749–753.
- Bisconti, M. 2008. Le culture degli altri animali. *Zanichelli*, Bologna; p. 207.
- Bisconti, M. 2009. Introduzione ai metodi statistici di base negli studi paleoantropologici; In: Mallegni F., Lippi B. (eds.), *Non omnis moriar—Manuale di Antropologia*. CISU, Roma. Pp. 319–353.
- Bisconti, M., Carnieri, E., Roselli, A. 2008. L'evoluzione biologica nei percorsi e nei laboratori didattici di zoologia e antropologia presso il Museo di Storia Naturale del Mediterraneo di Livorno. In: Domenici V., Lenzi A., Montesarchio E. (eds.), *Codice Armonico 2008—Secondo congresso di scienze naturali Ambiente toscano*. Edizioni ETS, Pisa. Pp. 146–152.
- Bisconti, M. 2008. Morphology and phylogenetic relationships of a new eschrichtiid genus (Cetacea: Mysticeti) from the Early Pliocene of northern Italy. *Zoological Journal of the Linnean Society*, 158:161–186.
- Boyd, R.S., M.A. Davis, **M.A. Wall** and K. Balkwill. 2009. Host plant-herbivore studies on *Chrysolina clathrata* (Clark) (Coleoptera: Chrysomelidae) from Mpumalanga, South Africa. *Insect Science* 16:81–88.
- Boyd, R.S., **M.A. Wall**, and T. Jaffré. 2009. Do tropical nickel hyperaccumulators mobilize metals into epiphytes? A test using bryophytes from New Caledonia. *Northeastern Naturalist*. 16 (Special Issue 5):139–154.
- Boyd, R.S., **M.A. Wall**, S. R. Santos, and M.A. Davis. 2009. Variation of morphology and elemental concentrations in the California nickel hyperaccumulator *Streptanthus polygaloides* (Brassicaceae). *Northeastern Naturalist*. 16 (Special Issue 5):21–38.
- Brown, J. W. and F. Komai. 2008. Key to the larvae of *Castanea*-feeding Olethreutinae frequently intercepted at U.S. ports-of-entry. *Tropical Lepidoptera Research* 18(1):2–4.
- Brown, J. W. 2008. Review of the Neotropical genus *Cacocharis* Walsingham (Lepidoptera: Tortricidae: Olethreutini), with comments on its geographic distribution and new synonymy. *Proceedings of the Entomological Society of Washington* 110:533–542.
- Brown, J. W. & K. Nishida. 2008. A new species of *Acleris* (Lepidoptera: Tortricidae) from high elevations of Costa Rica, feeding on *Rubus* (Rosaceae). *SHILAP Revista de Lepidopterologia* 36 (143): 341–348.
- Brown, J. W. 2008. Book review: "Palearctic Tortricidae. Volume 1. General Part and Tortricini," by Jozef Razowski. *Proceedings of the Entomological Society of Washington* 110:1246–1248.
- Brown, J. W. 2008. Book review: "The Washington Biologists' Field Club: Its Members and Its History (1900–2006)," edited by Matthew Perry. *Proceedings of the Entomological Society of Washington* 110:1249–1250.
- Carnieri, E., Bisconti, M. 2008. Modificazioni ambientali e faunistiche durante l'Olocene sull'Isola di Pianosa (Arcipelago Toscano, Italia): le evidenze malacologiche. In: Domenici V., Lenzi A., Montesarchio E. (eds.), *Codice Armonico 2008—Secondo congresso di scienze naturali Ambiente toscano*. Edizioni ETS, Pisa. Pp. 66–69.
- Deméré, T.A.** and J. Yonas. 2009. Locomotion, Terrestrial. In: W.F. Perrin, B. Wursig, and J.G.M. Thewissen (eds.), *Encyclopedia of Marine Mammals*, Second Edition. Academic Press, Burlington, MA, USA. Pp. 672–673.
- Deméré, T.A.** and A. Berta. 2008. Cranial anatomy of the toothed mysticete *Aetiocetus weltoni* and its implications for aetiocetid phylogeny. *Zoological Journal of Linnean Society*, 154(2):308–352.
- Ezcurra, E.**, M.A. Carvajal, R. Cudney-Bueno, and J. Torre. 2009. Gulf of California, Mexico. In: K. McLeod and H. Leslie (eds.) *Ecosystem-Based Management for the Oceans*. Island Press, New York. Pp. 227–252.

- Ezcurra, E.** 2008. No way back. In: Nancy Sutor (curator) *The history of the future: Photographs by Michael Berman and Julián Cardona, essays by Charles Bowden, Julián Cardona, and Exequiel Ezcurra*. The Lannan Foundation, Santa Fe, New Mexico. Pp. 26–29.
- Ezcurra, E.** 2008. Biodiversity, a fragile inheritance. In: *The Camino Real and the Missions of the Baja California Peninsula*. Fundación Manuel Arango and Instituto Nacional de Antropología e Historia, México, D.F. p. 3.
- Ezcurra, E.** 2008. Baja California, The geography of hope. In: *The Camino Real and the Missions of the Baja California Peninsula*. Fundación Manuel Arango and Instituto Nacional de Antropología e Historia, México, D.F. p. 2.
- Garcillán, P. P., **J. Rebman**, and F. Casillas. 2009. Analysis of the non-native flora of Ensenada, fast growing city in northwestern Baja California. *Urban Ecosystems*, DOI 10.1007/s11252-009-0091-1.
- Grismer, L.L. 2008. On the distribution and identification of *Cyrtodactylus brevipalmatus* Smith, 1923, and *Cyrtodactylus elok* Dring, 1979. *The Raffles Bulletin of Zoology*. 56(1):177–179.
- Grismer, L.L., T. Neang, T. Chav, P.L. Wood, Jr., J.R. Oaks, J. Holden, J.L. Grismer, T.R. Szutz, and T.M. Youmans. 2008. Additional amphibians and reptiles from the Phnom Samkos Wildlife Sanctuary in northwestern Cardamom Mountains, Cambodia, with comments on their taxonomy and the discovery of three new species. *The Raffles Bulletin of Zoology* 56(1):161–175.
- Grismer, L.L., P.L. Wood Jr., and J.L. Grismer. 2009. A new insular species of skink of the genus *Sphenomorphus* Strauch 1887 (Squamata: Scincidae) from Pulau Perhentian Besar, Terengganu, Peninsular Malaysia. *Tropical Life Sciences Research*, 20(1):51–69.
- Guevara-Medina, M.A., J.A. Castillo-Guerrero and E. Mellink, 2008. Variaciones interanuales en la biología reproductiva del rabijunco de pico rojo (*Phaethon aethereus*) en Farallon de San Ignacio, Sinaloa, México. In: *Estudios de las Islas del Golfo de California*. Flores-Campaña, L.M. (Editor). Universidad Autónoma de Sinaloa-Gobierno del Estado de Sinaloa-Consejo Nacional de Ciencia y Tecnología, México. Pp. 115–122.
- Hertz, C.M. 2008. Growth changes in *Jenneria pustulata* (Lightfoot, 1786) (Gastropoda: Ovulidae). *The Festivus* 40(10):121–122.
- Hertz, C.M. 2009. An adventure at Playa Matanchén, Nayarit, México. *The Festivus* 41(4):38.
- Hertz, C.M. and C. Skoglund. 2008. An undescribed Panamic *Cyclostremiscus* (Tornidae: Vitrinellinae: Gastropoda). *The Festivus* 40(8):93–94.
- Hoebeker, E. R., A. G. Wheeler, Jr., and J. W. Brown. 2008. *Archips xylosteana* (L.) (Lepidoptera: Tortricidae), a Palearctic leaf-roller, new to North America. *Proceedings of the Entomological Society of Washington* 110: 789–795.
- Kelly, A.C., Mateus-Pinilla, N.E., Diffendorfer, J.E., Jewell, E., Ruiz, M.O., Killefer, J., Shelton, P., Beissel, T., Novakofski, J. 2008. Prion sequence polymorphisms and chronic wasting disease resistance in Illinois white-tailed deer (*Odocoileus virginianus*): *Prion*, v. 2, p. 1–9.
- Lovich, K., C.R. Mahrtdt, and K.R. Beaman. 2008. A curator and his rattlesnakes: The history of Laurence Monroe Klauber at the San Diego Zoo. In: William K. Hayes, Kent R. Beaman, Michael D. Cardwell, and Sean P. Bush (Eds), *The Biology of Rattlesnakes*, Loma Linda University Press, Loma Linda, California. Pp. 25–38.
- Luévano, J., E. Mellink, M.E. Riojas-López and J.L. Flores-Flores. 2008. Comunidades de roedores nocturnos en un ecotono de matorrales micrófilos y zacatal gipsófilo en San Luis Potosí, México. *Revista Mexicana de Biodiversidad* 79:197–203.
- Mellink, E. and M. E. Riojas-López. 2009. Waterbirds and human-related threats to their conservation in Laguna Cuyutlán, Colima, México. *Revista de Biología Tropical* Pp. 571–12.
- Mellink, E., M. Riojas-López and J. Luévano-Esparza. 2009. New breeding records of Charadriiformes along the coast of Jalisco-Guerrero, southern Mexico. *Waterbirds* 32:44–53.
- Mellink, E., M.E. Riojas-López and J. Luévano-Esparza. 2009. Organochlorine content and shell thickness in brown booby (*Sula leucogaster*) eggs in the Gulf of California and the southern Pacific coast of Mexico. *Environmental Pollution* 157: 2184–2188.
- Mellink, E., M. Riojas-López, J. Luévano-Esparza and J. Wheeler. 2009. Historic changes in mid-winter use of Laguna Cuyutlán, Colima, Mexico, by waterfowl. *Ornitología Neotropical* 20:171–179.
- Paquin P., N. Duperre, J.C. Cokendolpher, K. White, and M. Hedin. 2008. The fundamental importance of taxonomy in conservation biology: The case of the eyeless *Cicurina bandida* (Araneae: Dictynidae) of Central Texas, including new synonyms and the description of the male of the species. *Invertebrate Systematics* 22,1–11.
- Peters, E.M., C. Martorell, and **E. Ezcurra**. 2009. The adaptive value of cued seed dispersal in desert plants: Seed retention and release in *Mammillaria pectinifera*, a small globose cactus. *American Journal of Botany* 96(2):537–541.
- Pierce, Nuri and M. G. Simpson. 2009. Polyaperturate pollen types and ratios of heteromorphism in the monocot genus *Conostylis* R. Br. (Haemodoraceae). *Australian Systematic Botany* 22:16–30.
- Price, R.D., Johnson, K.P. and Dalgleish, R.C. 2008. Five new species of *Myrsidea* Waterston (Phthiraptera: Menoponidae) from antshrikes and antbirds (Passeriformes: Thamnophilidae). *Zootaxa*, 1819: 55–62.
- Price, R.D., Johnson, K.P. and Dalgleish, R.C. 2008. Five new species of *Myrsidea* Waterston (Phthiraptera: Menoponidae) from saltators and grosbeaks (Passeriformes: Cardinalidae). *Zootaxa* 1873:1–10.

- Prothero, D.R. 2008. Missing links found: Transitional forms in the fossil mammal record. In: Schneidermann, J., and Allmon, W. (eds.), *For the Record: Geologists on Intelligent Design*. University of California Press, Berkeley. Pp. 39–59.
- Prothero, D.R. 2008. Paleogene climates, In: Gornitz, V. (ed.), *Encyclopedia of Paleoclimatology and Ancient Environments*. Kluwer Academic Publishers, Dordrecht, The Netherlands. Pp. 728–733.
- Prothero, D.R. 2008. Do impacts really cause most mass extinctions? In: Seckbach, J. (ed.), *From Fossils to Astrobiology*. Springer: New York. Pp. 411–423.
- Prothero, D.R., E. Draus, E. A. Nesbitt, T.M. Smiley, and C. Burns. 2009. Paleomagnetism and tectonic rotation of the Eocene-Oligocene rocks of the Quimper Peninsula, northeastern Olympic Peninsula, Washington. *Newsletters on Stratigraphy* 43:127–138.
- Prothero, D.R. 2009. Introduction. *Evolution: Education and Outreach 2* (online). <http://www.springerlink.com/content/Ow2j24265j7x11j2/?p=b1ac4f4ac3f649bcb8906f57bc4be699&pi=16>
- Prothero, D.R. 2009. Evolutionary transitions in the terrestrial hoofed mammals. *Evolution: Education and Outreach 2* (online). <http://www.springerlink.com/content/k786p18g77j41370/?p=a1b42fc0265742c1b82200b22d9d73ff&pi=10>
- Prothero, D.R., E. Draus, and C. Burns. 2009. Magnetic stratigraphy and tectonic rotation of the Eocene-Oligocene Makah and Hoko River Formations, northwestern Washington, USA. *International Geophysical Journal* (online) <http://www.hindawi.com/journals/ijgp/2009/930612.html>
- Razowski, J. and J. W. Brown. 2008. A new genus for *Laspeyresia guttifera* Meyrick (Lepidoptera: Tortricidae), with notes on its host plant and geographic distribution. *Proceedings of the Entomological Society of Washington* 110: 635–642.
- Razowski, J. and J. W. Brown. 2008. New species, new combinations, and new synonymies in Neotropical *Episimus* Walsingham, 1892 (Lepidoptera: Tortricidae: Olethreutinae). *Acta Zoologica Cracoviensia* 51B (1-2): 83–144.
- Rea, A. M. 2008. Ethnobiology of desert springs. In: L. E. Stevens and V. J. Meretsky (eds.) *Aridland Springs in North America: Ecology and Conservation*. University of Arizona Press, Tucson, Pp. 268–278.
- Riojas-López, M.E., E. Mellink, and J. Bojórquez Martínez. 2008. Métodos básicos para el muestreo de vegetación y vertebrados terrestres, con énfasis en la región de Los Llanos de Ojuelos. *Universidad de Guadalajara*. Guadalajara, Jal.
- Rota, J. and J. W. Brown. 2008. The euonymus leaf-notcher, *Pryeria sinica* Moore (Lepidoptera: Zygaenidae)—alive and well in Fairfax County, Virginia. *News of the Lepidopterists' Society* 50:96–97, 100.
- Sammartino, F., Bisconti, M., Borzatti, de Loewenstern A., Carnieri, E. 2008. Ripple marks e tracce fossili nelle formazioni del Cretaceo superiore del Rio Ardenza, Livorno. In: Domenici V., Lenzi A., Montesarchio E. (eds.), *Codice Armonico 2008—Secondo congresso di scienze naturali Ambiente toscano*. Edizioni ETS, Pisa. Pp. 30–34.
- Thomas, S.M. and M. Hedin. 2008. Multigenic phylogeographic divergence in the paleoendemic southern Appalachian opilionid *Fumontana deprehendor* Shear (Opiliones, Laniatores, Triaenonychidae). *Molecular Phylogenetics & Evolution* 46:645–658.
- Unitt, P., M.A. Faulkner, and C. Swanson. 2009. First record of Newell's Shearwater from the mainland of North America. *Western Birds* 40:21–28.
- Velarde, E., B. Hollingsworth, and J. Rebmán. 2008. *Sauromalus hispidus*. *Herpetological Review* 39(3):368.
- Velarde, E. 2008. Book review: S.N.G. Howell and J. Dunn. 2007. *Gulls of the Americas*, Peterson Reference Guides. Houghton Mifflin Company, Boston and New York. *Western Birds* 39(1):47–50.
- Vetter, R.S., L.S. Vincent, J.E. Berrian, and J.K. Kempf. 2008. *Metaltella simoni* (Araneae: Amphinectidae): widespread in coastal southern California. *Pan-Pacific Entomologist* 84(2):146–149.
- Vieyra, L., E. Velarde, and E. Ezcurra. 2008. Effects of parental age and availability of small pelagic fish on the reproductive success of Heermann's Gulls in the Gulf of California. *Ecology* 90(4):1084–1094.
- Vincent, L.S., R.S. Vetter, W.J. Wrenn, J.K. Kempf, and J.E. Berrian. 2009. The brown widow spider *Latrodectus geometricus* C.L. Koch, 1841, in southern California. *Pan-Pacific Entomologist* 84(4):344–349.
- Vink, C., M. Hedin, M. Bodner, W. Maddison, C.Y. Hayashi, J. Garb. 2008. Actin 5C, a promising nuclear gene for spider phylogenetics. *Molecular Phylogenetics & Evolution* 48:377–382.
- Wilder, B.T., R.S. Felger, and H. Romero-Morales. 2008. Succulent plant diversity of the Sonoran Islands, Gulf of California, Mexico. *Haseltonia* 14:127–160.
- Wood, D.A., J.M. Meik, A.T. Holycross, R.N. Fisher, and A.G. Vandergast. 2008. Molecular and phenotypic diversity in *Chionactis occipitalis* (Western Shovel-nosed Snake), with emphasis on the status of *C. o. klauberi* (Tucson Shovel-nosed Snake). *Conservation Genetics* 9(6):1489–1507.
- Wood Jr., P.L., L.L. Grismer, N. Ahmad, and J. Senawi. 2008. Two new species of torrent-dwelling toads *Ansonia stoliczka*, 1870 (Anura: Bufonidae) from Peninsular Malaysia. *Herpetologica* 64(3):321–340.
- Zeder, M. and S. R. Arter. 2008. Meat consumption and bone use in a Mississippian village, In: *Case Studies in Environmental Archaeology*. Reitz, E. et al. Eds. Springer Science and Business Media, New York. Pp. 337–355.

**Bold** indicates staff members. Underline indicates research associates.

## BRC Associate List

Ms. Susan Arter	Birds and Mammals Research Associate
Dr. James E. Diffendorfer	Birds and Mammals Research Associate
Dr. Jeffrey L. Lincer	Birds and Mammals Research Associate
Dr. Eric Mellink	Birds and Mammals Research Associate
Dr. Michael A. Patten	Birds and Mammals Research Associate
Dr. Matt Rahn	Birds and Mammals Research Associate
Dr. Amadeo M. Rea	Birds and Mammals Research Associate
Dr. Wayne D. Spencer	Birds and Mammals Research Associate
Ms. Suzanne Bond	Birds and Mammals Departmental Associate
Dr. Reid Moran	Botany Curator Emeritus
Dr. José Delgadillo Rodriguez	Botany Research Associate
Dr. Anne Fege	Botany Research Associate
Dr. Richard S. Felger	Botany Research Associate
Dr. José Luis León de la Luz	Botany Research Associate
Dr. Michael S. Mayer	Botany Research Associate
Dr. Michael G. Simpson	Botany Research Associate
Mr. Jim Dice	Botany Departmental Associate
Mr. Roderick Dossey	Botany Departmental Associate
Ms. Annette Winner	Botany Departmental Associate
Mr. Larry Hendrickson	Botany Field Associate
Ms. Jerilyn Hirshberg	Botany Field Associate
Dr. Robert C. Vinton	Botany Field Associate
Dr. Paisley Cato	Collections Care Research Associate
Dr. John Brown	Entomology Research Associate
Dr. Robert C. Dagleish	Entomology Research Associate
Mr. David K. Faulkner	Entomology Research Associate
Dr. Marshal C. Hedin	Entomology Research Associate
Dr. Tomas M. Mustelin	Entomology Research Associate
Mr. James Berrian	Entomology Departmental Associate
Mr. Matthew Graham	Entomology Departmental Associate
Mr. Ron McPeak	Entomology Departmental Associate
Ms. Daniela E. Ramirez C.	Entomology Departmental Associate
Dr. Charles Crumly	Herpetology Research Associate
Dr. Lee Grismer	Herpetology Research Associate
Dr. William Presch	Herpetology Research Associate
Mr. Clark Mahrtdt	Herpetology Departmental Associate
Mr. Richard Schwenkmeyer	Herpetology Departmental Associate
Mr. Angelo Soto-Centeno	Herpetology Departmental Associate
Mr. Dustin Wood	Herpetology Departmental Associate
Ms. Carol Barsi	Librarian Emeritus
Dr. Reed Pierce	Library Departmental Associate
Dr. Joel Martin	Library Departmental Associate
Mrs. Carole M. Hertz	Marine Invertebrates Research Associate
Mr. Larry Lovell	Marine Invertebrates Departmental Associate
Mrs. Barbara W. Myers	Marine Invertebrates Departmental Associate
Dr. Michael J. Walawender	Marine Invertebrates Departmental Associate
Ms. Pamela Bruder	Mineralogy Research Associate
Dr. J. David Archibald	Mineralogy Departmental Associate
Dr. Annalisa Berta	Paleontology Research Associate
Dr. Michelangelo Bisconti	Paleontology Research Associate
Mr. Ian Browne	Paleontology Research Associate
Dr. Robert M. Chandler	Paleontology Research Associate
Dr. Paul C. Murphey	Paleontology Research Associate
Dr. Donald R. Prothero	Paleontology Research Associate
Dr. Hugh M. Wagner	Paleontology Research Associate
Ms. H. Patricia Don Vito	Paleontology Departmental Associate
Ms. Carol Stadum	Paleontology Departmental Associate

education



**BioBlitz, the Museum's annual rapid biodiversity assessment, held this year at Mission Trails Regional Park, enticed naturalists of all ages into the field.**



BioBlitz sponsored by Heller Foundation of San Diego, Union Bank of California, Beyster Family Foundation Fund 



Concerns about a growing disconnect between humans and our surrounding environment have proliferated across the country, spreading through books such as Richard Louv's *Last Child in the Woods* and articles in *The New York Times*. One such article suggests that we are so disconnected from the living world that we can live in the midst of a mass extinction and be entirely unaware that anything is happening.

San Diego Natural History Museum's Education Department addresses these concerns. With programs like BioBlitz, PROBEA, School in the Park, and the Sustainable Planet Lecture Series the Museum has canvassed the trails and backwoods, parks and beaches of San Diego County and Baja California to re-establish and strengthen the bond between nature and you.

The Education Department was also busy connecting people with nature inside its walls. The Nature to You Loan Program loaned out 2,096 specimens and reached 92,275 teachers, students and social club

members. Over 62,000 students participated in onsite and offsite programs. Nearly 9,000 people participated in lectures, classes and Museum trips.

The Sustainable Planet Lecture Series hosted four sold-out lectures addressing issues like *The Coming Fight for Water* and *Thinking Like a Watershed*, which complemented the two water exhibitions the Museum hosted.

Disconnect from the natural world may be a growing epidemic as time and technology progress, but the Museum's Education Department provides a remedy when you feel your eyes beginning to hurt from staring at your computer screen and your spine beginning to form to that office chair. San Diego is one of the best classrooms nature offers, and the Museum's programs provide ample ways to learn within and throughout it.

Volunteer Canyoneers led over 150 elementary school groups on Friday-morning hikes through local natural areas such as the Torrey Pines State Reserve.

School in the Park students scoured Balboa Park for rocks and minerals, surveying the landscape around the Museum to identify local landforms, and measuring weather conditions at different park locations.

PROBEA cultivated a native plant nursery in La Gloria, Mexico, with more than 20 different native species available for Baja California teachers and schools to check out and study.

BioBlitz, the Museum's annual rapid biodiversity assessment, held this year at Mission Trails Regional Park, enticed naturalists of all ages into the field. Amateur botanists uncovered two species of lichen new to the region, budding bird lovers spotted a new species of bird not seen in the area before, and families spent hours examining beetles, bats, and butterflies alongside Museum scientists.



exhibits

More than 424,000 people enjoyed the Museum's exhibitions, including 44,475 students (11,000 of whom used our Museum Access Fund for free admission), and 49,000 San Diegans who visited on Resident's Free Tuesdays during the first week of each month.

Science writer Loren Eisely once said, “If there is magic on this earth, it is contained in water.” Unfortunately that magic threatens to fizzle in the wake of a warming climate and ever-increasing human impacts. Its beauty and power, influence and inspiration hang perilously in the balance in an era when our water usage may well reshape and restructure ecological communities as we have known them.

The San Diego Natural History Museum hosted two exhibitions about water this year, *Water: H<sub>2</sub>O=Life* and *Water: A California Story*, to address the importance of sustainable water usage, and to inspire within visitors a respect for the environment in which they live.

*Water: H<sub>2</sub>O=Life* surveyed water on a global level, exploring its physical nature, its ubiquitous yet ultimately finite and unevenly distributed existence, and the responsibility we have to share the existing fraction of usable water.

*Water: A California Story*, the Museum’s own regional water exhibition, narrates the story of local water supply and demand. By setting the scene within southern California’s environmental conditions and introducing the conflict between local water supply and its

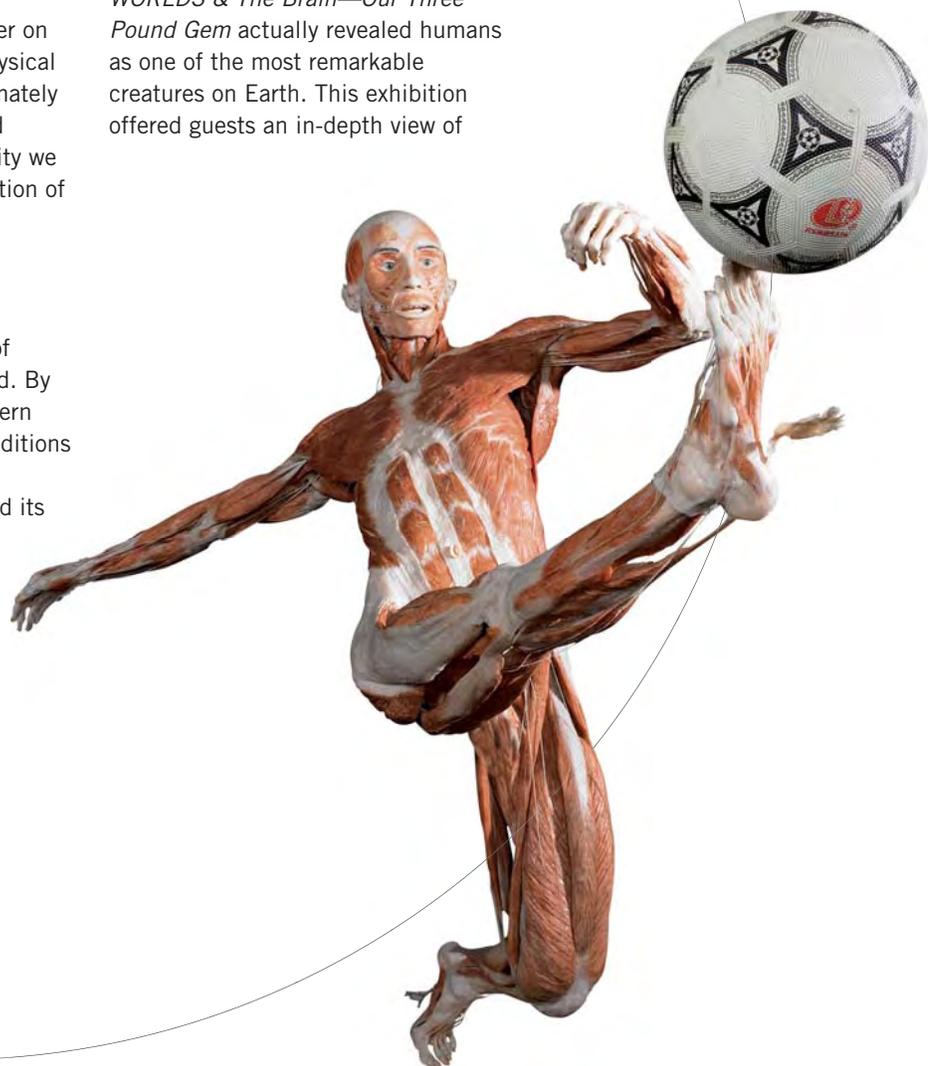
demanding antagonists—human over-consumption and climatic warming—the exhibition warns of the imbalance between water availability and consumption and demonstrates that we have demanded much without considering the limit of our supply.

Both exhibitions concluded with a message of hope and empowerment: as part of a local and global ecosystem dependent on water, we can begin building a balanced and sustainable water “economy” and leave a viable water legacy for future generations.

An exhibition of real human bodies may seem outside the scope of a natural history museum, but *BODY WORLDS & The Brain—Our Three Pound Gem* actually revealed humans as one of the most remarkable creatures on Earth. This exhibition offered guests an in-depth view of

the human brain, the anatomical key to our species’ development and the primary distinction between us and our fellow creatures.

Over 20 full-body specimens, numerous case displays, and several public programs explored the complex make-up of the human body, from birth to death, through developing adolescent years and into various states of aging. Visitors came face-to-face with ailments including cancer, addiction, obesity, and brain damage, and learned how our complex system of bones, muscles, and organs work together to accomplish the extraordinary endeavors unique to the human race.



## development

**Philanthropy:** Voluntary giving of time, assistance, or money for the public good. The term is from the Latin, *philanthropia*, which means “love of man.”

1. desire to benefit humanity. A desire to improve the material, social, and spiritual welfare of humanity, especially through charitable activities

—*Encarta Dictionary*

The most common reaction people have to those of us who choose a profession in fundraising is, “I could never do that—ask people for money!” My response is that it is a privilege and an honor to assist people who give of their time, their talent and their treasure in support of something that they believe in...and that’s what philanthropy is about.

Here in the United States we set the standard worldwide for philanthropy. Our tradition of coming together to meet critical unmet societal needs, first as volunteers in grass-roots organizations, then as board members and donors, is unique and a model and inspiration for the rest of the world.

Here at the San Diego Natural History Museum the development staff has the privilege of working with each of you and helping direct your support to the research and programs that you are passionate about. You provide guidance on the board; you devote countless hours as volunteers in our research division; you help us educate children about the natural world—in short, the Museum couldn’t do its job without you. And when people are passionate about natural history, and recognize that the Museum’s mission is a match with their passions, it’s not about asking for money. We simply ask how we can help you in realizing that mission, whether it’s through a research expedition, a new permanent exhibition, providing access for school children, or the countless other ways your generosity has a profound effect.

We are only successful at fundraising when we reflect the values of the organization we work for and are as passionate about its mission as each of you. Every one of us in the Institutional Advancement Division is dedicated to the Museum, its mission and its vision. Being able to work with each of you, every day, and see the vision realized is more rewarding than you can ever imagine. Thank you for allowing us the privilege of working at the heart of philanthropy. We appreciate your generosity each and every year, and your friendship. We look forward to serving you in the years to come.



*Ann Laddon*  
Vice President of  
Institutional Advancement



## Boards & Committees

### Board of Directors

#### Officers

Eleanor Navarra, *Chair*  
Community Volunteer

Iris Engstrand, Ph.D., *Vice Chair*  
Professor of History, University of San Diego

Jon Schmid, *Secretary*  
Partner, Cook and Schmid Public Relations

Frank Smith, *Treasurer (July–Dec. 2008)*  
President and CEO, Foresters Equity Services, Inc.

#### Directors at Large

Robert W. Armstrong  
CEO, San Diego Private Bank

Larry Banegas  
Director of Social Services, Kumeyaay

Jeff Block  
General Manager, KGTV Channel 10

Ben Clay  
President, Carpi and Clay

Stephen Cohen  
President, Private Asset Management

Darlene Davies  
Professor Emerita, San Diego State University

John Downing  
Downing Family Vineyards

Enrique R. Hambleton  
Chairman, Pronatura Noroeste

Matt Hom, M.D.  
Founder and Medical Director, Rejuve Medspa and Wellness

Allen M. Jones  
Vice President, Planning and Land Use, HG Fenton Company

Steve A. Kay, Ph.D.  
Dean and Richard C. Atkinson Chair, Division of Biological Sciences, UCSD

Peter Kovacs  
Kovacs Advisory Group

Steven McDonald  
Attorney and Counselor at Law

Robert Proulx  
Vice President, Marketing, Nanogen, Inc.

Mark H. Thiemens, Ph.D.  
Dean and Professor, Division of Physical Science, UCSD

Yolanda Walther-Meade  
Advisor of the Center for U.S./ Mexican Studies at UCSD

Carol Wilson  
Community Volunteer; Schoolteacher (Retired)

Jeff Witt  
Director of Research, Private Asset Management

#### Directors Emeritus

Pamela M. Bruder  
Mary H. Clark  
James Clements\*  
Norman C. Roberts, DVM\*  
Thomas W. Sefton\*

#### Honorary Directors

Charmaine Kaplan\*  
Maurice Kaplan\*  
Philip M. Klauber  
Donna K. Sefton

\*deceased

#### Binational Advisory Board

Susan Anderson, Ph.D.  
Northwest Mexico Program Director, The Nature Conservancy

Richard Cudney  
Conservation and Science Associate Program Officer, Packard Foundation

Carolina Shepard Espinosa  
Founder and Director, Bahia De Los Angeles Museum

Exequiel Ezcurra, Ph.D.  
Director of UCMEXUS; Professor, Botany and Plant Sciences, UC Riverside

Martin Goebel  
Executive Director, Sustainable Northwest

Enrique Hambleton  
Chairman, Pronatura Noroeste

Richard Kiy  
President & CEO, International Community Foundation

Sergio Knaebel  
Grant Director, Sandler Family Supporting Foundation

Gaston Luken  
President, Noroeste Sustentable

Steven McDonald  
Attorney and Counselor at Law

Tim Means  
Owner and Founder, Baja Expeditions

Rodolfo Ogarrio  
Executive President, FUNDEA (Fundacion Mexicana para la Educacion Ambiental AC)

Rudy Rehm  
Finance Partner, DCM-DOLL Capital Management

Alejandro Robles  
Executive Director, Noroeste Sustentable

Roberto Valdes  
Land and Planning Development Edificio Valcas

Christy Walton  
Walton Family Foundation

Jim Waring  
Chairman, CleanTECH San Diego

#### Volunteer Officers

**Covey**  
Co-Presidents, Ellen Smothers and Betsy Olsen

**Docents**  
President, Georganne Hocht  
Co-Vice Presidents, Betty Ball and Elizabeth Smith

**Canyoneers**  
President, Ellen Taylor  
Vice President, Garry Posey

**Whalers**  
Co-Presidents, Judy Lawrence and Diane Cullins

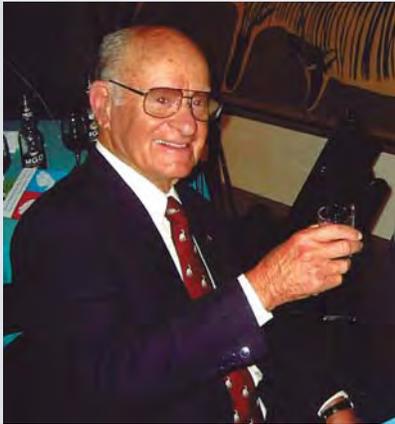
## Memorials

We are deeply grateful to the many friends who help the Museum with their time, talent and treasure. The following list of individuals represents members, donors and volunteers who passed away this fiscal year. We are thankful for their commitment to the Museum and wish to honor their memories.

Mrs. Mildred G. Abbott  
Mr. C. Hayden Atchison  
Mrs. Donna Bailey  
Mrs. Carol Banegas  
Mrs. Helen W. Boucher  
Mr. George P. Chandler, Jr.  
Mr. Sidney M. Chemnick  
Mr. Sid Craig  
Mr. Edward T. Cramer  
Mr. Jeffrey Cushing

Mr. Stephen Drogin  
Mr. Jose Fimbres  
Mr. Frank Gladden  
Mr. John Hanna  
Mr. Arthur W. Hester  
Mrs. MarBon Hubbard  
Mrs. Sally R. Kroll  
Mrs. Linda La Grange  
Mr. Edwin A. Lucado, Jr.  
Mrs. Sharon McColl

Mrs. Ellen C. Revelle  
Mr. Raymond C. Richardson  
Dr. Norman C. Roberts  
Mrs. Elsie Rossman  
Mr. John S. Shelton  
Mr. Wallace Springstead  
Mr. T. Jefferson Straub  
Mr. Paul Syverson  
Mr. Douglas E. Tanges  
Ms. Rosemary Troian

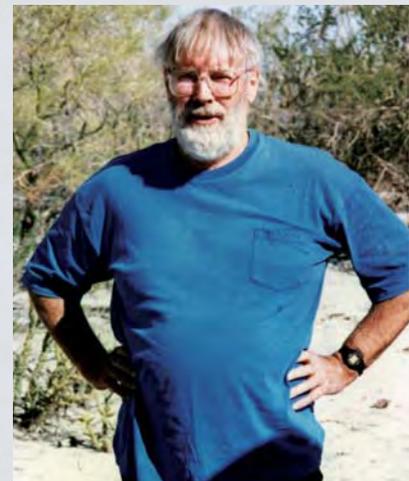


### **Dr. Norman Roberts**

Dr. Norman Roberts represented the highest standard of a citizen scientist. He was one of the earliest to explore the back roads of the rugged Baja California peninsula and awareness of his knowledge and expertise was so widespread that he was asked by editors of *National Geographic* magazine to guide them on their trips to Baja California. A crowning achievement of his love affair with Baja California was the writing and publishing of his book, the *Baja California Plant Field Guide*, which has been continually reprinted because of its popularity. Norman's field guide can be found in the glove compartment of every serious Baja California enthusiast.

### **Arthur Hester**

Art Hester was a beloved member of the Museum family. As an active member of the Covey, he helped with projects ranging from education classes to exhibition openings. Art was a passionate birder, and was deeply involved with the *San Diego County Bird Atlas* project. Art and his wife of 33 years, Dorothy, were active members of the Leadership Circle and participated in many Museum trips.



**THE SAN DIEGO SOCIETY OF NATURAL HISTORY**  
**STATEMENT OF ACTIVITIES**  
**Year Ended June 30, 2009**  
**(With Summarized Financial Information for the Year Ended June 30, 2008)**

	2009			2008	
	Unrestricted	Temporarily Restricted	Permanently Restricted	Total	Total
<b>SUPPORT AND REVENUE</b>					
Admissions and exhibit ticket sales	4,655,767	\$ -	\$ -	4,655,767	12,010,615
Contributions	2,099,300	1,969,440	5,449	4,074,189	5,923,920
Government appropriations	452,733	72,898	-	525,631	548,535
Grants and contracts	1,672,390	23,000	-	1,695,390	1,587,464
Store	713,045	-	-	713,045	2,765,592
Education	359,685	-	-	359,685	696,998
Memberships	329,787	-	-	329,787	548,415
Other	375,290	-	-	375,290	335,921
Net assets released from restrictions:					
Satisfaction of program restrictions	1,905,394	(1,905,394)	-	-	-
Total support and revenue	<u>12,563,391</u>	<u>159,944</u>	<u>5,449</u>	<u>12,728,784</u>	<u>24,417,460</u>
<b>EXPENSES</b>					
Program expenses					
Exhibits	5,437,513	-	-	5,437,513	9,533,028
Science and research	4,067,990	-	-	4,067,990	3,583,657
Education/public programs	1,948,109	-	-	1,948,109	2,346,758
Store cost of goods sold and operating expenses	787,406	-	-	787,406	1,924,498
Membership	308,958	-	-	308,958	260,834
Total program expenses	<u>12,549,976</u>	<u>-</u>	<u>-</u>	<u>12,549,976</u>	<u>17,648,775</u>
Supporting services					
Management and general	1,184,551	-	-	1,184,551	1,250,562
Fundraising	1,195,658	-	-	1,195,658	1,331,171
Marketing	1,023,367	-	-	1,023,367	964,094
Total supporting services	<u>3,403,576</u>	<u>-</u>	<u>-</u>	<u>3,403,576</u>	<u>3,545,827</u>
Total expenses	<u>15,953,552</u>	<u>-</u>	<u>-</u>	<u>15,953,552</u>	<u>21,194,602</u>
Revenue and other support in excess of expenses	<u>(3,390,161)</u>	<u>159,944</u>	<u>5,449</u>	<u>(3,224,768)</u>	<u>3,222,858</u>
<b>INVESTMENT LOSSES</b>					
Investment income	108,295	-	-	108,295	74,560
Net unrealized (loss)	(1,554,472)	-	(496,261)	(2,050,733)	(650,088)
Total investment losses	<u>(1,446,177)</u>	<u>-</u>	<u>(496,261)</u>	<u>(1,942,438)</u>	<u>(575,528)</u>
<b>TOTAL CHANGE IN NET ASSETS</b>	<u>(4,836,338)</u>	<u>159,944</u>	<u>(490,812)</u>	<u>(5,167,206)</u>	<u>2,647,330</u>
<b>NET ASSETS AT BEGINNING OF YEAR</b>	<u>16,762,258</u>	<u>1,658,201</u>	<u>10,459,123</u>	<u>28,879,582</u>	<u>26,232,252</u>
<b>NET ASSETS AT END OF YEAR</b>	<u>\$11,925,920</u>	<u>\$ 1,818,145</u>	<u>\$ 9,968,311</u>	<u>\$23,712,376</u>	<u>\$28,879,582</u>

**Notes to Audited Financial Statements**  
**Understanding Our GAAP Results**

1. The above audited financial statements are prepared in accordance with Generally Accepted Accounting Principals (GAAP) for the years ended June 30, 2009 and 2008. GAAP sets a standard of reporting which we must follow; however, GAAP reporting may not always be the best way to understand our results because it is detached from the multi-year nature of our significant projects. Thus, we experience financially "lean" years like 2009 and wonderful years like 2008.

2. Included in the results for 2009 and 2008 is \$1.6 million and \$1.5 million respectively of "depreciation expense." Depreciation is a non-cash expense that primarily amortizes the cost of the building addition. We do not write out a check for this amount, yet it is reflected as an annual expense in our audited results. Also included in the above results are losses due to the decline in the market value of the investments in our endowment. Like depreciation expense, these losses are non-cash and do not impact our daily operations. These unrealized losses were \$2.1 million in 2009 and \$.07 million in 2008.

Excluding the non-cash items above, the Museum incurred a deficit of \$1,549,587 and a surplus of \$4,807,261 in 2009 and 2008 respectively. The results in 2008 reflect the great success of the Museum's *Dead Sea Scrolls* exhibition.

3. In 2009 and 2008, our program expenditures constituted 79% and 83% respectively of all our spending. Generally, any ratio 75% or above is considered to be excellent in judging the efficiency of delivery of our programs. Our ratios are truly outstanding.

## Donors

### \$5000 and above

Thomas C. Ackerman Foundation  
Anonymous (2)  
Estate of Mrs. Mildred G. Abbott  
J.F. Beyster Fund of the San Diego Foundation  
M.A. Beyster Fund of the San Diego Foundation  
Beyster Family Foundation Fund  
Stephen and Mary Birch Foundation  
Border Environment Cooperation Community  
The California Endowment  
Margaret A. Cargill Foundation  
City of San Diego  
City of San Diego Commission for Arts and Culture  
Ms. Dale Hollis Clark  
Mary H. Clark  
Nicole and Benjamin Clay  
CONABIO  
County of San Diego Board of Supervisors, Community Enhancement Funds  
County of San Diego Supervisor Pam Slater-Price, Community Projects Fund  
County of San Diego Supervisor Ron Roberts, Community Projects Fund  
County of San Diego Supervisor Gregory Cox, Community Projects Fund  
Diversified Lending  
Mr. and Mrs. James M. Dort  
Downing Family Foundation  
Mr. and Mrs. John Downing  
Glenn and Jeanne Dunham  
Bernard J. Eggertsen and Florence Nemkov  
Fondo Mexicano para la Conservación de la Naturaleza, A.C.  
Friedman Charitable Foundation  
Enid and Martin Gleich  
Heller Foundation of San Diego  
Helm Fund of the San Diego Foundation  
Hervey Family Fund at the San Diego Foundation  
International Community Foundation  
The Joan and Irwin Jacobs Fund of the Jewish Community Foundation  
Estate of Charmaine and Maurice Kaplan  
Mandell Weiss Charitable Trust  
Mr. and Mrs. James D. Meyer  
Kenneth and Harle Montgomery Foundation  
Mrs. Harle G. Montgomery  
Mr. Marcelo Muzquiz  
National Geographic Society  
National Science Foundation  
The Nature Conservancy

Eleanor and Jerry Navarra and Family  
The Kenneth T. and Eileen L. Norris Foundation  
The David and Lucile Packard Foundation  
Walter and Anne Pagels  
Price Family Charitable Fund  
Mr. and Mrs. Robert E. Price  
Mrs. Valerie Quate  
Susan and Bryce Rhodes Family  
The Rice Family Foundation  
Dr. Norman C. Roberts\*  
San Diego River Conservancy  
Ellen Browning Scripps Foundation  
J.W. Sefton Foundation  
Sefton Family  
The Thursday Club Foundation  
Francis P. Torino Foundation  
U.S. Fish and Wildlife Service  
Bob and Ginger Wallace  
Estate of Stephen L. Walsh  
The Walton Family Foundation  
Weingart Price Fund at the San Diego Foundation  
WWW Foundation

### \$1000-4999

Anonymous (5)  
Walter and Jody Andersen  
Mr. Robert W. Armstrong, III  
Harry G. and Pauline M. Austin Foundation  
Mr. William Barbour  
Baumgartel DeBeer Family Fund of the Fidelity Charitable Gift Fund  
Dr. and Mrs. Wolfgang Berger  
Mr. and Mrs. Thomas A. Blackman  
Mr. and Ms. Bill Blatchley  
Mrs. Suzanne I. Bond  
Barbara A. Booth  
George and Mary Ann Brooks-Gonyer  
Esther J. Burnham  
California Native Plant Society-San Diego Chapter  
Dr. Margaret E. Carl  
Hugh and Pat Carter  
Charlotte and Jeff Chandler  
Stephen J. Cohen and Adele S. Rabin, Ph.D.  
Colwell Family Distributable Fund of the San Diego Foundation  
Mr. and Mrs. Christopher Conlan  
Virginia and Doug Crockett  
Ms. Darlene G. Davies, Ed.S.  
Vice Admiral and Mrs. Walter J. Davis, Jr.  
Bill Disher  
The Avis T. Dunahoo Family Fund #1  
Ms. Marion Eggertsen  
Dr. Iris Engstrand and Mr. Paul D. Engstrand  
Edward and Ruth Evans Family Foundation  
Drs. Edward and Ruth Evans  
Val and DeeGee Farrell

Dr. Anne S. Fege and Mr. Dave C. Fege Sr. and Sra. José Galicot  
Mr. Enrique Gamboa  
Sally Gault-Miller  
Audrey S. Geisel  
Gray Charitable Trust  
Barbara and David Groce Fund at the San Diego Foundation  
John and Terri Groth  
Denise and Michael Hager  
Robin Halford  
Mr. and Mrs. Enrique Hambleton  
Ms. Carol Baird and Mr. Alan Harper  
Kathryn Crippen Hattox Fund at the San Diego Foundation  
Ms. Allison Henderson  
Dorothy and Art\* Hester  
Joel and Rosanne Holliday  
Mrs. Jackie Hollywood  
Dr. and Mrs. Matt Hom  
Dr. Aline G. Hornaday  
Ambassador and Mrs. Charles Hostler  
Ji Ji Foundation  
Ms. Alice M. Johnson  
Dr. Donna Perdue and Dr. Calvin Johnson  
Ms. Rebecca Michael and Mr. Allen Jones  
Ms. Jeanne Jones and Mr. Donald Breitenberg  
Dr. and Mrs. Richard L. Kahler  
Martin Kantor  
Mr. and Mrs. Jeffrey Kent  
Advised Fund of Philip M. Klauber at the San Diego Foundation  
Peter and Marilee Kovacs  
Mr. H. William Kuni at the San Diego Foundation  
Ann Laddon and Adrian Jaffer  
Dede and Peter LaDow  
Dr. and Mrs. James U. Lemke  
Ms. Amina E. Lennon  
Judie and Jeff Lincer  
Jeffrey and Sheila Lipinsky Family Foundation  
Mr. and Mrs. William R. MacKenzie  
Mrs. Lucile Madruga  
Mr. Michael G. Mathos  
Mr. and Mrs. Donald L. Maxted  
Drs. Anne and Andy McCammon  
Ms. Courtney Coyle and Mr. Steven McDonald  
Bert McIntosh  
Mrs. Elizabeth B. Meyer  
Mrs. Richard C. Mitchell and Family  
Mr. and Mrs. Terry D. Moore  
Mr. Paul Mosher  
Dr. and Mrs. James W. Neel  
Dr. and Mrs. Rodney D. Orth  
Mrs. James B. Orwig  
Mrs. Joseph R. Parker  
The Pratt Memorial Fund at Union Bank of California  
Mr. and Mrs. Robert Proulx

Proyecto Fronterizo de Educacion  
Ambiental A C  
Mr. and Mrs. Thomas M. Richardson  
Rudolph and Carla Rehm  
Jim and Sharon Richardson  
Nancy Robertson and Mark Cookingham  
The SahanDaywi Foundation  
Dr. Rebecca Papendick and  
Dr. Jay Savage  
Libby and Tom Schiff  
Mr. and Mrs. Jon Schmid  
Warren and Anna Gale Schmidtman  
Richard C. Schwenkmeyer  
Mr. and Mrs. Charles Scott  
Dr. Seuss Foundation  
Mr. Harvey Shonts  
James H. and Beatrice\* Smith  
Mr. and Mrs. Richard Spehn  
Mrs. Susan Springstead  
Dr. and Mrs. John R. Stevenson  
Gwen Stoughton  
Strauss Family Foundation  
Dr. and Mrs. Paul Strauss  
Ms. Marilyn Fogel and  
Mr. Christopher Swarth  
Deborah and Sarah Livia Szekely  
Sarah Livia Brightwood  
and the Szekely Family Foundation  
Takahashi Family Fund at the  
San Diego Foundation  
The John M. Thornton and Sally B.  
Thornton Foundation  
Mr. and Mrs. Kenneth A. Tipton  
Mr. Scott Tremor  
Dr. Robert C. Vinton  
Nita and Henk van der Werff  
Mr. Edward P. Wallace, Jr.  
Kathy and Jim Waring  
Dr. and Mrs. Stephen L. Wheeler  
Harold and Betty Jo Williams  
Dennis and Carol Wilson  
Mr. and Mrs. Alvin Wood

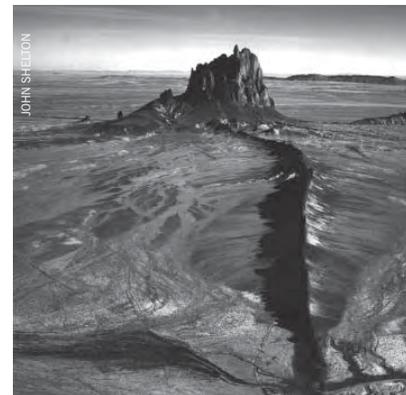
**\$500-999**

Dr. Janet A. Anderson and  
Mr. John Glascock  
Mr. Kurt Aschermann  
Mr. and Mrs. Thomas Barckley  
Mr. and Mrs. John Bellanich  
Mr. Randy Bixler  
Miles and Patricia Bowler  
Mr. and Mrs. Richard L. Breisch  
Dr. J. David Bukry  
Ms. Mollie Carter  
Mr. and Mrs. Robert Clelland  
Adriane and Ken Coveney  
Cross Border Law Group, P.C.  
Mr. and Mrs. James Dawe  
Carolyn and Bill Doherty  
Richard G. Dooley  
Meryl A. Faulkner  
Fundacion Mexicana Para La  
Educacion Ambiental A.C.  
General Electric Foundation  
Mr. and Mrs. Jeff Graham

Ms. Ingegerd E. Hansen  
Mr. and Mrs. Rudy Hasl  
Mr. and Mrs. Gary C. Jacobson  
Mr. and Mrs. Richard Kiy  
Harry and Shirley Koons  
Mr. and Mrs. F. Dale Marriott  
Mr. and Mrs. Bart McKay  
Christa McReynolds Fund  
at the San Diego Foundation  
Joanne Moore  
Judith and Neil Morgan  
Gary and Carol Neely  
Jean and Bill O'Daniel  
James and Louise O'Neill  
Jim and Claudia Prescott  
Community Needs Initiative Fund at  
the Rancho Santa Fe Foundation  
Scott & Susan Robinson  
Advised Fund at the  
Rancho Santa Fe Foundation  
Ms. Jan Rusnell  
San Diego Association of Geologists  
Mr. John F. Sanborn  
Robin Stark Family Foundation  
at the San Diego Foundation  
Mr. and Mrs. Gaylord Stickney  
Mr. and Mrs. Phil Tauber  
Dr. Mary Walshok  
Lisa Croner and Ira Warrenfelt  
Mrs. Carol Winter  
Mr. Juan Zuniga

**\$100-499**

Anonymous (13)  
Anstes V. Agnew  
Dr. Judith Bardwick  
Mr. and Mrs. Ken Barratt  
Eowyn Bates and Christopher Croom  
Bruce and Patricia Becker  
Mr. and Mrs. Paul Beiley  
Arthur R. Bell Trust  
Ms. Cynthia Bell Niermann and  
Ms. Grace Bell Parsons  
Carl Bell  
Dr. and Mrs. Kurt Benirschke  
Lauralee and Wayne Bennett  
Sylvia Brandais  
Mr. and Mrs. Donald W. Bush  
Ms. Norma Bustamante  
Cary Canning  
The Castillo Family  
Mr. George P. Chandler, Jr.\*  
Charlene Chatham Price and  
William Price  
Laurence Chiu  
Mr. and Mrs. Garet Clark  
Kevin Clark and Family  
Mr. John R. Cleator  
Karen and Jamie Cleland  
Rosellen and Richard Cline  
Mr. and Mrs. Dallas Clites  
Mr. Thomas Clotfelter  
Dr. and Mrs. Boyd D. Collier  
Mr. and Mrs. Tim Considine  
Ms. Ramona D. Court



**Giant Photo Service**

If you have visited the Museum recently, you most likely strolled through the Level Three Oexhibition, *Aerial Portraits of the American West: Photographs by John Shelton*. These stunning aerial photographs artistically illustrate North America's most fascinating geologic features. Visit [www.sdnhm.org/exhibits/shelton/index](http://www.sdnhm.org/exhibits/shelton/index) to see some of these incredible images and read the story of the late John Shelton.

This exhibition would not have been possible without the partnership of **Giant Photo Service**, a Natural Partner of the Museum. With over 50 years of experience, Giant Photo Service is a custom, digital imaging lab, specializing in high-quality digital enlargements. Giant Photo Service made high-resolution scans of Shelton's original negatives from the 1950s and 60s and then printed, mounted, and laminated the large pigment-based black and white prints.

Giant Photo Service is a Natural Partner because owners Alfred Pagano and Sue Tyler have committed to giving the Museum a 10% discount on all orders. This means thousands of dollars in savings for the Museum. So the next time you admire the Museum's large exhibition panels, thank San Diego's oldest photo lab: Giant Photo Services at [giantphoto.com](http://giantphoto.com).

\*deceased If we have omitted your name or made an error, please accept our apologies and help us correct our records by calling the Development Office at 619.255.0172.

Richard and Stephanie Coutts  
Edward Bert Cramer Memorial Fund  
of the Jewish Community Foundation  
Mrs. Julia Croom  
Dr. and Mrs. Michael Dainer  
Dave and Norma Dalton  
Mrs. Marie Daniels  
Lucile E. Davis  
Jose de la Torre Bueno  
Ms. Doris Dickinson  
Mrs. Philip H. Dickinson  
Mr. and Mrs. Scott Donaldson  
Dr. and Mrs. William D. Drake  
Ms. Zoe Droske  
Ms. Connie Thompson and  
Mr. Charles Easley  
Isabella Fund at the  
San Diego Foundation  
Mr. and Mrs. Richard Fassett  
Mr. and Mrs. Charles Feurzeig  
The Field Family  
Ms. Carol Ann Flanagan and  
Mr. Larry D. Rhodes  
Mr. Gordon T. Frost, Jr.  
Ms. Joanne Furer  
Robert J. and Judith A. Gennette  
Ms. Shirley Gibson  
Mr. and Mrs. John W. Giebink  
Alison and George Gildred  
Yvonne and Mark Green  
Mr. Richard Hannum  
Judge and Mrs. Richard J. Hanscom  
Mr. and Mrs. Frederick Harris  
Mr. and Mrs. Ed J. Hieshetter, Sr.  
Barbara and Edvard Hemmingsen  
Larry Hendrickson  
Mr. Alexander Henein  
Mr. and Mrs. Jules Hertz  
Mr. and Mrs. Lawrence Hess  
Maggie Reinbold and  
Bradford Hollingsworth  
Patricia Hoover  
Mr. and Mrs. Arne Hovdesven  
Ms. Kathleen A. Howell  
Mr. and Mrs. Irwin L. Hurn  
Ms. Viviana Ibanez  
Ms. Jean Immenschuh  
Ms. Evelyn Jackson  
William and Janet Johnston  
Gillian and Neil Joshi  
Mr. and Mrs. Frederick Judd  
Katy Justice  
Emanuel Kauder, M.D.  
Mr. and Mrs. Julian Kaufman  
Jessica and Mark Kearney  
Charles Kennel and Ellen Lehman  
Robert Kilian and Kathleen Slayton  
Mr. and Mrs. Alan King  
Mr. and Mrs. Kevin J. Kinsella  
Mr. and Mrs. Robert E. Klees  
Mr. and Mrs. Jon Kostyzak  
Mrs. Sally R. Kroll\*  
Ms. Paula Landale  
Dr. Frank Landis

William and Suzann Leininger  
Ms. Susan Leone and  
Ms. Amy L. Rogers  
Karen Levy-Szpiro  
Mr. and Ms. Lowell Lindsay  
Laurie Lippitt  
Mr. and Mrs. Jim Loomis  
Mr. and Mrs. Murry Luftig  
Mr. and Mrs. James Madden  
Ruth Malin  
Vincent Marin, M.D.  
Virginia W. Martin  
Mr. and Mrs. Christian Mayer  
Mr. and Mrs. Keith Mayers  
Mr. Allan McAllister  
Alice B. McCauley Schwab  
Charitable Fund  
Ms. Ann Bradley and  
Mr. Doug McCorquodale  
Mr. and Mrs. Brian McDonald  
Mr. and Mrs. A. T. McGuffey  
Dr. Suzanne Cahill and  
Mr. John McNeece  
Winona McNitt Family  
Mr. and Mrs. Dan McPherson  
Mr. James L. Melli  
Jane Minshall  
Tim and Ollie Murray  
Ms. Nancy Nenow and  
Mr. Lawrence Glacy  
Charlotte W. Nielsen  
Janie Noon and Michael Noon, M.D.  
Alfred E. and Laurie M. O'Brien  
Family Trust of the Fidelity  
Charitable Gift Fund  
Dr. Andrew C. Olson, Jr.  
Dr. and Mrs. Fred Orton  
Dr. Joanne Overleese and  
Ms. Victoria Melosi  
Mr. Atul C. Patel  
Dr. Bertha Pendleton and  
Mr. Oscar Pendleton  
Mr. and Mrs. David J. Pettitt  
Mr. and Mrs. B. J. Polak  
Jon Rebman, Ph.D.  
Mr. and Mrs. G.W. Reynolds  
Susan Rick  
Mr. Fred Roberts  
Ms. Jeanne Rosenberg  
Mr. James W. Royle, Jr.  
Ms. Mary Ann Percy and  
Dr. Oliver Ryder  
Mr. and Mrs. Edd Sandusky  
Mr. and Mrs. Martin Schroeder  
Mr. and Mrs. David Shelton  
Mr. and Mrs. Ronald Shinkle  
Mr. and Mrs. David Sigal  
Dr. David D. Smith  
Dr. Meg Sutherland-Smith and  
Mr. Harry Smith  
Mary Secan Smith  
Dr. and Mrs. Irving Alan Sparks  
Mrs. Teresa Steele  
Mr. James Stone  
Mr. and Mrs. Thomas Swanson

Melvin and Ellen Sweet  
Mr. and Mrs. Charles H. Swisher, Jr.  
Phyllis and Frank Tabor  
Susan E. Tanges  
Mr. and Mrs. Maurice J. Tauber  
The Covey  
William H. Thomas  
Mr. and Mrs. Miles Todd  
Mrs. J. Marie Tuthill  
Nancy L. Vaughan  
Mr. and Mrs. W. M. Wadlington  
Ms. Allison Teem and Dr. Michael Wall  
Jim and Penny Ward  
Marian Warwick  
Sharon Weremiuk and Jerry Doppelt  
Mr. and Mrs. James H. West  
Rhoda and Jack White  
Mr. Frank Williamson and  
Ms. Patricia Powers Williamson  
Ms. Fern L. Wilson  
Annette L. and Wade W. Winner, Jr.  
Charles Wolfinger  
Ms. Emily Wong  
Sandy Woodhouse  
Ms. Wendy L. Youngren  
Mr. and Mrs. Edward Zell

#### **Less than \$100**

Anonymous (13)  
Dr. and Mrs. Roberto Abdelnur  
Ms. Elaine Adams  
Ms. Rebecca Aguilar  
Mr. and Mrs. Kalle Ahmavaara  
Mr. Brian Aiken  
Mary W. Alexander  
Ms. Miranda Alexander and  
Mr. Michael Pollard  
Mr. Anthony Allred  
Dr. and Mrs. Louis Alpinieri  
Ms. Kambria Alston  
Ms. Denisse Amaro  
Mr. Bruce Anderson  
Mr. Eric Anderson  
Mr. and Mrs. Gary Anderson  
Mr. Melvonti Anderson  
Mr. Ray Anderson  
Mr. and Mrs. M. A. Arbib  
Mr. and Mrs. Alvaro D. J. Armendariz  
Mr. Val Asuncion  
Mr. and Mrs. Roswell Austin  
Mrs. Gloria Aviles  
Ellen and Bill Bach  
Ms. Verna G. Bain  
Josie and Frank Ball  
Mr. Kaijia Bao  
Mr. Dale Barham  
Mr. Gregory Barnhart  
Mr. and Mrs. Walter Barrett  
Mr. and Mrs. Vincent Bartsch  
Dr. Roland Becht  
Tony Bedford  
Mrs. Susan Beebe  
Ms. Ana Belland  
Mrs. Janelle Benuska  
Mr. William A. Bermudez

Mrs. Rebecca Berry  
 Ms. Lois Berson  
 Mr. William Betzer, Jr.  
 Capt. and Mrs. William E. Betzer  
 Ellen Bevier  
 Mrs. Paulette Biggs  
 Ms. Darla Birce  
 Dr. and Mrs. John A. Bishop  
 In memory of Adeline Black  
 Ms. Bianca Blake  
 Ms. Rianna Blake  
 Mr. Preston Blevins  
 Ms. Natalie Bojorquez  
 Ms. Kathy L. Bond  
 Ms. Gaylyn Boone and Mr. Jim R Dorcy  
 Mr. John Borroel  
 Mr. Dominic Boschetto  
 Dr. Katharine Boskoff and  
 Mr. Hodge Crabtree  
 Mr. Kam Bounkhoun  
 Dr. John S. and Dolores A. Bradshaw  
 Ms. Joanna B. Bravender  
 Dr. Adam Breslow  
 Mr. and Mrs. Stuart Britton  
 Ms. Angie Brooks  
 Ms. Brandy Brown  
 Mr. Jared Bruce  
 Ms. Sarah V. Brumfield  
 Mrs. Virginia Brust  
 Ms. Jeanie Brusven  
 Marie F. Buckey  
 Mr. Philip Buffington  
 Mr. and Mrs. Joe Buompensiero  
 Mrs. Elizabeth Burnam  
 Cecilia T. Burr  
 Ms. Sally Bushue  
 Ms. Dalila Butler  
 Ms. Kathy Butterfield  
 Mr. Charles Caballero  
 Jane F. Campbell  
 Ms. Joan S. Campbell  
 Mr. and Mrs. Kurt Campbell  
 Ms. Janell Cannon  
 Ms. Edie Cappel  
 Dr. Liana Carbon  
 Mr. and Mrs. Robert Carley  
 Mr. and Mrs. James Carrino  
 Mr. William Carter  
 Mr. Fausto E. Castillo  
 Mrs. Glenda Castro  
 Ms. Racheal Ceriani  
 Mr. Christopher Cervantes  
 Mr. William Chace  
 Mr. Dan Chandler  
 Ms. Francisca Charles and  
 Mr. Luis Figueroa  
 Mr. Don Chase  
 Jessica and Justin Chatigny  
 Hadarah and Sidney\* Chemnick  
 Ms. Cheryl Chester  
 Mr. Michael Christensen  
 Mr. and Mrs. Harrison D. Chua  
 Mrs. Debra Clarkson  
 Mrs. Betty Conklin  
 Mr. and Mrs. Robert Cooley

Mr. and Mrs. Warren Coon  
 Mr. David Cooper  
 Ms. Molly Corless  
 Mrs. Margaret Coughlin and  
 Ms. Sheila Coughlin  
 Mrs. Mary Courtney-Sheldon  
 Ms. Cynthia Cox  
 Mr. Bruce Crabtree  
 Ms. Anne Craig  
 Ms. Zoe Cryns  
 Joshua Culver  
 Mrs. Cindy Cunha  
 Mr. Benjamin Curry  
 Mr. Laurence W. Curtis  
 Ms. Joyce C. Cutler-Shaw  
 Mrs. Claudia Cuz-Flores  
 Kaitlin Dabbert  
 Ms. Wendy Dallas  
 Ms. N.R. Daniel  
 Mr. Thomas Dao  
 Ms. Pam Daron  
 Mr. and Mrs. Leonard Dasho  
 Mr. and Mrs. Benjamin Davidson  
 Ms. Jeanne Davies  
 Mr. Alfred Day  
 Dr. George Dehnel  
 Mr. Bryan Delacerna  
 Mr. Julius Delino  
 Deanne and Tom Deméré  
 Mr. William Dentham  
 Mr. and Mrs. Earl W. Denton  
 Ms. Holly Devlin  
 Mr. Matthew Dina  
 Mrs. Lynn Dodge  
 Ms. Sandy Dodge and Mr. Mo Peele  
 Ms. Leticia Dominquez  
 Mr. and Mrs. Edward Doyle  
 Ms. Penelope Drawbridge  
 Ms. Rachel Droessler  
 Mr. John Drumm  
 Ms. Ilene Dunagan and  
 Mr. Robert Plant  
 Ms. Sarabeth Dunkley  
 Ms. Shelley Dutt  
 Margi Dykens  
 Ms. Devora Safran and  
 Mr. Ronald Eisenberg  
 Ms. Roberta Eklund  
 Mac and Audrey Elliot  
 Dr. Hugh I. Ellis  
 Mrs. Jonna Ennis  
 Mr. Erik Enstad  
 Mrs. Lollo Enstad  
 Cynthia and Phil Epstein  
 Mr. Rey Estrada  
 Ms. Enid Farrell  
 Ms. Mary Farson-Collier  
 Mr. Tim Fenoglio  
 Mr. Bo Fern  
 Mr. Alfredo Ferrer  
 Ms. Karen Fields  
 Mr. and Mrs. Keith M. Fink  
 Mr. and Mrs. Matthew Fisher  
 Dr. Robert Fisher  
 Ms. Ayoola Folarin



### Ordovery Gallery

Since January 2006, the Museum has welcomed beautiful exhibitions of nature photography on our Level Four gallery through a generous partnership with The Ordovery Gallery. Founded in 2003 by retired attorney and professional photographer Abe Ordovery, the gallery focuses on contemporary photography, painting, and sculpture with an emphasis on natural history. The Museum has hosted 14 Ordovery exhibitions featuring internationally acclaimed artists. Abe and his wife, attorney Eleanor Musick, travel widely and are avid naturalists, deeply concerned about conservation and environmental issues. *Pictured above: Abe Ordovery, Art Wolfe and Eleanor Musick.*

Mr. Chad Foreman  
Ms. Julie Fowler  
Mrs. Susie Francis  
Ms. Cheryl L. Friday  
Ms. Tracy Fulkerson  
Mr. Robert Gaod  
Ms. Leticia Garcia  
Mr. Donald M. Gardner  
Mr. Gilbert Garra  
Ms. Margaret Gartin  
Mr. Rusty Gehm  
Ms. Kateri Gentles  
Ms. Coleen Geraghty  
Prof. Cathy Gere  
Ms. Keitha Giannella  
Ms. Wendy Gibson  
Ms. Carol Gilbertson  
Mr. Jake Gillen  
Ms. Melissa Girty  
Mrs. Edith Gladden  
Mrs. Stephanie Glidden  
Mr. and Mrs. David Goldberg  
Mr. Edgar Golden  
Mrs. Sheryl Gonda  
Mr. and Mrs. Luis Gonzalez  
Dr. Sharon Gonzalez  
Mr. and Mrs. Randy Goodell  
Mr. Jerry Goodwin  
Mrs. Veronica Gorini  
Ms. Joanne Gorup  
Ms. Sue Grant  
Ms. Dorothy J. Green  
Mr. Eric Green  
Ms. Patricia Green  
Mr. and Mrs. John Gregory  
Mrs. Heidi Greiser Pines  
Mrs. Cecilia Grose  
Mr. George Groza  
Ms. Linda Hagen  
Mr. Richard Hamilton  
Mr. and Mrs. Al Hammer  
Mr. James Hamrick  
Mrs. Helen Hansen  
Mr. Robert Hansen  
Ms. Ann Harmer  
Mrs. Norma Harrington  
Mr. Robert J. Harrington  
Mr. and Mrs. Richard Harris  
Ms. Diane Hartje  
Mr. Michael Haslam  
Virginia Hatt  
Dr. Mary Ann Hawke and  
Dr. Erik Viirre  
Mr. Marcus Hayes  
Ms. Dianne Haynes  
Mrs. Hope Hebdon  
Mr. Chad Hebert  
Mrs. Cynthia Hedgecock  
Mr. Gerhard T. Heine  
Dr. Aseem Hemmad  
Ms. Elizabeth Higareda  
Mrs. Diana Hilber  
Mr. Stephen Hill  
Ms. Annie Ng and Mr. Rob Hingtgen  
Mr. Ray Hitchcock

Ms. Marcia Hoagland  
Mr. Joseph Hobbs  
Mrs. Marge Hobbs  
Mr. Stephen Hoffman  
Mr. Brett Hogan  
Mr. Peter Holmes  
Mr. Kurt Holve  
Ms. Marianne Hommel  
Ms. E. Joan Hoobler  
Mrs. Patricia Horwath  
Dr. and Mrs. Robert J. House  
Mr. Kimberly Howard  
Ms. Lauren A. Hunter  
Mr. Ronald L. Hynum  
Ms. Joanna G. Ihnatowicz  
Ms. Adrienne Israel  
Ms. Barbara Jackson  
Mr. Josh Jackson  
Ms. Marjorie Jackson  
Ms. Carrie Jacobs  
Ms. Marilyn Adams and  
Mr. Wayne Jacobs  
Mrs. Alice Jaffe  
Mrs. Donna Jaoudi  
Elliott Family  
Mr. Doug Jewell  
Ms. Andrea Johnson  
David A. Johnson  
Ms. Joy Johnson  
Mr. William Johnston  
Mr. Alan Jones  
Mrs. Margaret Jones  
Ms. Marjorie A. Jones  
Ms. Abigail Josephsen  
Ms. Kim Joshway  
Mr. Elmer Keen  
Ms. Heidi Keller and  
Mr. Stephen Freyling  
Ms. Jeanne Keller  
Ms. Jennifer Kelly  
Mrs. Marjorie P. Kelly  
Mrs. Karen Kennedy  
Estate of Karl Kenyon  
Dr. Roy Kerckhoffs  
Mr. Alex Kesaris  
Mary Alice Kessler  
Mr. David Kisic  
Mrs. Kelly Kjos  
Mr. Ronald Kofron  
Ms. Sheri Konen  
Chris and Janel Kopp  
Mr. Clay Kordahl  
Ms. Jamie F. Koren  
Mr. Jeremy Krout  
Mrs. Kathryn Krug  
Mr. Steve Kurpinsky  
Mr. and Mrs. Jon Ladeau  
Ms. Sylvia Laird  
Ms. Charlene Larsen  
Miss Breanne Leach  
Ms. Lori Leavitt  
Mr. and Mrs. Paul E. Lebuhn  
Mr. and Mrs. Steve Leiserson  
Ken and Marilyn Licht  
Ms. Debra Lin

Ms. Vicki Lindblade  
Mrs. Russell Litchfield  
David and Norma Little  
Mr. William Long  
Ms. Juliet Lopez  
Mr. Lee Loventhal  
Mr. Jackson M. Lowe  
Mr. and Mrs. Carl D. Lowenstein  
Ms. Monika Lucs  
Mr. Joey Ludwiczak  
Mr. Phillips Lyons  
Ms. Suzanne Machamer  
Ms. Janet Macneill  
Mrs. Patricia Madigan  
Mr. Carl A. Maniscalco  
Mr. Silas Manspeaker  
Lauren Marino  
Ms. Jacqueline Martin  
Mr. and Mrs. Paul M. Martin  
Ms. Rhonda Martin  
Ms. Slava Martin  
Mrs. Jody Martz  
Laura Masotti  
Michelle Joy Mateo  
Mr. and Mrs. Warren Maule  
Dr. Arion Mayes  
Mrs. Emilie McBain  
Ms. Madeleine McCambridge  
Ms. Carolyn McCann  
Patricia McFarland  
Vernie and John McGowan  
Alexis Mckee  
Ms. Barbara Mcpherson  
Mr. Ericson Merritt  
Ms. Lila Meyer and Ms. Kay Wilhite  
Mr. and Mrs. Jim Miller  
Mrs. Kristine Miller  
Mr. and Ms. Morgan Miller  
Mr. David Miralles  
Ms. Elizabeth Missakian  
Mr. Jerry Mitcham  
Mrs. Jean T. Moe  
Mrs. Lisa Molar  
Mr. and Mrs. Bruce Moore  
Ms. Parker Moore  
Ms. Priscila Moreno  
Mr. Robert Morey  
Mrs. Helga Mulligan  
Mrs. Traci Mulligan  
Ms. Phyllis Murchland  
Ms. Jennifer L. Nash  
Marian Nelson  
Mr. Ralph Nelson  
Ms. Natalie Ngo  
Mr. and Mrs. Jonathan Nichols  
Mr. Dennie Nickell  
Mrs. Edith Nierenberg  
Mr. Christopher Norris  
Ms. Rosemary North  
Ms. Natalie Nunez  
Ms. Cindy Olmstead  
Dr. H. Alice Orgel  
Ms. Gabrielle Orozco  
Mr. Jorge A. Orozco  
Mrs. Cynthia Ortiz

Ms. Christine Otani  
 Ms. Julie Tupper and Mr. Jeffrey Ott  
 Mrs. Virginia Ouellet  
 Nancy Owens Renner  
 Ms. Derya Ozgur  
 Mr. Tom Page  
 Mr. Jose Paramo  
 Ms. Binal Patel  
 Mrs. Dorothy Paterson  
 Pat Pawlowski  
 Mr. and Mrs. Ed Pearson  
 Mr. Tristan Penhallegon  
 Mr. Joe Pereira  
 Mrs. Earlene Peterson  
 Nancy Phillips and Cal Maloney  
 Mr. and Mrs. Paul A. Pitt  
 Mr. and Mrs. Robert Pooley  
 Chena Popper  
 Ms. Phyllis Posner  
 Mr. Steve Potter  
 Ms. Eva L. Quesenberry  
 Mrs. Elke Radelow  
 Mr. John Rael  
 Ms. Breanne Ramirez  
 Ms. Debbie Ramirez  
 Judith A. Ramirez  
 Mr. Charles Randall  
 Kesler Randall  
 Leslie H. Rapp  
 Mr. William Ratsch  
 Ms. Heather E. Reed  
 Ms. Sue Regis  
 Mr. Wilson D. Reich  
 Ms. Nicole Reilly  
 Mrs. Anita Reith  
 Mrs. Darcy Reynolds  
 Mrs. Janet H. Richards  
 Ms. Sharon Richardson  
 Ms. Mary Platter-Rieger and  
 Mr. John Rieger  
 Ms. Sharon Ritchie  
 Ms. Lori Rivera  
 Ms. Carrie Roberts and  
 Ms. Joyce C. Newman  
 Mrs. Jane Robin  
 Mrs. Janis Rogers  
 Mr. Lance Roll  
 Mrs. Melissa Romo  
 Ms. Julia Ronlov  
 Mr. and Mrs. Richard Rosenberg  
 Betsy and Lea Rudee  
 Mr. Scott N. Rugh  
 Mr. and Mrs. Gerald G. Rundle  
 Dr. Donald W. Runyan  
 Ms. Lynne Russo  
 Mr. Steve Salhus  
 Mr. Ryan Salisbury  
 Dr. and Mrs. Sidney L. Saltzstein  
 Dr. Fred Sanders  
 Dr. and Mrs. John P. Sands  
 Mr. Ryan Sangster  
 Ms. Sharin Sarfaty and Mr. Donovan  
 Sun Contreras  
 Mrs. Holly Scarcella  
 Dr. and Mrs. Murray Schacher

Mr. Wolfgang Schimansky  
 Ms. K. Schlech  
 Mr. Charles Schmitt  
 Claudia Schroeder  
 Bud and Sudie Schumacher  
 Mrs. Eleanor Schwabe  
 Mr. Douglas Schwartz  
 Mrs. Dianna Seaney  
 Mr. and Mrs. James Seeright  
 Ms. Rita Shah  
 Mr. Sherman Shaw  
 Mr. and Mrs. Frederic N. Shepard  
 Hallie Shere  
 Dr. Joel Siegel  
 Ms. Heather Simmons  
 Mr. Matthew Simmons  
 Ms. Michaelen R. Simonian  
 Mr. and Mrs. Michael E. Sixtus  
 Mrs. Kathleen Sliter  
 Mr. Chris Smith  
 Ms. Elizabeth K. Smith  
 Mr. and Mrs. Glyndwr Smith  
 Ms. Jeanine Smith  
 Ms. Laura Smith  
 Lauren Lee Beaudry and Jack L. Snider  
 Mr. Juan Solano  
 Mr. Charles F. Spaulding, II  
 Ms. Jo Anne Springer  
 Dr. Sharon Sprouse and Mr. Bill Young  
 Mr. and Mrs. Anthony St. John  
 Mr. Richard H. Stafford  
 Ms. Faye Stampe  
 Mrs. Shauna Stark  
 Mr. Jim Staunton  
 Ms. Katherine Steele  
 Mr. and Mrs. David Steller  
 Nancy Stevens  
 Ms. Sue Stevenson  
 Dr. and Dr. Charles J. Stewart  
 Mr. Michael Stewart  
 Mrs. Kerri Stichka-Meyers  
 Rosanne Stogner  
 Ms. Kasia Stolba  
 Mr. Michael Stonge  
 Mr. Jan Strack  
 Ms. Julie Strassburger  
 Ms. Christina Nicole Streetman  
 Mr. Ralph Stricker  
 Ms. Cyndy Sulisz  
 Ms. Elsie Sullivan and  
 Mr. Richard Tait  
 Dr. and Mrs. Blake Talbot  
 Ms. Rita Tambornino  
 Ms. Joyce Tang  
 Mr. and Mrs. J. L. Tanzer  
 Krystyna Tatarkiewicz  
 Mr. Jason Taylor  
 Mr. Kevin Taylor  
 Mr. and Mrs. Paul W. Terwilliger  
 David and Wendy Thomas  
 Ms. Eloise F. Thomas  
 Mr. Mark Thomas  
 Sharlene and Edna Thompson  
 Mr. and Mrs. David Tillson  
 Mary L. Toomey



### Jerry and Eleanor Navarra

The Navarras embody the profile of our Museum donors: generous with their time, talent and treasure, and passionate about our mission. Eleanor has been both a Docent and a Board member, including service as Chair of the Board for three years. Jerry enjoys flying his plane down the Baja California peninsula to the couple's home on the Sea of Cortés. The Navarra's support has been broad—from gala events to education programs. The Navarra's signature project at the Museum is the conservation and exhibition of the A. R. Valentien collection—a previously hidden treasure now available for all to enjoy.

Ms. Sandy Tucker  
 Mr. and Mrs. Patrick Tyre  
 Mr. Scott Tyree  
 Mr. and Mrs. Andrew Ulitsky  
 Ms. Leticia Valdiviez  
 Mr. Daniel Valverde  
 Mrs. Rebecca Van Cleave  
 Ms. Pearl Van Denburg  
 Mr. John Van Roekel  
 George and Nancy Varga  
 Mrs. Madeleine E. Vastine  
 Mr. Jon Vencil  
 Mrs. Margaret Venter  
 Ms. Laura Vervaecke  
 Mr. George R. Vojtko  
 Ms. Virginia Vorous  
 Lorraine Wagner  
 Mr. and Mrs. Paul Walker  
 Mrs. Margaret Wallace  
 Drs. Randy and Cheryl Ward  
 Mr. and Mrs. Andrew Washabaugh  
 Ms. Andrea Watson-Canning  
 Ms. Julie Webb  
 Mrs. June Webb  
 Ms. Blanche Welch  
 Mr. Paul Werdeman  
 Mrs. Michelle West  
 Mrs. Anne Weston  
 Shawn Whisman  
 Mrs. Angela Whittet  
 Mrs. Elisabeth Wiering  
 Mr. and Mrs. Howard Wiggins  
 Mr. Steve Wilhelm  
 Ms. Loreen Wilhelm  
 Ms. Delle Willett Stattin and  
 Mr. Carl Stattin  
 Mr. Douglas Willhite  
 Mr. and Mrs. John Williams  
 Ms. Kristy Williams  
 Mr. and Mrs. Francis E. Wilson, Jr.  
 Ms. Hillary Wilson  
 Mrs. Lisa Wilson-Shaff  
 Doretta and David Winkelman  
 Ms. Cynthia Winters  
 Mrs. Maureen Wiskerchen  
 Mr. Stewart Wolfson  
 Dr. and Mrs. Francisco M. Wong  
 Mr. and Mrs. Jonathan P. Wright  
 Mr. and Mrs. Roland Wuertz  
 Ms. Patricia H. Yuengling  
 Mr. and Mrs. Richard Zander  
 Mrs. Suzanne Zetz

### Corporate Donors

#### Natural Partners

Natural Partners are corporate supporters of the Museum who give \$1250 or more in cash or product support over the course of the year. We are proud to be associated with these companies and most appreciative of their generosity across the Museum's programs.

#### Diamond (\$100,000 and above)

CBS Outdoor\*\*  
 Clear Channel Communications\*\*  
 KBNT-Univision, KDTF-TeleFutura,  
 XHAS-Telemundo\*\*  
 KFMB-TV, Channel 8\*\*  
 KNSD TV\*\*

#### Emerald (\$50,000–99,000)

Cox Media\*\*  
 10News/ABC\*\*  
 Yellow Book USA\*\*

#### Ruby (\$25,000–49,000)

Bank of America Charitable  
 Foundation Inc.  
 Metropolitan Transit System  
 QUALCOMM Incorporated  
 Quark Expeditions Inc.

#### Sapphire (\$10,000–24,999)

Commercial Press Inc.\*\*  
 Culinary Concepts\*\*  
 Edison International Corporate Giving  
 Kyocera International, Inc.  
 San Diego State University  
 Sempra Energy  
 Union Bank of California  
 University of San Diego

#### Topaz (\$5000–9999)

A Perfect Table\*\*  
 Cohn Restaurant Group  
 CRG Beverage Company\*\*  
 El Vitral Restaurant  
 and Tequila Lounge\*\*  
 ESRI\*\*  
 Event Technology Services\*\*  
 The McGraw-Hill Companies  
 The Prado Restaurant at Balboa Park  
 Rancho La Puerta  
 REI  
 Sony Electronics Inc.  
 Best Best & Krieger LLP  
 Gen-Probe Incorporated  
 The Grant Grill\*\*  
 Luce, Forward, Hamilton &  
 Scripps LLP\*\*  
 North County Medical Clinic, Inc.  
 Organic Elements\*\*  
 Tabule Restaurant and Bar\*\*  
 Tequila Los Abuelos-Fortaleza\*8  
 Terra Restaurant and Catering\*\*

Tommy Bahama Rum\*\*  
 WD-40 Company

#### Amber (\$1250–2499)

A Symphony of Flowers\*\*  
 Allergy and Rheumatology Medical  
 Clinic  
 California Bank & Trust  
 Chateau Camou\*\*  
 Cook & Schmid  
 Cowboy Star Restaurant and  
 Butcher Shop\*\*  
 Crescent Heights Kitchen and Lounge\*\*  
 El Rey Sol Restaurant\*\*  
 Giant Photo Service\*\*  
 Jewell Entertainment\*\*  
 Johnson & Johnson Pharmaceutical  
 Research & Development, LLC  
 Luxus\*\*  
 Natural History Magazine, Inc.  
 Nobu San Diego\*\*  
 Resolusean Photography, Inc.\*\*  
 Romesco Baja Med Bistro\*\*  
 Trumer Pils & Shiner Beers\*\*

#### Additional Corporate Partners

Adobe Systems Inc.  
 CerasoliStafford Media  
 Management LLC  
 Downstream Services  
 Engineered Mechanical Services, Inc.  
 Gomez Law Firm  
 Melhorn Construction, Inc.  
 Mexican Consulate General  
 Morningstar Enterprises Inc.  
 Orange Commercial Credit  
 Pfizer Foundation Matching Gifts  
 Program  
 Private Asset Management  
 Red Corp. Alliances, Inc.  
 Sycuan Band of the Kumeyaay Nation  
 Tatum LLC  
 Tupperware Brands  
 West Rhode and Roberts  
 Willis Insurance Services of  
 San Diego, Inc.  
 Zagrodnik and Thomas Architects LLP

\*\* Indicates gift in kind

## Gifts in Kind

Gifts of products and services provide valuable support to the Museum. From auction items to food and marketing support, these donors also assure the success of the Museum's activities.

Mr. Mark A. Ardagna  
Mrs. Mary J. Baker  
Dr. and Mrs. Wolfgang Berger  
Mr. Tim Burr  
Mr. Joshua Culver  
Ms. Adrienne Flowers  
Hansji Hotels, Inc.  
Joni and Friends International  
Disability Center  
Philip Krutzsch, Ph.D.  
Kurt's Camera Repair  
Dr. Martha Minter and  
Dr. Richard Convery  
Mitchell International  
Mrs. James B. Orwig  
Mr. and Mrs. Harlan I. Price  
Regional Geologic Mapping Project  
Mr. and Mrs. Rudolph J. Rehm  
Mr. John F. Sanborn  
Seismic Hazard Assessment  
& Geologic Mapping Programs  
Somerset Entertainment  
Yolanda Walther-Meade  
Yolanda S. Walther-Meade  
Ms. Ann Wu  
Mr. Frederick E. Zerlaut

## Live Oaks Society

The Live Oaks Society is comprised of supporters who have made gifts to the Museum through their estate plans. These generous donors are providing funds for endowment support which will assure the future of the Museum and its programs.

Anonymous (5)  
Mr. C. Hayden Atchison\*  
Francoise D. Baker  
Mr.\* and Mrs.\* Harlan Boucher  
Barbara and Eugene\* Bowman  
Mr. and Mrs. Richard L. Breisch  
Althea M. Brimm and  
Daniel J. Brimm  
Esther J. Burnham  
Mary Jane and Bob Cherry  
Henry and Charlotte Clark  
Mary H. Clark  
Ms. Dale Hollis Clark  
Karen and Dr. James F.\* Clements  
Mr. and Mrs. David Crawford  
Jose de la Torre Bueno  
Mr. and Mrs. James M. Dort  
Glenn and Jeanne Dunham  
Mrs. Elizabeth A. Eddy and  
The Eddy Marital Trust  
Bernard J. Eggertsen  
Dr. Iris Engstrand and  
Mr. Paul D. Engstrand  
Mrs. William Gordon  
Dr. David E. and Barbara Groce  
Judy Guilmette  
Capt.\* and Mrs.\* Charles A. Guthrie  
Mr. and Mrs. Enrique Hambleton  
Janelle and Ed Harris  
Lois and John Harris Trust Fund  
Helen\* and Kent Heppell  
Dorothy and Art\* Hester  
Mr. and Mrs. Michael Hoctor  
Ms. Kathleen A. Howell  
Linda D. King  
Philip and Detty June\* Klauber  
Harry and Shirley Koons  
Mr. and Mrs. Burton Kuck  
Dr. Ellen E. Kuhns  
Luisa J. Larson  
Ms. Ida E. Lewis  
Ms. Barbara J. Lohne  
Virginia W. Martin  
Bert McIntosh  
Ms. Ray-Etta L. Morrell  
Dr. James D. Nauman  
Dr. and Mrs. Fred Orton  
Walter and Anne Pagels  
Mrs. Joseph R. Parker  
James and Barbara Peugh  
Rudy and Marilyn Regalado  
Jim and Sharon Richardson  
Dr. Norman C. Roberts\*  
Harleen and Richard Roncaglia  
Ms. Ronnie Schneider

Richard C. Schwenkmeyer  
Henry M. Shenkman  
Phyllis and Frank Tabor  
William H. Thomas  
Christine Tratnyek  
Dr. Robert C. Vinton  
Mr. Allen Van Norman\*  
Mrs. Mary M. Yount



### Senior Management

Michael W. Hager, Ph.D.,  
President and CEO

George Brooks-Gonyer, Vice  
President, CFO and COO

Ann M. Laddon, Vice President of  
Institutional Advancement

James Stone,  
Vice President of Public Programs

Michael Wall, Ph.D.,  
Director of the Biodiversity Research  
Center of the Californias,  
Curator of Entomology

Tom Deméré, Ph.D.,  
Curator of Paleontology

Bradford Hollingsworth, Ph.D.,  
Curator of Herpetology

Jon P. Rebman, Ph.D.,  
Curator of Botany

Philip Unitt, Curator of  
Birds and Mammals

Margaret Dykens,  
Director of the Research Library  
and Registrar

### Acknowledgements

Art Direction and Design:  
Mary Lou Morreal

Editorial Committee: Ann M. Laddon,  
Margaret Dykens, Delle Willett,  
Eowyn Bates

### Photography

BodyWorlds, Lollo Enstad, Elizabeth  
Castillo, Rusty Gehm, François Gohier,  
Bradford Hollingsworth, Samantha  
Marcum, Dana McLaughlin, Christopher  
Plouffe, Jon Rebman, Bob Ross,  
Chris Swarth, Phil Unitt, Delle Willett

### Images

Cover: Southern Mule Deer, San  
Jacinto Mountains

Back Cover, inside covers: *Uta  
stansburiana*, lizard skin close-up

p.4: view from window of lighthouse  
on West San Benito Island, Baja  
California

p.5: Savannah sparrow; Panorama of  
San Jacinto Mountains from  
Tahquitz Valley

p.6: Townsend's big-eared bat

p.7: vegetation in the Sierra de La  
Libertad with Mexican Blue Palms;  
mule train with field gear in the  
Sierra de La Libertad, Baja California

p.8: horse pelvis fossil

p.9: Thomas Jefferson School of Law  
project site

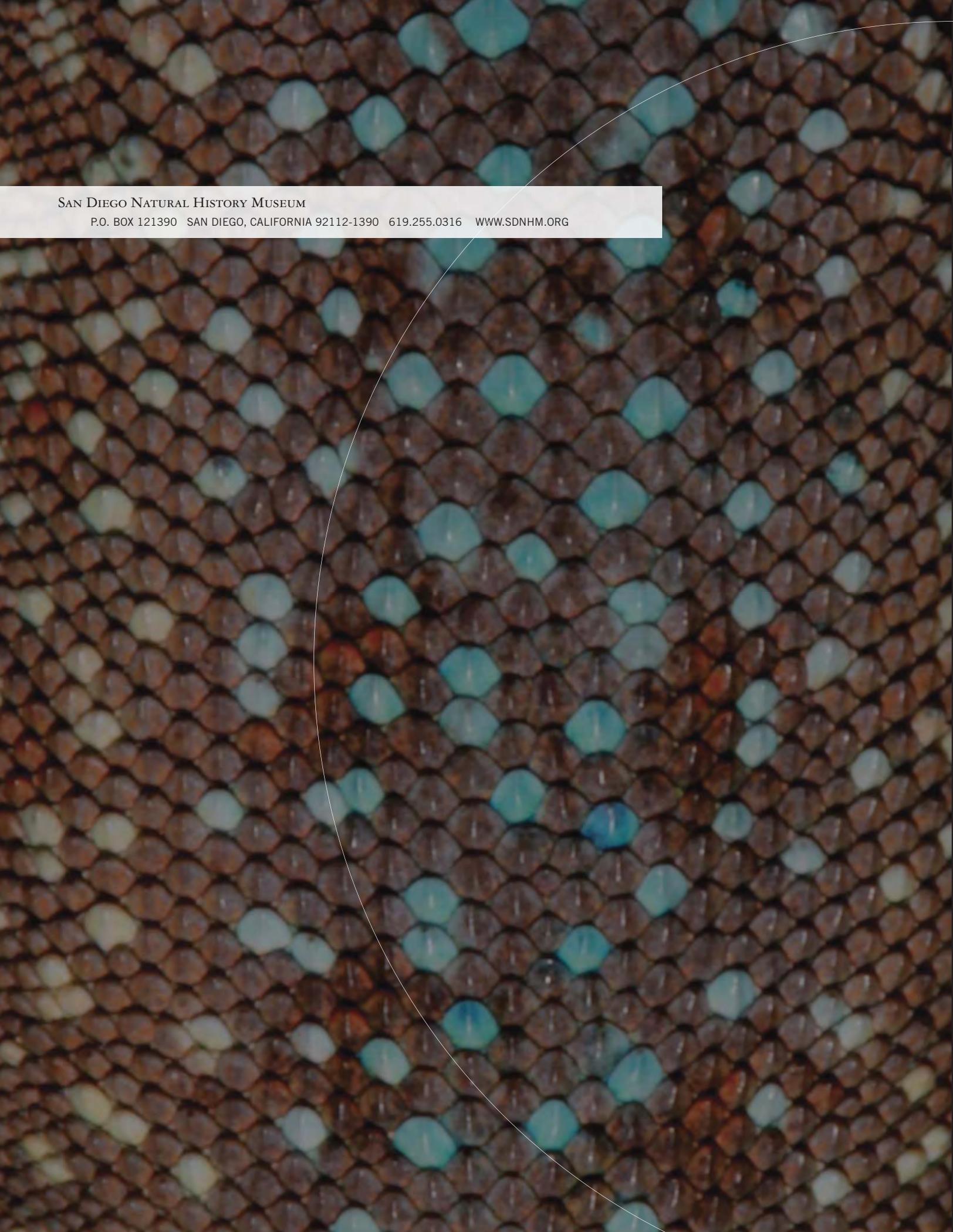
p.14: BioBlitz 2009

p.15: Behr's Metalmark

p.16: *Water: H<sub>2</sub>O=Life*

p.17: *BODY WORLDS & The Brain—  
Our Three Pound Gem*

p.18: Staff members of the  
Development and Membership team:  
top row (from left to right): Gillian  
Joshi, Eowyn Bates, Wendy Endsley,  
Connie Shinkle; bottom row (from  
left to right): Alexandra Prsha, Donna  
Raub, Ann Laddon, Jessie Holmes  
Chatigny. Missing from photo: Sally  
Bushue and Evelyn Jackson.

A close-up photograph of a fish's scales, showing a repeating pattern of brown and light blue/green scales. A white rectangular text box is overlaid on the upper left portion of the image. A thin white curved line starts from the top right corner and arcs across the image towards the bottom left.

SAN DIEGO NATURAL HISTORY MUSEUM

P.O. BOX 121390 SAN DIEGO, CALIFORNIA 92112-1390 619.255.0316 [WWW.SDNHM.ORG](http://WWW.SDNHM.ORG)