



Press Release

July 26, 2010

The Winner of the 2010 (18th) International Cosmos Prize,
Commemorative of Expo '90 is:

Dr. Estella Bergere Leopold
Professor Emeritus, University of Washington

On June 28th, 2010, the International Cosmos Prize Committee (Chairperson: Dr. Akito Arima) selected Dr. Estella B. Leopold, Professor Emeritus, University of Washington (83), as the winner of the 2010 (18th) International Cosmos Prize. The decision to award the prize to Dr. Leopold was reached after considering the recommendations submitted by the International Cosmos Prize Screening Committee of Experts (Chairperson: Dr. Masahiro Kato).

Dr. Estella 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.



This picture is at the following URL:
<http://www.expo-cosmos.or.jp/2010.jpg>

Selection Process

(1) 2010 International Cosmos Prize Nominees

153 nominations (from 25 countries)

< Breakdown by Year >

Candidates since 2008: 47

Candidates since 2009: 56

Candidates since 2010: 50

(Candidacy is valid for three years.)

< Breakdown by Country >

Japan (57), the United States (27), the United Kingdom (11), Australia (8), China(8),
Indonesia(7),India(5),Kenya(5),Germany(3),Canada(3),Russia(3),Vietnam(2),
Brazil(2),Argentina(1),Bhutan(1),Chile(1),France(1),Greece(1),Mongolia(1),
the Netherlands(1), Pakistan(1),Philippines(1),Sweden(1),Tanzania(1),Turkmenistan (1)

(2) Selection Process

The International Cosmos Prize Screening Committee of Experts met four times between February and June of 2010 in order to evaluate candidates for the prize. After careful deliberations, the winner was selected at the International Cosmos Prize Committee on June 28.

Others

(1) Award Ceremony

An award ceremony will be held at Izumi Hall in Shiromi, Chuo-ku, Osaka on Thursday, October 14, 2010.

(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

Photograph

Reason for Awarding the Prize

Comments (on receiving the Prize) by the winner

Prizewinners 1993-2009

The International Cosmos Prize Committee, the Screening Committee of Experts

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Curriculum Vitae

Name: Estella Bergere Leopold

Date of Birth: 8 January 1927 (Born in Madison, Wisconsin, U.S.A.)

Nationality: U.S.A

Education:

1948 Ph.B. in Botany. University of Wisconsin at Madison

1950 M.S. in Botany. University of California at Berkeley

1955 Ph.D. in Plant Science. Yale University

Employment:

1955-1976 Research Botanist, Paleontology and Stratigraphy Branch,
U.S. Geological Survey, Denver, Colorado,

1967-1976 Ad joint Professor, Department of Biology,
University of Colorado

1971-1972 Visiting Professor, University of Wisconsin, Madison

1976-1982 Director, Quaternary Research Center, Professor of Botany and Forest
Resources, University of Washington, Seattle

1982-1989 Professor, Department of Botany and College of Forest Resources,
University of Washington

1989-1995 Professor of Botany and Environmental Studies, University of
Washington

1995-1999 Professor of Botany, University of Washington

2000- Professor Emeritus, Department of Biology, University of Washington

Honors:

1974 National Academy of Sciences, elected

1992 American Academy of Arts and Sciences, elected

Research Monographs:

1955 Climate and Vegetation Changes During an Interstadial Period in Southern New England

1963 Miocene pollen and spore flora of Eniwetok Atoll, Marshall Islands

1969 Ecological requirements of the Wilderness Act

1987 Aldo Leopold -The Man and His Legacy

1994 Climatic comparison of Miocene pollen floras from northern East-China and south-central
Alaska

- 1998 Aldo Leopold's Land Ethic and Education
2001 Florissant leaf and pollen floras of Colorado compared
2008 Phytogeography of the Late Eocene Florissant Flora reconsidered

Reason for Awarding the Prize

As a palynologist and wilderness advocate, Dr. Estella Leopold has made tremendous achievements by inheriting and further developing the Land Ethic philosophy, which was initiated by her father, Aldo Leopold (1887-1948), as well as by disseminating the idea to many places in the United States.

The “land” in the Land Ethic refers not merely to soil, but to a community whose members include soil, water, plants, animals, and humans. In this community, all members constitute a relationship of interdependency and interaction with each other. In other words, each member of the ecological community cannot survive outside of this relationship, whose maintenance enables the continuation of its life. This is precisely what is meant by the Harmonious Coexistence between Nature and Mankind.

A Sand County Almanac (Japanese translation: *Yasei no uta ga kikoeru*, Kodansha Gakujutsu Bunko) was written by Aldo Leopold and published after his death. It suggested, from the Land Ethics perspective, the importance of the earth’s limited natural resources, marking a sign of forthcoming conservation activities. His daughter, Dr. Leopold—along with her siblings—has followed in his footsteps in pursuing this idea. With a firm belief in the Land Ethic as a governing principle of her activities, she has been engaged in conservation activities at many places in the United States.

Most notably, she has dedicated herself to activities for the preservation of the Florissant Fossil Beds in Colorado, providing the scientific basis, through pollen analysis, for the necessity of their preservation and protection. The Florissant Fossil Beds, which include fossilized trees, fish, birds, insects and many other living things, are now an internationally famous National Monument thanks to her leading role in the activities that saved these beds from development. Furthermore, although Mount St. Helens, Washington, lost as much as 600 km² of its neighboring forest due to an eruption, it was Dr. Leopold’s distinguished leadership that galvanized a subsequent movement toward the creation of a national monument. This area provides one of the few laboratories for studying ecosystems after their living members have been decimated. In addition, she has conducted research and studies into dam construction in the Grand Canyon, thereby helping approximately twenty non-profit organizations to work in concert with each other on environmental conservation activities.

It is safe to say that the creation of these national parks and monuments—as well as related preservation activities—have made a significant contribution to human society by leaving natural heritage sites to be handed down forever.

These achievements are attributable to Dr. Leopold’s astute insight and strong will with which she, together with her siblings, has honored her father’s achievements and continued his legacy, the Land Ethic. There are few individuals who span generations and show others how humans can live

in harmony with the land. In addition, for the purpose of carrying on the family's work, she worked for the establishment of the Leopold Foundation in 1982. She is still engaged in the management of the Foundation as its director and as the chairperson of its scientific research committee while pushing to broaden its educational outreach program and weave the Land Ethic into the fabric of people's lives and society.

Dr. Estella Leopold has propagated the Land Ethic, made numerous proposals on a wide range of conservation issues, and implemented those proposals in the United States, which is one of the developed countries facing environmental problems. As such, her achievements, which have universal value for activities all over the world that advance environmental protection and bio-preservation, are considered highly deserving of the 2010 International Cosmos Prize, whose objective is to promote the Harmonious Coexistence between Nature and Mankind.

Comment

I am greatly humbled to be chosen as a recipient of the International Cosmos Award of 2010. This is an unexpected capstone to my career as a botanist and conservationist. I was much influenced by youthful times spent in the woods and fields along the Wisconsin River where I grew up. Learning to love wild nature was critical to my spending time in my life trying to restore, save, and understand natural systems. The field experience led me to undertake botanical studies and the disciplines of ecology and geology.

In my career as a scientist, I have given part of my time to work on conservation issues aimed at correcting ecological problems. We need to reach out to decision makers and provide science to improve decisions. When I heard about frightening conservation problems, such as a proposal to build dams that would flood Grand Canyon National Park, I undertook to work with non-profit groups to do research that would help protect such areas. The need for citizens to work together was obvious in order to seek better ways to be effective advocates. Thanks to colleagues that were similarly inclined, we conservationists in Colorado felt compelled to unify our efforts and seek to have a role in decision-making about the establishment and management of wilderness and park areas in the US.

I find as a paleontologist, that the study of past floras leads me to greatly revere nature's biodiversity which was even far greater in the last few millions of years than now. Such studies give me an appreciation for the existence of rich past floras that through climate change have become modified, shifted in geography or extinguished entirely. The experience makes one more aware of the need to protect and promote the principle of ethical treatment of the land and ecosystems today.

Toward this end my siblings and I founded the Aldo Leopold Foundation with the goal to foster the land ethic of Aldo Leopold. We have specialized in working with farmers and landowners to promote ecological land management and teach good land practices in the mid continent. While Leopold's book of essays is translated in to 12 languages, the land ethic must be international in its application, requiring international leadership. The Leopold Foundation has collaborated with the U.S. Forest Service to use our new film about the land ethic, *Green Fire*, as a key element in events associated with the United Nation's International Year of the Forests. In the next stage the film to be integrated in multiple events for international audiences associated with this effort. The Cosmos prize will help expand our efforts to carry the land ethic to international audiences.

I am particularly honored to be among the distinguished COSMOS recipients. The honor belongs also to many dedicated colleagues who work toward protection of the environment. The important Cosmos purpose and goal of "Harmonious co-existence of man and nature" seems an elegant version of Aldo Leopold's Land Ethic. Both themes represent an important need in our world today and ones that I will continue to foster.

With gracious thanks,

Estella B. Leopold

PRIZEWINNERS 1993-2009

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. Tatu Kira

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 throughout 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.

The Expo '90 Commemorative International Cosmos Prize Committee

as of January, 2010

Position	Name	Specialty	Official Title
Chairperson	Dr. Akito Arima	Nuclear physics	Chairperson, Japan Science Foundation
Vice-Chairperson	Dr. Tadamitsu Kishimoto	Immunology	Professor, Graduate School of Frontier Biosciences, Osaka University
Member	Dr. Kunio Iwatsuki	Systematic Botany	Director, Museum of Nature and Human Activities, Hyogo
Member	Dr. Masahiro Kato	Systematic Botany	Head, Department of Botany, National Science Museum
Member	Dr. Kiyoshi Kurokawa	Medical Science	Former President, the Science Council of Japan
Member	Dr. Yoichiro Murakami	History of Science	Professor, Graduate School, Tokyo University of Science
Member	Dr. Chie Nakane	Social Anthropology	Former Chairperson of Section I, the Japan Academy
Member	Dr. Keiko Nakamura	Biohistory	Director General, Biohistory Research Hall
Member	Dr. Gunnar Öquist	Botany	Secretary General, the Royal Swedish Academy of Sciences
Member	Ambassador Ole Philipson	International Politics	President of honor, Bureau International des Expositions, Paris (BIE)
Member	Dr. Sir Ghillean Prance	Forest Botany	Science Director, the Eden Project
Member	Dr. Akinori Suzuki	Agricultural Chemistry	Professor Emeritus, the University of Tokyo Professor Emeritus, Akita Prefectural University
Member	Dr. Tadao Umesao ※	Ethnology	Advisor, National Museum of Ethnology
Member	Dr. A. H. Zakri	Genetics, Plant breeding	Former Director, the United Nations University, Institute of Advanced Studies

※deceased in July 2010

The Expo '90 Commemorative
International Cosmos Prize Screening Committee of Experts
as of January, 2010

Position	Name	Specialty	Official Title
Chairperson	Dr.Masahiro Kato	Systematic Botany	Head, Department of Botany, National Science Museum
Vice- Chairperson	Mr.Kazuo Matsushita	Environmental Policy	Professor, Graduate School of Global Environment Studies, Kyoto University
Member	Dr.P.De. Boersma	Conservation Biology	Professor, Department of Biology, University of Washington
Member	Mr.Akio Etori	Scientific Review	Advisor, National Institute for Materials Science
Member	Dr.Michio Imafuku	Ethology	Professor Emeritus, Kyoto University
Member	Dr.Kuswata Kartawinata	Plant Ecology	Former Senior Advisor on Environmental Sciences, UNESCO Jakarta Office
Member	Dr.Shuzo Koyama	Anthropology	Director, Suita City Museum
Member	Mr.Keiichi Noe	Philosophy of Science	Professor, Graduate School ,Faculty of Arts and Letters, Tohoku University
Member	Dr.Kazuhiko Takeuchi	Landscape and Environmental Science	Professor, Graduate School of Agricultural and Life Science, the University of Tokyo
Member	Dr.Izumi Washitani	Ecology, Conservation Ecology	Professor, Graduate School of Agricultural and Life Science, the University of Tokyo