INTERNATIONAL
COSMOS
PRIZE

THE EXPO '90 COMMEMORATIVE
INTERNATIONAL COSMOS PRIZE COMMITTEE
c/o Expo '90 Foundation
2-136 Ryokuchi-koen,Tsurumi-ku,Osaka 538-0036,Japan
Tel.81-6-6915-4513 Fax.81-6-6915-4524
http://www.expo-cosmos.or.jp

Press Release

July 27, 2011

The Winner of the 2011 (19th) International Cosmos Prize,
Commemorative of Expo '90 is:

The Scientific Steering Committee
of the Census of Marine Life

On June 27th, 2011, the International Cosmos Prize Committee (Chairperson: Dr. Tadamitsu Kishimoto) selected The Scientific Steering Committee Of the Census of Marine Life (Secretariat: Washington, DC, USA), as the winner of the 2011 (19th) International Cosmos Prize. The decision to award the prize to the Committee was reached after considering the recommendations submitted by the International Cosmos Prize Screening Committee of Experts (Chairperson: Mr. Kazuo Matsushita).

The Scientific Steering Committee (SSC) of the Census of Marine Life (CoML) provided overall governance to the CoML, a grand global project. The objective of the Census was to survey and analyze changes from past to present in marine life biodiversity, distribution and abundance, and to compile the resultant data into a comprehensive database called the "Ocean Biogeographic Information System (OBIS)," to be used in forecasting the future of marine life.

Dr. Ian Poiner
Chairperson,
The Scientific Steering Committee of
The Census of Marine Life

Dr. Frederick Grassle,
First Chairperson, Co-Founder,
The Scientific Steering Committee of
The Census of Marine Life

Photos are at the following URL:

http://www.expo-cosmos.or.jp/2011.zip

Contents of the Prize

1. Focus and scope of research to be awarded

The prize will be awarded for research and work that has achieved excellence and is recognized as contributing to a significant understanding of the relationships among living organisms, the interdependence of life and the global environment, and the common nature integrating these interrelationships. It should be characterized by a global perspective which tries to illuminate the relationships between diverse phenomena, in keeping with the concepts and principle of "The Harmonious Coexistence between Nature and Mankind."

The following points will be the standards by which the achievements will be evaluated.

1) The body of achievements should show an inclusive and integrated methodology and approach, in contrast to analytic and reductive methodologies.
2) The achievements must be based on a global perspective. If the focus is on a particular phenomenon or specific area, it must have universal significance and applicability.
3) The achievements should offer a long-term vision which leads to further developments, rather than solutions to limited problems.

2. Selection Process

(1) 2011 International Cosmos Prize Nominees

141 nominations (from 19 countries)

＜Breakdown by Year＞

Candidates since 2009: 56

Candidates since 2010: 50

Candidates since 2011: 35

(Candidacy is valid for three years.)

＜Breakdown by Country＞

Japan (49), the United States (31), the United Kingdom (14), China(7), Indonesia(6), India(6), Australia (5), Canada(4), Kenya(3), Germany(3), Russia(3), Chile(2), the Netherlands(2), Vietnam(1), Bhutan(1), France(1), Sweden(1),Tanzania(1), Ireland(1)

(2) Selection Process

The International Cosmos Prize Screening Committee of Experts met four times between January and June of 2011 in order to evaluate candidates for the prize. After careful deliberations, the winner was selected at the International Cosmos Prize Committee on June 27.

3. Others

(1) Award Ceremony

An award ceremony will be held at Izumi Hall in Shiromi, Chuo-ku, Osaka on Thursday, October 18, 2011.

(2) Others

The prizewinner shall be awarded a certificate of merit, a medallion, and a monetary prize of 40 million yen.

Attached documents:

Curriculum Vitae of the Major Members
Timeline of Activities and notable events
Reason for Awarding the Prize
Explanation of Reason for Awarding
Comments (on receiving the Prize) by the winner
Prizewinners 1993-2010
The International Cosmos Prize Committee, the Screening Committee of Experts

For further information, please contact:

Mikihito Kanamori
Cosmos Prize Secretariat, Expo '90 Foundation
Phone: 06-6915-4513
Fax: 06-6915-4524
Email kanamori@expo-cosmos.or.jp
URL http://www.expo-cosmos.or.jp

Curriculum Vitae of the Major Members
The Scientific Steering Committee of the Census of Marine Life

Dr. Ian Poiner: Chairperson

Date of Birth: March 15, 1953

Nationality: Australian

Specialty: Tropical marine ecology

B.Sc. Zoology, University of Queensland, Australia (since 1976);

Ph.D., University of Queensland, Australia (since 1978);

Research Scientist, The Commonwealth Scientific and Industrial Research Organisation (CSIRO) Division of Fisheries (1983-85);

Senior Research Scientist, CSIRO Division of Fisheries 1985 – 86);

Research Fellow, Botany Department, University of British Columbia, Canada (1987); Senior Research Scientist, CSIRO Division of Fisheries (1988 – 89);

Principal Research Scientist, CSIRO Division of Fisheries (1989 – 90).

Principal Research Scientist, CSIRO Division of Fisheries (1990 – 95);

Senior Principal Research Scientist, CSIRO Division of Fisheries (1995-1997);

Senior Principal Research Scientist, CSIRO Marine Research (1997-01);

Deputy Chief - Research, CSIRO Marine Research (2001 – 2004);

Chief Executive Officer, Australian Institute of Marine Science (2004 – present);

Chairperson of the Scientific Steering Committee of the Census of Marine Life (2008–present)

Dr. Frederick Grassle: First Chairperson, Co-Founder

Date of Birth: July 14, 1939

Nationality: USA

Specialty: Benthic ecology, ocean biogeography

B.S. Yale University (1961)

Ph.D. Duke University (1967)

Assistant Scientist, Woods Hole Oceanographic Institution (1969-1973);

Senior Scientist, Woods Hole Oceanographic Institution (1969-1989);

Adjunct Scientist, Woods Hole Oceanographic Institution (1993-1996);

Professor II, Rutgers University, Institute of Marine and Coastal Sciences, (1989-present);

Director, Rutgers University, Institute of Marine and Coastal Sciences, (1989-2008);

Chairperson of the Scientific Steering Committee of the Census of Marine Life (2000-2008)

Dr. Victor A. Gallardo: Vice-Chairperson
Date of Birth: November 3, 1934
Nationality: Chilean
Specialty: Benthic ecology

State Professor (Biology and Chemistry), University of Chile (Studies at the University of Concepcion, Concepcion, Chile (1961);
Ph. D. (Biology), University of Southern California, Los Angeles, California, USA (1963-67);
Master of Marine Affairs, University of Rhode Island, Kingston, Rhode Island, USA (1973-74);
Vice-Chair of the Scientific Steering Committee of the Census of Marine Life (2005-present)

Dr. Myriam Sibuet: Vice-Chairperson
Date of Birth: July 30, 1945
Nationality: French
Specialty: Deep-sea ecosystems

Thèse de doctorat d'Etat, Dr ès Sciences Naturelles, Université Pierre et Marie Curie, Paris (1987);
Research scientist and then Research Director at Institut français de recherche pour l'exploitation de la mer (IFREMER) (1969-2006);
Senior Scientist in residence at the Institut Océanographique de Paris, Fondation Albert 1er de Monaco since 2006 and member of the Scientific Committee (2006-present);
Science and Technology adviser to the President of Ifremer (2005- present)
Vice-Chair of the Scientific Steering Committee of the Census of Marine Life (2008-present)

Mr. Jesse Ausubel: Co-Founder
Date of Birth: September 27, 1951
Nationality: USA
Specialty: Environmental science & technology

Harvard College, BA with honors (1974);
Columbia University, Master of International Affairs & Master of Business Administration (1977);
The Rockefeller University, director, Program for the Human Environment, and senior research associate (1993- present); fellow in science and public policy (1989-1993);
Woods Hole Oceanographic Institution, adjunct scientist (1995-present), guest investigator (1990-1994);
Alfred P. Sloan Foundation, vice president (2009-present), program director (1994-2009), responsible for basic scientific research and for history of science & technology

Photos are at the following URL:

http://www.expo-cosmos.or.jp/2011.zip

Census of Marine Life
Timeline of Activities and notable events

July 2, 1996	Dr. Frederick Grassle and Mr. Jesse Ausubel meet to discuss potential value of a large cooperative international scientific exploration program on marine biodiversity.
March 1997- August 1998	Feasibility workshops held to define the scope of the program.
January 1999	An International Secretariat and International Scientific Steering Committee form. The Scientific Steering Committee to guide the direction of the research and ensure that the program objectives are met.
June 1999	At its first meeting, the Scientific Steering Committee agrees that the program purpose should be "To assess and explain the diversity, distribution, and abundance of marine life."
May 2000	The first database, Ocean Biogeographic Information System (OBIS), demonstration projects, launches.
October 2000	To answer the question "What lived in the ocean?," the "Oceans Past" research element, the History of Marine Animal Populations (HMAP) project, launches .
April 2001 – October 2002	The ocean is divided into six realms that can be explored using available technology, and the "Oceans Present" research element is established..
February 2002 – June 2004	The establishment of 13 National and Regional Implementation Committees (NRICs) that serve to strengthen the global reach of the Census in support of marine biodiversity research.
November 2002	An Education & Outreach initiative is established to ensure Census findings are communicated to a broad public audience.
June 2003	The "Oceans Future" research element, the Future of Marine Animal Populations (FMAP) project, is set in motion.
October 2003	The first "All Program" meeting is held, in which representatives from all projects and NRICs come together to share data, findings, and ideas.

April 2004 – January 2005	The "Oceans Present" research element grows to 14 projects.
November 2005	The second "All Program" meeting is held. At the midpoint of the program, the participants discuss progress to date and plans for the future.
October 2006	Over 130 participants from 27 countries gather in Kobe, Japan for the first Natural Geography in Shore Areas (NaGISA) World Congress.
July-October 2007	In a second phase of targeted global engagement, the Census establishes new NRICs in Indonesia, Korea, and the Arabian Sea.
October 2007	Mapping & Visualization and Marine Barcoding initiatives are established.
November 2007	The third "All Program" meeting is held, where plans to synthesize data and results begin to take shape.
April 2008	The Census enters its "Synthesis" phase and establishes a Synthesis Group to organize, integrate, and synthesize the vast data and information gathered by the Census to ensure comprehensive content and products for 2010.
February 2009	The fourth "All Program" meeting, is structured as Synthesis workshops.
October 2010	The Census program releases its major ten-year program findings ("Decade of Discovery") in London, England. The First Census shows life in the ocean is richer, more connected, and more impacted than expected.

Reason for Awarding

The Scientific Steering Committee (SSC) of the Census of Marine Life (CoML) provided overall governance to the CoML, a grand global project. The objective of the Census was to survey and analyze changes from past to present in marine life biodiversity, distribution and abundance, and to compile the resultant data into a comprehensive database called the "Ocean Biogeographic Information System (OBIS)," to be used in forecasting the future of marine life.

The CoML comprised a global network of over 2,700 researchers in more than 80 nations who engaged in a 10-year investigation of ocean life forms, commencing in 2000. Census projects were divided into three major research components, respectively focusing on the past, present and future of marine life. To investigate the past, the History of Marine Animal Population (HMAP) studied historical archives. Teams of fisheries scientists, historians, economists and others conducted case studies in various parts of the world, analyzing data from various sources, such as old ship logs, monastic records, restaurant menus, fish bones and shell middens. From these studies, HMAP researchers produced records providing a picture of life in the oceans before the advent of modern fishing.

The Ocean Realm Field Projects, through 14 field projects, investigated world oceans life of the present day. The areas of study included not only major shallow-water habitats (shore areas, coral reefs etc.) but also unique ocean realms, such as hydrothermal ecosystems, cold seep ecosystems, mid-oceanic ridges, and the Arctic Ocean. These projects were carried out using a combination of acoustics, engineering, genetics and other technologies.

The research component for forecasting future ocean life was organized under the rubric of the Future of Marine Animal Populations (FMAP). This group focused on integrating data from many different sources, including fishery and climate change, and on creating new analytical tools for predicting marine populations and the possible future composition of ecosystems.

As stated above, the CoML was a scientific initiative to assess and explain life in all the world's oceans, including the compilation of centuries-old information and the prediction of the future of marine life. Census data on 28 million observations of 120,000 species were recorded in the Ocean Biogeographic Information System (OBIS) and posted on the Internet, to be made available to everyone around the world. Especially noteworthy is the fact that 5 million records are added to OBIS each year.

Moreover, the CoML was active in education and outreach initiatives to ensure that Census findings were communicated to a broad public audience in collaboration with artists, composers and filmmakers, even cartoonists and weavers. It is significant that diverse means of expression were used to disseminate research outcomes to the general public. To help develop the next generation of marine scientists, the CoML also implemented programs to enable many youngsters to help gather data on organisms in nearshore habitats.

There is scientific, economic and political importance in promoting comprehensive investigation and understanding of the ocean and its inhabitants. Indeed, the United Nations Convention on Biological Diversity requires that signatories collect information on living resources, though as yet no nation has a complete baseline of such information. The CoML's global network of researchers will contribute greatly to the collection of information on marine life resources and to formulating policies for biodiversity conservation, sustainable use of marine resources and so forth.

Though oceans cover about 70% of the Earth's surface, a great portion of the ocean still remains unknown, further out of human reach than land. The Census of Marine Life was an interdisciplinary and comprehensive project in which researchers from various fields collaborated to survey the history and diversity of ocean life. The Census of Marine Life was meant precisely to explore the true nature of life forms, which comprise a complex system in a closely interwoven natural environment. For this reason, the Census of Marine Life conforms well to the motive of the International Cosmos Prize, which upholds the principle of Harmonious Coexistence of Nature and Mankind.

This unprecedented international project, governed and promoted by the Scientific Steering Committee (SSC) of the Census of Marine Life, accomplished significant results. These achievements have made the SSC a deserving recipient of the International Cosmos Prize.

Explanation of Reason for Awarding

The oceans, which cover about 70% of the Earth's surface, have brought numerous benefits to humanity. However, our knowledge of life forms that live in or on the ocean is woefully incomplete. In 2000, the Census of Marine Life (CoML) was launched under the governance of its Scientific Steering Committee (SSC), to undertake a 10-year initiative assessing the diversity, distribution and abundance of marine life.

The CoML was structured around the three questions of its basic framework: What has lived in the oceans? What does live in the oceans? and What will live in the oceans? The CoML comprised a grand marine life census project involving 2,700 marine scientists from over 670 laboratories, universities, natural history museums and aquariums from more than 80 nations and all continents.
The History of Marine Animal Populations (HMAP), a research project for constructing the history of marine animal populations, gathered historical data dating back to roughly 500 years ago, when human impact on the oceans became significant. For instance, the HMAP project found out that bluefin tuna resources had declined in northern European waters since the mid-1900s. The project also clarified changes in species diversity between the 1960s and the 1990s. These findings were made by teams of fisheries scientists, historians, economists and others, who conducted case studies in southern Africa, Australia and approximately a dozen other regions, analyzing data from old ship logs, monastic records, restaurant menus, fishbone and shell middens, and various other trustworthy sources. Together, these case studies provided the world's first reliable picture of life in the oceans before modern fishing. These long historical records of changes in marine populations are of great value, since they help distinguish the effects of normal changes in the natural environment from those of human activities.

The Ocean Realm Field Projects investigated marine life of the present day. Of the 14 field projects conducted, 11 addressed shallow-water habitats, including coral reefs, as well as unique ocean realms, such as seamounts, seeps, the Arctic Ocean, the Southern Ocean and the Mid-Atlantic Ridge. The remaining three projects looked globally at the plankton and the microbes, which are important players in waters, and tuna, which occupy a high position in the food chain, throughout the world oceans. The Ocean Realm Field Projects were carried out using a combination of various technologies, such as acoustic sonar, acoustic tagging, communications satellite, DNA analysis, large research vessels and deep-sea research vessels.

The research component for forecasting future ocean life was organized under the rubric of the Future of Marine Animal Populations (FMAP). This group focused on integrating data from many different sources, including fishery and climate change, and on creating new analytical tools for predicting marine populations and the possible future composition of ecosystems.

Census data were recorded in the Ocean Biogeographic Information System (OBIS), a search engine-type database, and posted on the Internet, so as to be accessible by everyone around the world. Currently, OBIS contains data on more than 110,000 species, and 28 million distribution records. Even now, 5 million records are being added to OBIS each year. OBIS is admirable for its high utility value, in that it provides users with the latest findings. Visiting the OBIS website and entering the Latin or popular name of a species calls forth a map containing information on where and when the species has been recorded. Such features make OBIS both useful for researchers and enjoyable by the general public.

The CoML was also active in education and outreach initiatives, to ensure that its findings were communicated to the general public. As part of these efforts, the CoML worked with artists, composers, filmmakers, cartoonists and weavers to disseminate its scientific research outcomes to a broad public audience. Many of the unique and beautiful organisms discovered by the Census have served as muses to inspire these artists and artisans to create various forms of artwork (e.g., plastic arts, films, cartoons and quilts). To help develop the next generation of marine scientists, the CoML also implemented programs to enable many youngsters to assist in gathering data on organisms in nearshore habitats.

There is scientific, economic and political importance in promoting comprehensive investigation and understanding of the ocean and its inhabitants. Indeed, the United Nations Convention on Biological Diversity requires that signatories collect information on living resources, though as yet no nation has a complete baseline of such information. The CoML's global network of researchers has accumulated information on marine life resources, which serves as a source for forecasting future changes of marine life in all oceans. This accumulated information also contributes greatly to the formulation of policies for biodiversity conservation, sustainable use of marine resources and so forth.

Although oceans are home to many life forms, most remain unknown to humanity. The CoML was an interdisciplinary and comprehensive project in which researchers from various fields collaborated to survey the history and diversity of ocean life. The CoML was meant precisely to explore the true nature of life forms, which comprise a complex system in a closely interwoven natural environment. For this reason, the Census of Marine Life was deemed to conform well to the aims of the International Cosmos Prize, whose principles uphold the Harmonious Coexistence of Nature and Mankind.

Comment

We are thrilled that the International Cosmos Prize, rooted in the theme of the Expo '90, "The Harmonious Coexistence between Nature and Mankind", honors the blue world. Humanity every day has opportunities to see the beauty of nature on land, exemplified by flowers and gardens and their changes through the seasons. Until recently, humanity could see little of life in the vast, dark, and deep oceans. We transferred a few forms of marine life into aquariums, but we did not even have a list of the forms of life in the ocean or a reliable estimate of how many forms of life remain to be discovered.

In the late 1990s, marine biologists became convinced that new technologies and international cooperation could make possible the first Census of Marine Life. The goal was to bridge polar and tropical seas, shallow and deep waters, and small and large organisms in an exploration and documentation of marine life. The members of the international Scientific Steering Committee of the Census of Marine Life had the privilege of encouraging and assisting more than 2700 researchers from over 80 nations to participate. We humbly accept the International Cosmos Prize on behalf of the entire community of researchers who succeeded in realizing the dream of a Census. The discovery of one another's talents, and the consequent rapport and respect, form a major legacy of the Census matching the global scale of the ocean's questions.

We also thank all the organizations that enabled the Census, including marine laboratories and universities, natural history museums and aquariums, navies, governmental and intergovernmental organizations that support and coordinate ocean and biodiversity science, and private corporations and foundations who gave technical and financial support. We specially note the Alfred P. Sloan Foundation of New York, which provided funds to assess the feasibility of the Census and then to coordinate the Census through its decade.

We are proud that the Census advanced both the microscopic and the macroscopic. The Census described in detail more than 1200 new species. It also discovered immense global patterns of diversity, distribution, and abundance based on tens of millions of observations united in a modern database freely accessible to everyone. We are proud that the beauty and mystery of marine life attracted artists and historians as well as natural scientists and that the Census became a united celebration of many forms of the power of human observation. Together, we learned that the oceans are richer, more connected, and more altered than anyone had known.

May the extraordinary honor of the International Cosmos Prize prove that the oceans can symbolize the harmonious coexistence between nature and humanity. What the Census discovered, what the Census showed that has already been lost, and what the Census showed remains to be discovered give urgency to achieving such harmony, our best gift to future generations. The ocean can be Earth's largest garden – and wilderness.

Ian Poiner, Chairperson
The Scientific Steering Committee of the Census of Marine Life

PRIZEWINNERS 1993-2010

1993 Sir Ghillean Prance

Director, Royal Botanic Gardens, Kew, U.K.

An authority on tropical plants centering on those of the Amazon basin of South America, Dr. Prance advocates his Flora-on-the-Earth Project to establish a comprehensive record of the earth's vegetation in the form of a database.

1994 Dr. Jacques François Barrau (deceased)

Professor, Paris National Museum of Natural History, France

Dr. Barrau has conducted ethnobiological studies on nature and the life styles of people in the Pacific Ocean. His results have afforded unique insights into the relationship between human beings and food from a global perspective.

1995 Dr. Tatuo Kira (deceased)

Professor Emeritus, Osaka City University, Japan

On the basis of his quantitative research on plants' organic production, Dr. Kira has established “Production Ecology". He has also played a leading role in conducting field studies of the ecosystem in tropical rainforests in Southeast Asia.

1996 Dr. George Beals Schaller

Director of Science, the Wildlife Conservation Society, U.S.A.

Dr. Schaller has been conducting field research on the ecology and behavior of various wild animals in all parts of the world, and has written many books including “The Mountain Gorilla" and “The Last Panda."

1997 Dr. Richard Dawkins

Professor, Oxford University, U.K.

Dr. Dawkins totally reversed the conventional view of biology with a bold hypothesis he put forward in his 1976 book. He continues to present new views.

1998 Dr. Jared Mason Diamond

Professor, University of California at Los Angeles, U.S.A.

Dr. Diamond has made remarkable achievements in physiology. He has been organizing field expeditions to New Guinea and has employed the results of this fieldwork to restructure his unique studies of the evolution of human societies.

1999 Dr. Wu Zheng-Yi

Professor and Director Emeritus, Kunming Institute of Botany, Chinese Academy of Sciences, China Dr. Wu is a representative botanist of China. He edited “Flora of China" which describes all known plant species in China.

2000 Sir David Attenborough

Producer, Naturalist, Zoologist, U.K.

Sir David is a pioneer of wildlife documentary films. With his excellent films of various creatures or plants, he has told many people throughtout the world about the nature of life for more than fifty years since joined the BBC.

2001 Prof. Anne Whiston Spirn

Professor, Massachusetts Institute of Technology, U.S.A.

Based on the principle, “Cities must not conflict with nature, it is possible to build cities that exists as part of nature", she proposes measures to develop cities while maintaining harmony with nature.

2002 The Charles Darwin Research Station

The Charles Darwin Research Station is a biological research center established in 1964 by the international NGO/NPO Charles Darwin Foundation in the Galapagos Islands of Ecuador. The Station has made remarkable achievement in research and protection of the numerous indigenous species of the Island, including elephant tortoises and marine iguanas.

2003 Dr. Peter Hamilton Raven

Director, Missouri Botanical Garden, U.S.A.

Dr. Raven is a representative botanist of the U.S., and international pioneer in advocating for the conservation of global biodiversity. He has given his approach toward issues concerning life on earth from a global viewpoint and his significant contributions toward promoting the co-existence of nature and human beings in both academic and practical terms.

2004 Prof. Julia Carabias Lillo

Professor, National Autonomous University of Mexico, Mexico

Professor Carabias has always considered global environmental issues from the perspective of developing countries. She has achieved excellent results in resolving difficult challenges under different conditions, through the implementation of programs based on thorough fieldwork with a multidisciplinary approach.

2005 Dr. Daniel Pauly

Professor and Director, Fisheries Centre, University of British Columbia, Canada

Pursuing his comprehensive studies of the relationship between fishing and marine ecosystem,

Dr. Pauly has made outstanding achievements in the field of research into marine ecosystems and resources, including the development of scientific models to enable both marine ecosystem conservation and sustainable resource use of fisheries.

2006 Dr. Raman Sukumar

Professor, Centre for Ecological Sciences, Indian Institute of Science

A strong advocate of preserving biodiversity and the environment, Dr.Sukumar has done pioneering research on the ecological relationship between elephants and humans, and on resolving the conflict between them, making him an internationally recognized expert on the coexistence of wildlife and humans.

2007 Dr. Georgina Mary Mace

Professor of Conservation Science and Director of NERC Centre for Population Biology, Imperial College, London

Dr.Mace played a significant role in the creation of scientific criteria for the identification and classification of threatened species. She has also contributed to the conservation of species and biodiversity.

2008 Dr. Phan Nguyen Hong

Professor Emeritus, Hanoi National University of Education

Dr. Phan has been involved in comprehensive scientific research in Vietnam, where war and overdevelopment have had a devastating impact on its mangrove ecosystem. He has made a major contribution to the restoration of the mangrove forests.

2009 Dr. Gretchen Cara Daily

Professor, Stanford University

Dr. Daily has provided us with a comprehensive picture of the value of biodiversity-based ecosystem services, upon which human society is dependent. She has made a vital contribution to international initiatives such as the U.N. Millennium Ecosystem Assessment, and played a leading role in launching the "Natural Capital Project," which is a result of the fusion of ecology and economics, in order to promote the sustainable utilization of natural capital.

2010 Dr. Estella Bergere Leopold

Professor Emeritus, University of Washington

Dr. Leopold has made tremendous achievements by continuing and further developing the Land Ethic, which was initiated by her father, Aldo Leopold (1887-1948), as well as by disseminating the idea to many places in the United States. She is still pursuing activities that weave the Land Ethic into the fabric of people's lives and society.

The Expo '90 Commemorative International Cosmos Prize Committee

2011.1

Position	Name	Specialty	Official Title
Chairperson	Dr. Tadamitsu Kishimoto	Immunology	Professor, Graduate School of Frontier Biosciences, Osaka University
Vice-Chairperson	Dr.Yoshihide Kozai	Celestial mechanics	Chairperson of Section Ⅱ, The Japan Academy
Member	Dr. Kunio Iwatsuki	Systematic Botany	Director, Museum of Nature and Human Activities, Hyogo
Member	Dr. Shuzo Koyama	Anthropology	Director, Suita City Museum
Member	Dr. Kiyoshi Kurokawa	Medical Science	Former President, The Science Council of Japan
Member	Mr. Kazuo Matsushita	Environmental Policy	Professor, Graduate School of Global Environment Studies, Kyoto University
Member	Dr. Yoichiro Murakami	History of science	President, Toyo Eiwa University
Member	Dr.Keiko Nakamura	Biohistory	Director General, Biohistory Research Hall
Member	Dr. Kazuo Oike	Seismology	Director, International Institute for advanced Studies
Member	Dr. Gunnar Öquist	Botany	Former Secretary General, The Royal Swedish Academy of Sciences
Member	Sir Ghillean Prance	Forest Botany	Science Director, the Eden Project
Member	Ambassador Ole Philipson	International Politics	President of honor, Bureau International des Expositions, Paris（BIE）
Member	Dr. Akinori Suzuki	Agricultural Chemistry	Professor Emeritus, University of Tokyo Professor Emeritus, Akita Prefectural University
Member	Dr. A. H. Zakri	Genetics, Plant breeding	Former Director, The United Nations University, Institute of Advanced Studies

The Expo '90 Commemorative

International Cosmos Prize Screening Committee of Experts

2011.1

Position	Name	Specialty	Official Title
Chairperson	Mr. Kazuo Matsushita	Environmental Policy	Professor, Graduate School of Global Environment Studies, Kyoto University
Vice-Chairperson	Dr. Kazuhiko Takeuchi	Landscape and Environmental Science	Professor, Graduate School of Agricultural and Life Science, the University of Tokyo
Member	Dr.Tomoya Akimichi	Ecological Anthropology, Ethno-Biology	Professor Deputy Director-General, Research Institute for Humanity and Nature
Member	Dr. James L. Edwards	Systematic Biology	Senior Advisor, National Museum of Natural History
Member	Mr. Akio Etori	Scientific Review	Advisor National Institute for Materials Science
Member	Dr. Michio Imafuku	Ethology	Professor Emeritus, Kyoto University
Member	Dr. Masahiro Kato	Systematic Botany	Head, Department of Botany, National Science Museum
Member	Mr.Keiichi Noe	Philosophy of Science	Professor, Graduate School, Faculty of Arts and Letters, Tohoku University
Member	Dr. Endang Sukara	Microbiology	Vice Chairman of the Indonesian Institute of Sciences
Member	Dr. Izumi Washitani	Ecology , Conservation Ecology	Professor, Graduate School of Agricultural and Life Science, the University of Tokyo