

The World After Nuclear War

CONFERENCE ON
THE LONG - TERM WORLDWIDE
BIOLOGICAL CONSEQUENCES
OF NUCLEAR WAR

OCTOBER 31 - NOVEMBER 1, 1983
SHERATON WASHINGTON HOTEL
WASHINGTON, D.C.

CONFERENCE PROGRAM

MONDAY, OCTOBER 31, 1983

10:00 a.m.

Registration
Lobby, Cotillion
Ballroom

2:00 p.m. - 2:45 p.m. Cotillion Ballroom

WELCOME AND INTRODUCTION

George M. Woodwell
Conference Chairman
*Director, The Ecosystems Center
Marine Biological Laboratory,
Woods Hole, Massachusetts*

KEYNOTE ADDRESS

Donald Kennedy
President, Stanford University

2:45 p.m. - 3:45 p.m. Cotillion Ballroom

ATMOSPHERIC AND CLIMATIC CONSEQUENCES

Carl Sagan
*David Duncan Professor of Astronomy and
Space Sciences, and Director of the Laboratory
for Planetary Studies, Cornell University*

3:45 p.m. - 4:15 p.m. Discussion

4:15 p.m. - 4:30 p.m. Break

4:30 p.m. - 5:30 p.m. Cotillion Ballroom

BIOLOGICAL CONSEQUENCES

Paul R. Ehrlich
*Professor of Biological Sciences and the
Bing Professor of Population Studies,
Stanford University*

5:30 p.m. - 6:00 p.m. Discussion

6:00 p.m. - 8:00 p.m. Sheraton Ballroom

RECEPTION

TUESDAY, NOVEMBER 1, 1983

9:00 a.m. - 10:00 a.m. Cotillion Ballroom

PANEL ON ATMOSPHERIC AND CLIMATIC EFFECTS

Thomas F. Malone, *Moderator*
*Director Emeritus, Holcomb Research Institute,
Butler University*

Paul J. Crutzen
*Director, Max-Planck-Institute for Chemistry,
Mainz, Federal Republic of Germany*

Georgiy S. Golitsyn
*Senior Scientist, Institute of Atmospheric Physics,
Academy of Sciences of the U.S.S.R., Moscow*

John P. Holdren
*Professor, Energy and Resources,
University of California, Berkeley*

Stephen H. Schneider
*Deputy Director, Advanced Study Program,
National Center for Atmospheric Research,
Boulder, Colorado*

Richard P. Turco
Research Scientist, Marina del Rey, California

10:00 a.m. - 10:20 a.m. Discussion

10:20 a.m. - 10:30 a.m. Break

10:30 a.m. - 11:30 a.m. Cotillion Ballroom

PANEL ON BIOLOGICAL EFFECTS

George M. Woodwell, *Moderator*

Joseph A. Berry
*Staff Member, Department of Plant Biology,
Carnegie Institution of Washington,
Stanford, California*

Thomas Eisner
*Jacob Gould Shurman Professor of Biology,
Cornell University*

John Harte
*Professor, Energy and Resources,
University of California, Berkeley*

Mark A. Harwell
*Research Associate and Assistant Director,
Ecosystems Research Center, Cornell University*

11:30 a.m. - 11:50 p.m. Discussion

12:00 Noon - 1:30 p.m. Sheraton Ballroom

LUNCHEON AND CONCLUDING ADDRESS:

Walter Orr Roberts
*President Emeritus, University Corporation
for Atmospheric Research
Boulder, Colorado*

THE MOSCOW LINK

A Dialogue via Satellite between Physicists and Biologists in
Washington and Moscow. Concerning the Findings of The
Conference on the World After Nuclear War

SCHEDULE

Cotillion Ballroom
November 1, 1983

2:00 p.m. - 2:05 p.m.

Introduction

Thomas F. Malone

Chairman, The Moscow Link

2:05 p.m. - 2:15 p.m.

Atmospheric and Climatic Effects

Carl Sagan

2:15 p.m. - 2:25 p.m.

Biological Effects

Paul R. Ehrlich

2:25 p.m. - 2:50 p.m.

Moscow Panel Response

2:50 p.m. - 3:20 p.m.

Conversation among Washington and Moscow Panelists

Washington Panel: Paul R. Ehrlich, Thomas F. Malone,

Walter Orr Roberts and Carl Sagan

Moscow Panel: Physicists and Biologists (to be announced)

3:20 p.m. - 3:25 p.m.

Concluding Remarks

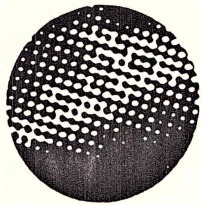
Walter Orr Roberts

End of Satellite Transmission

Financial support from the following foundations and individuals is gratefully acknowledged. At the time of this printing, these include: The Benton Foundation, Carnegie Corporation of New York, Catherine Conover, Charles Savitt, and The Topsfield Foundation.

Washington panelists participated in The Conference on the World After Nuclear War.

Members of the Conference audience are invited to remain and to observe this dialogue.



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Chairman

Carl Sagan
Physical Sciences

Peter H. Raven
Biological Sciences

Chaplin B. Barnes
Executive Director

CONFERENCE ORIGINS

The Conference on the Long-Term Worldwide Biological Consequences of Nuclear War developed more than a year ago out of the mutual concerns of scientists, environmental leaders and foundation executives.

In early 1982, environmentalists were engaged in a United Nations effort to assess progress over the previous decade in tackling the long-term threats to the global environment identified at the 1972 Stockholm U.N. Conference on the Human Environment.

However, the most serious long-term threat to the planet, nuclear war, was not among the issues under consideration; indeed it had not even been generally regarded as an environmental issue. Environmental leaders recognized this oversight, and those involved became convinced that the environmental community should take an active role in addressing this issue.

At about the same time, there was concern among scientists that such studies as had been made of the long-term environmental consequences of nuclear war were both limited in scope and outdated. (The National Academy of Sciences of the United States had issued a report, "Long-Term Worldwide Effects of Multiple Nuclear-Weapons Detonations," in 1975, and the U.S. Congressional Office of Technology Assessment had issued a subsequent report on "The Effects of Nuclear War," in 1979.)

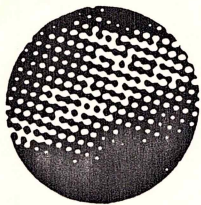
A special issue of Ambio, the International Environmental Journal of the Royal Swedish Academy of Sciences (Volume XI, Number 2-3, 1982) presented new findings and indicated new areas of concern.

Meanwhile, an independent group of scientists was conducting new atmospheric studies employing a series of physical models, and discovering that factors ignored in previous studies could well lead to unanticipated longer-term and global scale consequences. Their efforts, which culminated in a paper entitled, "Global Atmospheric Sequences of Nuclear War," became known to those already concerned and all parties agreed to work together.

In view of the dramatically important nature of the still preliminary scientific findings on atmospheric effects, decisions were made: (1) to form a Steering Committee to bring the findings, when further developed, to the attention of biologists and ecologists, who would be asked to assess the implications for planetary life and life-support systems; (2) to provide an appropriate forum for peer review of the findings of both physicists and biologists; and (3) to make the findings as widely known to the public as possible.

In the Summer of 1982, the Steering Committee of the Conference was established, a Scientific Advisory Board was created and a group of sponsoring organizations was formed. In April 1983, five days of scientific preparatory meetings were held in Cambridge, Massachusetts, involving some 100 nuclear and atmospheric physicists and biologists. As a result of those meetings the biological and physical papers to be presented at the Conference were developed and refined, respectively.

The Conference is a special project of the Open Space Institute and the Global Tomorrow Coalition, and has been funded solely by private sources. Financial support from the following foundations and individuals is gratefully acknowledged. At the time of this printing, these include: the Beldon Fund, Lillian Boehm Foundation; Columbia Foundation; The Conservation and Research Fund, The Jessie B. Cox Charitable Trust; The George Gund Foundation; John A. Harris, IV; W. Alton Jones Foundation; Ruth Mott Fund; New York Zoological Society; North Shore Unitarian Universalist Veatch Program; Ploughshares Fund; Public Welfare Foundation; Rockefeller Brothers Fund; Rockefeller Family Fund; Tortuga Foundation, and Drs. Jeremy P. and Lucy R. Waletzky.



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Chairman

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Physical Sciences

Peter H. Raven
Biological Sciences

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Mr. Robert Cahn
Journalist

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Professor of Biological Studies
and Bing Professor of
Population Studies
Stanford University

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Director
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Dr. Walter Orr Roberts
President Emeritus
University Corporation for
Atmospheric Research

Dr. Carl Sagan
David Duncan Professor of Astronomy
and Space Sciences and Director,
Laboratory for Planetary Studies
Cornell University

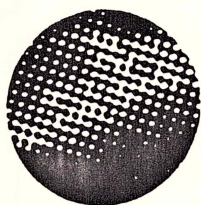
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Thomas B. Stoel, Jr., Esq.
Director, International Programs
Natural Resources Defense Council

Dr. George M. Woodwell
Conference Chairman
Director
The Ecosystems Center
Marine Biological Laboratory

Mr. Chaplin B. Barnes
Conference Executive Director



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International Union of Biological Sciences

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National Wildlife Federation

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