Blue Planet Prize

FOR IMMEDIATE RELEASE
June 18, 2014

2014 BLUE PLANET PRIZE: ANNOUNCEMENT OF PRIZE WINNERS

■ **Prof. Herman Daly (USA)**

■ **Prof. Daniel H. Janzen (USA) and Instituto Nacional de Biodiversidad (Costa Rica)**

This year marks the 23rd awarding of the Blue Planet Prize, the international environmental award sponsored by the Asahi Glass Foundation, chaired by Tetsuji Tanaka. Two Blue Planet Prizes are awarded to individuals or organizations each year that make outstanding achievements in scientific research and its application, and in so doing help to solve global environmental problems. The Board of Directors and Councillors selected the following recipients for this year.

1. Prof. Herman Daly (USA)

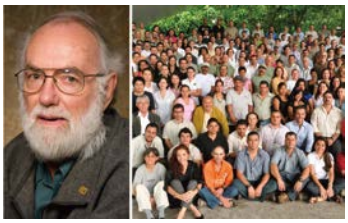
Professor Emeritus, School of Public Policy, University of Maryland

Prof. Daly redefined “steady state economics” through the concept of sustainability by incorporating such factors as the environment, local communities, quality of life, and ethics into economic theory, which lead to building a foundation of ecological economics. He has been questioning whether economic growth brings happiness to humans and has been issuing warnings to society, which tends to overemphasize economic growth. As a consequence, he has had a significant international influence.

2. Prof. Daniel H. Janzen (USA)

Professor, Department of biology, University of Pennsylvania

Instituto Nacional de Biodiversidad (INBio) (Costa Rica)



Prof. Janzen and the Instituto Nacional de Biodiversidad of Costa Rica (INBio) propose measures and policies on sustainable development in harmony with local environmental conservation and local inhabitants and works on environmental education and the conservation of biodiversity. INBio’s activities serve as a valuable role model, from which people both in developed and developing countries around the world should learn.

Both recipients will be awarded a certificate of merit, a commemorative trophy and a supplementary award of 50 million yen.

The awards ceremony will be held on November 12, 2014 (Wednesday), at the Palace Hotel Tokyo (Chiyoda Ward, Tokyo). The commemorative lectures by the prize recipients will be held at the United Nations University (Shibuya Ward, Tokyo) on November 13 (Thursday).

*This press release may also be viewed on our web site at www.af-info.or.jp. from 14:00, June 18, 2014.
The photos of the recipients are available from the web site of the Asahi Glass Foundation.

THE ASAHI GLASS FOUNDATION
2nd Floor, Science Plaza, 5-3 Yonbancho Chiyoda-ku, Tokyo 102-0081 Japan
Tel +81-3-5275-0620 Fax +81-3-5275-0871
E-mail: post@af-info.or.jp URL: http://www.af-info.or.jp

Report on the Selection Process (23rd Annual Prize, 2014)

A total of 620 nominators from Japan and 770 nominators from other countries recommended 119 candidates. The fields represented by the candidates, in order of number, were ecology (27), atmospheric and earth sciences (20), Multidisciplinary field (19), environmental economics and policy making (17).

The candidates represented 28 countries; 28 persons, 27 percent of the total, were from developing countries.

After individual evaluation of the 119 candidates by each Selection Committee member, the committee was convened to narrow down the field. The results of their deliberation were examined by the Presentation Committee, which forwarded its recommendations to the Board of Directors and Councillors. The Board formally resolved to award the Prize to **Prof. Herman Daly,** and jointly to **Prof. Daniel H. Janzen** and **Costa Rica's Instituto Nacional de Biodiversidad (INBio)**.

For more information, please contact: **Tetsuro Yasuda**
THE ASAHI GLASS FOUNDATION
2nd Floor, Science Plaza, 5-3 Yonbancho Chiyoda-ku,
Tokyo 102-0081 Japan
Phone +81-3-5275-0620 Fax +81-3-5275-0871
e-mail: post@af-info.or.jp
URL: http://www.af-info.or.jp

Attachment

Profile of the 2014 Blue Planet Prize Recipient

Prof. Herman Daly (USA)

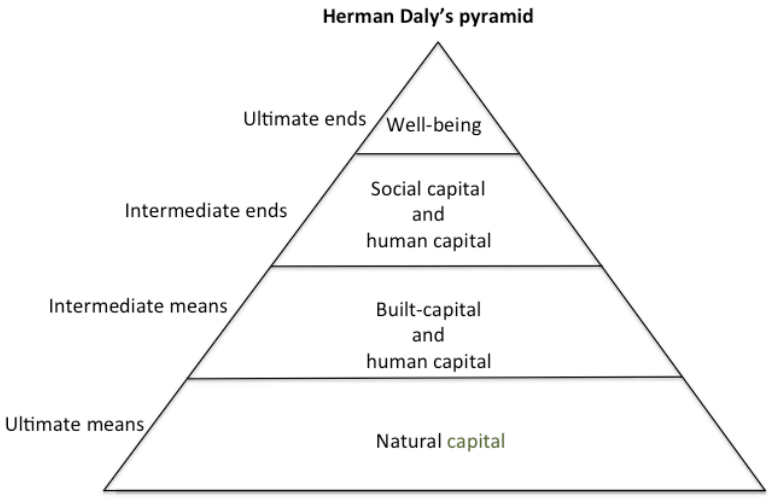
His achievement in building the foundation of ecological economics is tremendous, as he built in elements, namely, the environment, regional communities, quality of life and morality into economics and incorporated the principle of sustainability into steady state economics. Specifically, he had a major impact on the world by identifying indicators that are essential for a sustainable human society that are well known as Herman Daly's three rules[*1]. Also, he questioned whether economic growth is connected to the well-being of mankind and presented the concept of the Herman Daly pyramid[*2], which sounded an alarm to the world that tends to overemphasize economic growth. This professor, thus, can be seen as one of the people who pioneered and established a new field of economics known as ecological economics. Further, in addition to research activities, the professor co-founded the journal Ecological Economics with Robert Costanza, Ann-Marie Jansen, and Joan Martinez-Alier, and encouraged invigorated discussions on ecological economics. He also impacted a vast number of people through his activities within The International Society for Ecological Economics, the World Bank (where he worked for six years with the late Robert Goodland, the World Bank's first ecologist and pioneer in environmental assessment), universities and other venues, and also contributed to a series of talent emerging in this field.

*1 Herman Daly's three rules

1. The sustainable use of renewable resources means that the pace should not be faster than the rate at which they regenerate.
2. The sustainable use of nonrenewable resources means that the rate should not be faster than the pace at which their renewable substitutes can be put into place.
3. The sustainable pace of emission for pollution and wastes means that it should not be faster than the pace at which natural systems can absorb them, recycle them, or render them harmless.

*2 The Herman Daly pyramid

This pyramid was conceived from Herman Daly's question of whether economic growth truly leads to an improvement in the people's quality of life.
He presented a pyramid that transcends the elements of the economy that can be conjured up under normal circumstances (artificial capital (factories, facilities, etc.), human capital (labor, knowledge, skills), financial capital) and added natural capital, which envelopes the economy's possibilities and specifically its limitations, as well as social capital and human capital. The pyramid consists of these stages, through which people achieve their ultimate purpose of well-being. By using natural capital as the



(source: Indicator and Information Systems for Sustainable Development, A report to the Balaton Group 1998 by Donella Meadows)

foundation, securing and achieving sustainability is not measured by economic growth, but is assessed by the ultimate goal of the degree of achievement of well-being for all of mankind. The pyramid, thus, represents a schematic that places the middle world of economics between the apex of ethical desirability and the base of biophysical possibility.

Biographical Summary

1938	Born in Houston, Texas
1960	Bachelor of Arts (Economics), Rice University (Houston, Texas)
1967	Ph.D. in Economics, Vanderbilt University (Nashville, Tennessee)
1968	Associate Professor, Louisiana State University
	Visiting Professor, Economics Department, University of Ceará, Brazil
1969-1970	Research Associate, Yale University
1973	Professor, Louisiana State University
1980	Visiting Fellow, Centre for Resources and Environmental Studies, Australian National University
1983	Fulbright Senior Lecturer, Brazil
1983-1988	Alumni Professor, Louisiana State University
1988-1994	Senior Economist, Environment Department, World Bank
1994-2010	Professor, School of Public Policy, University of Maryland
2010-present	Emeritus Professor, School of Public Policy, University of Maryland

Awards

1991	Grawemeyer Award for Ideas Improving World Order
1995	Conservation Biology Society Award
1996	Heineken Prize for Environmental Science
1996	Honorary Right Livelihood Award
1999	Sophie Prize for Environment and Development
2001	Leontief Prize for Advancing Economic Thought
2002	Medal of the Presidency of the Italian Republic
2010	National Council for Science and the Environment, Lifetime Achievement Award

Prof. Daniel H. Janzen (USA) and Instituto Nacional de Biodiversidad (Costa Rica)

Professor Daniel Hunt Janzen

Prof. Janzen, a world-renowned researcher of tropical biodiversity, has achieved great results in Costa Rica, jointly with his collaborator Dr. Winnie Hallwachs, towards exemplary tropical environmental conservation, such as by ecosystem-level dry and rain forest restoration and biodiversity conservation through non-damaging biodiversity development [*1]. The Instituto Nacional de Biodiversidad of Costa Rica (INBio), for which Prof. Janzen and Dr. Hallwachs are two of the founders, has been globally preeminent in its activities in biodiversity research, biodiversity use, and conservation. Their activities, such as using DNA barcoding[*2] and other tools to explore sustainable use of wild biodiversity and transmit biodiversity information, have been a global example and inspiration for restoration and conservation of fragile wild nature in tropical countries.

The practical activities of Costa Rica's INBio range widely from gathering and identifying more than 3 million Costa Rican specimens, building and offering internet-based search tools for specimens, management and transmission of massive amounts of biodiversity information, environmental education, and international commercial cooperations based on the premise of sustainable wildland conservation. These things are all embedded in environmental preservation policies designed for specific places and purposes. By using Prof. Janzen's profound insights from years of tropical biodiversity research and observation as fodder, coupled with national common sense, the Instituto Nacional de Biodiversidad (INBio) of Costa Rica is working on measures for nature conservation and sustainability through non-damaging development, while maintaining harmony between environmental preservation and the resident societies in which that environment is embedded. INBio's initiatives for preserving biodiversity through environmental education and non-damaging biodiversity development, as supported by policy proposals and by explicit actions in and for Costa Rica's conserved wildlands, have impressed many people and governments..

INBio is a valuable practical role model that demonstrates a way to resolve environmental problems by implementing specific policies that harmonize wildlands with society, and an example from which both industrialized and developing nations can learn.

*1 Prof. Janzen attained his prominence by demonstrating that tropical dry and rain forests can be restored with local human resources and common-sense mission-directed policies, a.k.a. adaptive management, and by application of his 50 years of tropical biodiversity knowledge. This biocultural wildland restoration in turn reversed the kind of habitat fragmentation and species loss through insularization that is destroying much of tropical biodiversity. The actual demonstration is the reconnection and consolidation of many small forest (and now, marine) fragments in the 165,000 hectare Area de Conservacion Guanacaste (ACG) in northwestern Costa Rica, which was severely ranched and agriculturalized for four centuries, into one regenerating landscape from the Pacific Ocean to the Caribbean rain forest lowlands (http://www.acguanacaste.ac.cr). In doing this, ACG conserves as many species as 75% of the USA and Canada combined, and does it with a Costa Rican staff dedicated to very long term ACG survival, financed by both government and the private sector. While this very large and diverse habitat island in its ocean of agricultural landscape will lose some of its hundreds of thousands of species through insularization, the great majority will survive through being able to shift locations and ecosystems in the face of unavoidable climate change, and through ACG being a useful and welcome member of the society in which it resides.

*2 “DNA Barcoding” is the cheap and easy use of small and easily extracted signature DNA sequences for anyone to identify a specimen and discover unknown ones, especially in the species-rich tropics, as pioneered by Professor Paul Hebert of the University of Guelph, Canada (http://ibol.org), and intensively proof-of-concepted in Area de Conservacion Guanacaste (ACG) in northwestern Costa Rica (http://www.acguanacaste.ac.cr), as part of its wildland conservation through non-damaging biodiversity development, as guided by ACG, Janzen & Hallwachs, and INBio.

Biographical Summary

1939 Born in Milwaukee, United States
1961 Graduates from University of Minnesota
1965 Receives his doctorate degree (entomology) at the University of California, Berkeley
1969 Associate Professor, University of Chicago
1972 Professor, University of Michigan
1972- Research Advisor, Costa Rica National Park organizations
1978- Professor, University of Pennsylvania
1989 Establishes the Instituto Nacional de Biodiversidad (INBio) in Costa Rica

Awards

1975 Gleason Award, American Botanical Society
1984 Crafoord Prize, Royal Swedish Academy of Sciences
1989 Joseph Leidy Medal, Philadelphia Academy of Natural Sciences
1994 Silver Medal Award, International Society of Chemical Ecology
1997 Kyoto Prize in Basic Sciences
2005 25 people who made a difference, Smithsonian Institution
2011 Premio INBio al Mérito en la Conservación de la Biodiversidad Costarricense
2011 BBVA Frontiers of Knowledge in Ecology and Conservation Biology

Instituto Nacional de Biodiversidad (INBio)

The establishment in 1986 of the Ministry of Natural Resources, Energy and Mining (MIRENEM) of Costa Rica was a landmark in the national efforts initiated a few decades earlier, to conserve and sustainably use its natural biological wealth.

Although initially conservation was conceived as strict protection of natural resources, this concept was giving way to a view of conservation as an opportunity to incorporate nature conservation into the socioeconomic development of the country.

The view of biological diversity and its basic components (genetic, species and ecosystems) began to gather force, and in 1989 the Costa Rican Government established a high-level commission, comprising representatives of several organizations, to examine the idea of establishing an agency, a national biodiversity institute, that would address the issue of biodiversity conservation and its link to the socioeconomic development of the country.

The commission identified the need for a new institution that could work alongside the National System of Protected Areas and broaden its agenda, moving away from the protectionist stance toward a vision that targeted conservation and development. At the time, however, the initiative to create a new public institution was politically and financially impossible. For this reason governmental authorities endorsed the idea of a National Biodiversity Institute as a civil society organization. INBio was thus established a private nonprofit association focusing on the generation of knowledge on biodiversity for its conservation and sustainable use.

Founded in 1989, the National Institute of Biodiversity (INBio) is a private, non-profit, public interest organization, which generates scientific knowledge about the country's biological diversity and makes it available to the public, in order to achieve its mission: “to promote a greater awareness about the value of biodiversity and thereby achieve its conservation and improve the quality of life of the human beings”.

INBio promotes that knowledge be used to instil values and promote responsible actions and decisions in support of effective conservation measures. The core process of the institution consists in generating, processing and sharing information and knowledge about biodiversity with society. This core process has been implemented through the following action areas, which are strongly interrelated:

- Education and Communication: Share information and knowledge about biodiversity with different audiences: (decision-makers, general public, tourist industry, teachers, students, etc) seeking to achieve a greater awareness about the value of biodiversity and consequently promoting behavioral changes that will benefit its conservation. Use of mass and social media to disseminate information about biodiversity.
- Science and Technology: Generate and capture information about the diversity of the species and ecosystems of the country. This information is readily available for systematics, ecology, biogeography, biodiversity informatics, and geographic information systems. At the same time, it establishes the base line and develops monitoring programs for the different elements of biodiversity in the country. Bioprospecting, the search for new profitable and sustainable uses from genetic and biochemical biodiversity resources through scientific research, is developed and implemented in cooperation with local and international private, academic and corporate partners.
- Conservation: Integrates the information generated and managed by INBio to the decision-making processes for protection purposes and the sustainable use of biodiversity, not only for the public, but also for the private sector. This leads to the establishment and management of extensive networking activities with the conservation sector, as well as to the processing of the information, adding value to promote responsible decision-making.
- Biodiversity Informatics: Develops and applies biodiversity informatics tools to support the processes of information capturing, generation, management, analysis and dissemination.
- Policy and Legislation: Provides information and criteria for decision making for the central government, congress, local governments, as well as others who make decisions that affect biodiversity.

- Technical Assistance and Capacity Building: The institutional experience constitutes a service provided to public and private entities within and outside the country. INBio has collaborated with more than 45 countries around the world, on issues related to biodiversity conservation and management, sustainable development and institutional development, aiming to strengthen national capacities to contribute in complying with the Aichi Targets of the Nagoya Protocol of the Convention of Biological Diversity.

INBio works in close collaboration with Costa Rica's Government, through agreements and specific projects with the Ministries of Environment and Energy, Foreign Affairs, Education, Science and Technology, and Agriculture, as well as other public and private institutions such as universities and enterprises in and outside the country.

Awards

INBio´s achievements have been recognized nationally and internationally as a unique institution in its area. A list of Awards and Prizes received along its 25 years of work appears bellow.

2012 Partnership Award, South-South Triangular Cooperation, United Nations Office for South-South Cooperation (Austria)
2011 International Cooperation Award, Wings of the Americas, United States of America Forest Service, (U.S.A.)
2007 National Award for Institutional Contributions to Agriculture and Rural Development, Interamerican Institute for Agricultural Cooperation (IICA) Ministry of Agriculture and National University, (Costa Rica)
2006 First Place, National Scientific and Technological Publisher. Consejo Nacional para Investigaciones Científicas y Tecnológicas (CONICIT), (Costa Rica)
2005 Second Place, Iberamerican Webpage. Asociación Hispanoamericana de Centros Investigación y Empresas de Telecomunicaciones (AHCIET), (Argentina)
First Place, II National Webpage Competition, Ministerio de Ciencia y Tecnología, ICE y RACSA, (Costa Rica)
2004 Augusto González de Linares Award on Environment, Universidad de Cantabria, Consejería de Medio Ambiente y Ordenación del Territorio del Gobierno de Cantabria y la Empresa de Residuos de Cantabria, (Spain)
2003 Tech Museum Award 2003: Technology that benefits humankind, Tech Museum of Innovation, (U.S.A.)
2001 First Place, National Scientific and Technological Publisher, Consejo Nacional de Investigaciones Científicas y Tecnológicas (CONICIT), (Costa Rica)
INBioparque, Member of the Creativity Map, Next Generation Forum Roundtable & LEGO Company
2000 Tourism Business Merit, National Chamber of Tourism (Canatur), (Costa Rica)
1998 Friend of Nature, Asociación Costarricense de Profesionales en Turismo, (Costa Rica)
Research Benefiting the Environment and Future Generations Award, Feria Verde, (Costa Rica)
1995 Prince of Asturias Award, Scientific and Technical Research. Prince of Asturias Foundation (Spain)
1994 Conservation Biology Award, Society for Conservation Biology (USA)
1993 Ancora Award in Science, La Nación (Costa Rica)
1992 Peter Scott Award to Conservation, Species Survival Commission, IUCN
Honorable Recognition, Fundación Cultural Banesto (Spain)
1991 International Environmental Award. Saint Francis of Assisi "Canticle to all Creatures" Franciscan Center for Environmental Studies (Italy)

Remarks from the Award Recipients upon Notification of their Selection

Prof. Herman Daly (USA)

I am both honored and humbled to accept the magnanimous Blue Planet Prize from the Asahi Glass Foundation. The making of such important products as glass and chemicals is already a great benefit to the world. Encouraging and supporting others in their efforts to protect and improve our Earth home, as the Asahi Glass Foundation does, is truly an example of generosity and service. When one is treated generously, then one is inspired to treat others the same way. Thank you for that inspiration, and for including me among a list of recipients whom I have long admired.

This recognition is not only an encouragement to me, but also to many friends and colleagues who have worked hard to protect and preserve our Earth from the destruction caused by excessive growth and careless waste. Among these I especially include my colleagues in the International Society for Ecological Economics. If I have done anything to deserve this Prize it is to have provided a generational connecting link between my best teachers and my best students. May this award strengthen that continuing chain into the future!

Prof. Daniel H. Janzen (USA)

We - all of us, including 2.6% of the world's biodiversity – are delighted and honored to learn of the Blue Planet Prize for us and Costa Rica's INBio. This honor really is for a cast of thousands of Homo sapiens - Costa Ricans and internationals - dancing with billions of other beasts, each doing their part to keep alive some portion of the nature that produced all of us. It is wonderful and wise that years ago the Asahi Glass Foundation had the foresight to offer this support to attempts to move away from the very human tendency to consume and alter our nest. Yes, we can restore some of what we have destroyed, and yes, we can help the world to become biologically literate. Without bioliteracy, nature is just a green threatening mass and there is little hope of its peaceful coexistence with all of us. We, INBio, and Area de Conservacion Guanacaste, are happy recipients of this recognition of decades of trying to open the doors of conserved wildlands to non-damaging partnerships with humanity. Only through direct understanding of the wild world can society welcome it into the family, village and nation.

Instituto Nacional de Biodiversidad (INBio) (Costa Rica)

To receive the prestigious Blue Planet Prize, given in recognition of our voluntary efforts to conserve Costa Rica´s rich biodiversity is a great honor, which we appreciate in all of its significance. We are humbled to be among many of the most outstanding authorities and leaders in the quest for solutions to the global environmental problems who have been previously recognized with this award, as well as to share it with Dr. D.H. Janzen, a world authority in tropical ecology and conservation with whom INBio has worked in a mutually beneficial association.

What our National Biodiversity Institute has been able to achieve through its institutional efforts has been largely determined by an enabling national environment; the endorsement of the Government of Costa Rica; the support of bilateral and multilateral development agencies; the collaboration of the scientific community and the profound commitment of INBio´s community with the cause of promoting a greater awareness of the value of biodiversity in our society.

The Blue Planet Prize becomes a new source of inspiration and motivation to continue our search for a harmonious relationship between humanity and our living world.

Message to the Japanese public

Prof. Herman Daly (USA)

The economy grows physically bigger, but the Earth does not. It becomes more full of us, and more empty of nature. Expansion of the economy now increases environmental costs faster than production benefits. We must move toward a sustainable steady-state economy. Japan is an island nation already with a stationary population; a relatively equitable distribution of wealth; and an emphasis on qualitative improvement more than quantitative growth. It is therefore well placed to lead the transition from our failing growth economy to a steady-state economy—a transition that all countries will have to make.

Prof. Daniel H. Janzen (USA)

Thank you for inviting us into your home. You all know how to learn the languages of other peoples, and what that brings to you. You study, practice and use. There is a whole other society out there, all around you everywhere. Millions of species of them. We ask you to learn their language, study what they do, open your minds to what they are and offer. They are our first teachers, stimulators, and inspiration. You are what you are through many millions of years of dancing with them. Reach out and bring the wild world to the table with you. That is what we have been doing, what Costa Rica's INBio and Area de Conservacion Guanacaste have been doing. It works, and it makes for a better human life. Thank you Japan and thank you Asahi Glass Foundation.

Instituto Nacional de Biodiversidad (INBio) (Costa Rica)

Twenty-five years ago a group of individuals concerned about the future of life on our planet decided to act locally, establishing a National Biodiversity Institute in our small country of Costa Rica, with the ambitious mission "…to promote a greater awareness of the value of our rich biological diversity, to ensure its conservation and improve the quality of life of human beings". Our efforts and accomplishments, now recognized by the prestigious Blue Planet Prize, reaffirm our belief that the protection of living nature is a universal value that serves the interests of humanity, thus a common purpose for which we all can work together.