



Blue
Planet
Prize

FOR IMMEDIATE RELEASE

June 13, 2002

**2002 BLUE PLANET PRIZE:
ANNOUNCEMENT OF PRIZE WINNERS**

Dr. Harold A. Mooney (U.S.A.)

For pioneering in the field of plant physiological ecology, for providing objective measures of how plant ecologies are influenced by their environments, and for his conservation efforts.

Mr. James Gustave Speth (U.S.A.)

For a lifetime of creative and visionary leadership in the search for science-based solutions to global environmental problems and for pioneering efforts to bring these issues, including global climate change, to broad international attention.

Blue Planet Prize

The winners of the 11th Blue Planet Prize have been announced by the Asahi Glass Foundation (Chairman Hiromichi Seya). This prize is awarded each year to two individuals or organizations that have contributed in a noteworthy scientific way to global environmental conservation. The Board of Directors and Councillors of the Asahi Glass Foundation have selected this year's recipients for the following reasons.

**1) Dr. Harold A. Mooney, U.S.A.,
Professor, Department of Biological Sciences, Stanford University**

Dr. Mooney pioneered in the field of plant physiological ecology by introducing physiological methodology to the research of plant ecology and contributed methods for quantitatively understanding the impact of natural and human-generated environmental change on plant ecology. He has helped to establish many international joint research projects related to plant ecology, including problems related to invasions of non-indigenous plant species. He has also been instrumental in establishing the field of global ecology and played major roles in having these results reflected in environmental policies.

**2) Mr. James Gustave Speth, U.S.A.,
Dean and Professor, School of Forestry and Environmental Studies, Yale University**

Professor Speth has devoted his career to creating and invigorating environmental institutions of extraordinary importance. After taking initiative to create the Natural Resources Defense Council, Prof. Speth in 1980 helped to predict the current challenge to the global environment in the *Global 2000 Report* as Chairman of the Council on Environmental Quality in the Carter Administration. In the 1970s, he was among the first to call for action on global climate change. Prof. Speth then founded the World Resources Institute and led it in the search for science-based solutions to large-scale environmental threats. He went on to serve as Administrator of the United Nations Development Programme and focused the agency on sustainable, people-centered development. As dean, he now seeks to help the Yale University School of Forestry and Environmental Studies become the first truly global school of the environment.

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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 celebrated on November 14 (Thursday) at the Tokyo Kaikan (Chiyoda Ward, Tokyo) and the commemorative lectures by the recipients will be given the next day, on November 15 (Friday), at the United Nations University (Shibuya Ward, Tokyo).

This press release may also be viewed over the Internet on the Asahi Glass Foundation website from June 17, 2002.



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Remarks from the Award Recipients upon Being Notified of Their Selection

Dr. Harold A. Mooney

"I am deeply grateful to have been designated as one of the recipients of the Blue Planet Prize for the year 2002. It is a great honor to join the ranks of those outstanding individuals who have received this prize in past years. It is wonderful that the Asahi Glass Foundation, has seen fit to establish this award dedicated to a better global environment.

I hope that their example, a deep concern for the global environment, will be followed by all sectors of society as we move into a world with a human population that is predicted to reach as much as 10 billion people by the year 2050 with a resultant enormous impact on, and utilization of, the natural resources that sustain us all.

The past few decades has seen ever greater attention directed toward improving our local environments and in sustaining our natural resource base, but mostly in those nations with the wealth to do so. At the same time many rich nations are improving their local environments the global environment is suffering enormous changes, including climate alteration, that threaten our very well being. The Asahi Glass Foundation has wisely focused part of its resources on recognizing and alleviating this global crisis."

Mr. James Gustave Speth

"Because societies have thusfar failed to rise to the challenges of the global environment, we face a situation that is enormously difficult. The scale of the human enterprise has grown so enormous that we dominate the planet as never before. We impact hugely on its great life support systems.

Despite the seriousness of our predicament, it is far from hopeless. There are many encouraging signs. Scientific understanding is improved. Population growth is slowing, and poverty is being reduced. Technologies that can bring a vast environmental improvement are available. We are learning how to harness market forces for sustainability. International environmental law has expanded impressively. Private businesses, non-governmental organizations, and local governments the world over are taking far-reaching initiatives.

Our mission must be to press forward on all these fronts as never before. If we do, our great gift to the new generation can be a world sustained and whole.

I can hardly express my pleasure upon receiving the Blue Planet Prize. It is an honor indeed to receive this Prize from such a distinguished organization and to join the list of extraordinary individuals and organizations that have been previously recognized by you. I am deeply grateful."

Profiles of the 2002 Blue Planet Prize Recipients

Dr. Harold A. Mooney

Dr. Mooney entered the University of California at Berkeley as a political science major, but was forced to halt his studies for economic reasons and accepted a job on a freighter traveling down the west coast of the Americas. While transiting the Panama Canal, he read in a magazine about being a collector for the United States Department of Agriculture's Plant Exploration unit, which led to a major change in his career path. Dr. Mooney, who had taken a strong interest in plants through his activities in the mountains of California, was extremely attracted to an occupation in which he could both study plants and go on adventurous travels. So he transferred to the University of California's Santa Barbara campus, which had a plant ecology program.

In 1957, he researched the physiological processes of Arctic-Alpine plants over a vast natural range extending from Alaska to the Rocky Mountains. He studied photosynthesis and respiration of the plants using an infrared gas analyzer and equipment that he helped to design and was able to demonstrate the physiological basis for ecotypic differentiation by comparing the plants that were raised in controlled environments with naturally occurring plants. He showed that plants adapted their physiological processes to their local environments.

After he obtained his doctorate in 1960, he embarked on research into convergent evolution that showed that different plant species develop the same physiological characteristics in response to the same severe environments. He earned acclaim for demonstrating that similarities between different species were not limited to "form," which had already been demonstrated, but also extended to "function." He accomplished this by comparing the ecology and physiological characteristics of plants in the drought-limited Mediterranean climates in the geographically disparate California and Chilean coastal regions and Mediterranean Basin.

In the 1970s, he took a broader approach to examine not only carbon gain but carbon use by plants in an area of California ranging from the desert to the White Mountains and applied a cost-benefit approach to clarify how carbon resources are allocated to different sites in plants for photosynthesis, or various other functions. He had a significant impact on later studies into plant physiological ecology and advanced research into carbon gain and use in plants by showing in a detailed cost analysis how plants obtain carbohydrates and nitrogen, and how they distribute and store them to obtain the greatest effect with the lowest expenditure of energy.

Through these studies, Dr. Mooney showed how plant species and groups of species respond to their environments, thereby contributing to the theoretical framework of plant physiological ecology, and developed research methodologies for assessing how plants interact with their biotic environments. To date he has authored over 400 scientific books, papers and articles.

In the latter half of the 1980s, he pursued research into the effect of the invasion of different plant species on naturally occurring species under the auspices of the Scientific Committee on Problems of the Environment (SCOPE), setting up the first global evaluation of invasive plant species. He regarded the acceleration of problems related to invasive species due to increased international commerce with grave concern, recognized the need for joint research between naturalists and social scientists, and launched the "Global Invasive Species Program" with many international institutions

as partners. Through such programs, he has brought awareness to the topic of the impact of human activities upon ecosystems through species introductions.

Dr. Mooney has played an international leadership role in recent years, especially with problems related to biodiversity and global warming. In addition, he has been active in building up worldwide communities and networks of ecologists and scientists in other disciplines and arranging international conferences on the environment. He played a central role in the International Geosphere-Biosphere Program (IGBP), building up an international organization of scientists and having an influential part in setting the guidelines for the formulation of environmental policies. He has advanced numerous international research programs as Secretary General and Vice-President of the International Council for Science (ICSU). Furthermore, he is working to solicit the interest of the general public in many scientific topics through the media and other channels. As president of the Ecological Society of America he helped launch the publication of a new journal called *Ecological Applications* that is intended to make use of ecology as a useful tool for management, and worked to promote the designation of the International Biodiversity Observation Year.

Dr. Mooney has demonstrated the importance of ecological studies in the research of changes in the global environment and helped to build the foundation for the field of global ecology. Now universities around the world are establishing global ecology research departments. He continues to work toward the development of new environmental sciences that will be required for the continued existence of humankind.

Education and Academic and Professional Activities

1932	Born on June 1, in California, U.S.A
1957	Graduates from the University of California at Santa Barbara
1960	Obtains doctorate at Duke University
1960—1968	Associate Professor, University of California at Los Angeles
1968—1975	Associate Professor, Stanford University
1975	Professor, Stanford University
1976—	Paul S. Achilles Professor of Environmental Biology, Stanford University
2000—2003	Senior Fellow, by courtesy, Institute for International Studies, Stanford University

Major Awards Received

1961	Ecological Society of America, Mercer Award
1983	Merit Award, Botanical Society of America
1990	Ecology Institute Prize for Terrestrial Ecology
1991	Max Planck Research Award
1996	Eminent Ecologist Award, Ecological Society of America
2000	Nevada Medal of Science Award

Mr. James Gustave Speth

Mr. Speth was raised as the son of a farm machinery dealer in the cotton-growing area of South Carolina and after public schools there went on to graduate from Yale University with top marks in political science. Later, after studying economics as a Rhodes Scholar at Oxford University, he graduated from Yale University's law school in 1969. During the late 1960s when student movements around the world were seeking to promote public welfare, he decided to focus his energies on public interest law and to create a new non-profit legal group to defend the environment.

He enlisted a group of students and faculty at the Yale Law School and helped to establish the Natural Resources Defense Council (NRDC) in 1970. Drawing on the latest science and economic understanding, he initiated the lawsuits that led to the regulation of toxic water pollutants, the protection of freshwater wetlands, and termination of the plutonium breeder nuclear reactor program in the United States. For three decades, NRDC has had a major impact on protecting environmental quality.

After his role in NRDC was recognized, he was appointed to President Carter's Council on Environmental Quality and became the chair in 1979. At CEQ, he brought the threat of global climate change to public attention and called repeatedly for action to forestall global warming. In 1980, the Council released the landmark *Global 2000 Report*, a government survey that linked available data and computer models to analyze population, environment, and development conditions likely at the start of the 21st century. The report pointed out that in the year 2000, the global environment could face difficult prospects including population pressures, heightened pollution, and resource degradation. A second report led by Mr. Speth recommended specific strategies for alleviating these problems. *Global 2000* was widely hailed and became a fundamental reference. It generated an immense response as 1.5 million copies were sold around the world.

In 1982, he founded the non-profit research organization, the World Resources Institute (WRI), and served as its president for over a decade. The Washington-based WRI is a think tank that addresses the fundamental question of how societies can achieve development that satisfies human needs while sustaining the natural environment. WRI also provides technical guidance and assistance to governments and NGOs in developing nations interested in sustainable natural resource management. It is particularly active in policy research related to the prevention of global warming and the maintenance of biodiversity. At the Rio Earth Summit, it contributed to the adoption of important treaty articles related to both these topics. As WRI president, Mr. Speth also initiated the acclaimed *World Resources Report* series.

In 1993, he was appointed to head the United Nations Development Programme (UNDP), which has offices in more than 130 developing countries and an annual budget of over \$2 billion. The UN enlisted Mr. Speth to serve as the first chair of the United Nations Development Group and to lead the process of UN agency reform. In the *Human Development Report* released in 1994, he advocated a new concept of "human security" that included environmental security. This concept of global human security addresses common problems that threaten human safety, such as narcotics, terrorism, communicable diseases, environmental destruction, natural resource depletion, natural disasters, ethnic conflict, and refugee outflows. It stresses the need for governments to make a fundamental shift in attention from the guarantee of nuclear security to the guarantee of human security.

In 1999, Mr. Speth was appointed Dean of the Yale University School of Forestry and Environmental Studies where he is seeking to build the first truly global school of the environment and to

train a new generation of environmental leaders from around the world, goals to which he brings a wealth of experience.

Education and Academic and Professional Activities

- 1942 Born on March 4, in South Carolina, U.S.A
- 1964 Graduates from Yale University
- 1966 Graduates from Oxford University (Economics)
- 1969 Graduates from Yale University Law School
- 1970-1977 Senior Attorney for Natural Resources Defense Council
- 1977-1981 Member of U.S. President's Council on Environmental Quality
- (1979-1981 Served as Chairman of the Council)
- 1982 Establishes World Resources Institute (WRI)
- 1982-1993 President, WRI
- 1993-1999 Administrator, United Nations Development Programme
- 1999- Dean, School of Forestry and Environmental Studies, Yale University

Major Awards Received

- 1976 National Wildlife Federation's Resources Defense Award
- 1992 Natural Resources Council of America's Barbara Swain Award of Honor
- 1997 Special Recognition Award (Society for International Development)
- 1998 Decorated by the Governments of Senegal and Morocco
- 1999 Environmental Law Institute Lifetime Achievement Award

Report on the Selection Process (11th Annual Prize, 2002)

A total of 1,100 nominators from Japan and 1,400 nominators from other countries recommended 132 candidates. The fields represented by the candidates, in order of numbers, were ecology (32), atmospheric and earth sciences (26), complex fields (17), and environmental economics and policy making (16).

The candidates were drawn from 39 countries, with those from developing countries numbering 21, or 16% of the total.

At a meeting of the Foundation's Board of Directors and Councillors, the Board formally resolved to award the Prize to **Dr. Harold A. Mooney** and **Mr. James Gustave Speth** after numerous screenings by the Selection Committee under consultation with the Presentation Committee, a subcommittee of the Board.



The contents of this press release may also be viewed at the Asahi Glass Foundation's Internet web site. Please visit us on-line at:

<http://www.af-info.or.jp>

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Message to the Japanese Public

Dr. Harold A. Mooney

The human species has evolved the capacity to convert the bounty of the natural world into resources that sustain and enrich our lives. As our population has grown, and our industriousness has brought new opportunities for humankind, we are in danger of ignoring and hence damaging the natural resource base that sustains us all. We must be attentive to nurturing and sustaining the natural systems that provide the goods and services upon which we all depend. This responsibility falls upon all of us as individuals as well as the institutions that we have built. Without this close attention we are in danger of losing vital support and development capacity as well as further damaging our life support system.

Mr. James Gustave Speth

I drive my Toyota Prius, with its excellent fuel economy, to work daily. At work, I study the complexities of the Kyoto Protocol, our best hope of beginning the process of saving the global climate that sustains us. When I pause to reflect on my career, I recall the prominent role that Japan played in making the 1992 Earth Summit a success, and the leadership that Japan gave in the United Nations when I served there in the 1990s.

Despite its current economic difficulties, Japan remains a powerhouse of creativity and innovation, a source of environmental leadership and stewardship, and a force for peace and cooperation in the world.