

#### Southern California Association of Marine Invertebrate Taxonomists

3720 Stephen White Drive San Pedro, California 90731

November 1990

Vol. 9, No.7

NEXT MEETING: Barnard Amphipod Workshop

GUEST SPEAKERS: J.L. Barnard, Smithsonian Institution

James D. Thomas, Reef Foundation Additional speakers listed below.

DATE: Monday and Tuesday, December 10 & 11, 1990,

9:30 A.M.

LOCATION: Los Angeles County Museum of Natural History

Times Mirror Conference Room (ground floor)

MINUTES FROM MEETING ON November 19, 1990

<u>Hesionidae</u>: Ron Velarde, City of San Diego hosted this month's meeting. Ron presented a key to the Hesionidae for southern California. Ron is also developing voucher sheets for <u>Podarkeopsis</u> sp. A and <u>Microphthalmus</u> sp A. Both the key to the Hesionidae and the voucher sheets will be distributed in the next edition of the newsletter.

Scaleworm Key: The scaleworm key presented at the September SCAMIT meeting has been completed and is included in this newsletter. In addition to the pictorial and verbal keys, there are voucher sheets for each provisional species listed in the key.

Another polynoid species has been added to the key since the September meeting. Two specimens of <u>Arcteobia</u> cf. <u>anticostiensis</u> were recently collected from Point Loma in 150 ft of water. If you are not careful you could mistakenly call these animals <u>Harmothoe</u> sp. B. The neurosetae are bifid and reminiscent of <u>Harmothoe</u> sp. B, however, there are two types of notosetae; capillary and stout.

FUNDS FOR THIS PUBLICATION PROVIDED IN PART BY ARCO FOUNDATION, CHEVRON USA, AND TEXACO INC.

SCAMIT newsletter is not deemed to be a valid publication for formal taxonomic purposes.

The pictorial key to the scaleworms was created using the Macintosh program Superpaint. New species may be added to the key easily to make a customized key for your specific monitoring program. Anyone interested in having a copy of the computer file for the scaleworm pictorial key may send a micro floppy disk to Ross Duggan at the following address:

Ross Duggan
Point Loma Marine Biology Laboratory
Ocean Monitoring Program
4077 North Harbor Drive MS 45A
San Diego, CA 92101

SCAMIT Christmas Party: The SCAMIT Christmas party is scheduled for Saturday evening, December 8th from 6:00 pm to 9:00 pm at the Cabrillo Marine Museum. The party is potluck style. SCAMIT will provide the entree, drinks and plates/utensils. J.L. Barnard (Santa Claus) and James Thomas will attend this year's Christmas party. If you have any questions about the party, or if you would like to help, you may contact Larry Lovell at (619) 945-1608.

Barnard Amphipod Workshop: In addition to J.L. Barnard and James Thomas there will be three additional presentations. Ron Velarde, City of San Diego will discuss Orchomene and Doug Diener, Marine Ecological Consultants Inc. will discuss Hippomedon. On Monday, December 10th Jodie Martin, L.A. Co. Mus. of Natural History, will present a talk including a film on the symbionts occurring on the giant jellyfish that appeared in the southern California waters this past summer.

<u>Spionidae Meeting</u>: Larry Lovell has requested species lists for the Spionidae (non-Polydorid) meeting scheduled for February. Please send your species lists to Larry at the following address.

> Larry Lovell 1036 Buena Vista Drive Vista, CA 92083

Telephone: (619) 945-1608

National Institute for the Environment: A proposal for the establishment of a National Institute for the Environment was received by SCAMIT and is included in the newsletter.

Zoological and Natural History Literature: If you want any literature from Donald Hahn, Natural History Books, please send him your new wish list. He is destroying the old wish lists and will be loading the new lists on a computer. He will be attending a Booksellers convention in Glendale April 27-28, 1990. His address and phone number are:

Natural History Books Box 1004 Cottonwood, AZ 86326-1004 (602) 634-5016

#### New Literature:

Fautin, D.G., A. Bucklin and C. Hand. 1989. Systematics of sea anemones belonging to genus <u>Metridium</u> (Coelenterata: Actiniaria) with a description of <u>M. giganteum</u> new species. The Wasmann Journal of Biology 47(1-2):77-85.

SCAMIT Officers: If you need any other information concerning SCAMIT please feel free to contact any of the officers.

#### Officers |

President	Ron Velarde	(619)	226-0164
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Secretary	Ross Duggan	(619)	226-8175
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"It is time for the U.S. to treat the environmental health of the nation and the planet with the same seriousness it devotes to the health of its citizens."

#### National Institutes for the Environment

Global deforestation. Mass extinction. Global climate change. Ozone depletion. Acid rain. Pollution and toxic wastes. Rapid human population growth and dwindling natural resources. We face a world in which accelerating social change and global deterioration threaten our security and very survival, especially that of our children. These changes present us with historic opportunities and challenges. Solutions to many environmental problems still lie within reach. But we cannot delay. The problems we face will grow unimaginably more difficult and costly to fix with time.

In the 1940's the United States created the National Institutes of Health to attack serious health problems like cancer and polio. NIH sponsored the pioneering research that led to many of the medical advances that we enjoy today.



Tropical deforestation in Brazil to create pasture for cattle ranching. Photo: S. P. Hubbell.

It is time for the U.S. to treat the environmental health of the nation and the planet with the same seriousness it devotes to the health of its citizens. It is time to create the National Institutes for the Environment (NIE). The NIH was created from the peace dividend at the end of World War II. The NIE can be created from the peace dividend at the end of the Cold War.

The NIE is an idea whose time has come. A broad national consensus is emerging that more effective action on the environment is needed. We do not own the Earth; we are trustees. If we do not manage the Earth wisely, our children will hold us accountable for its destruction.



# National Institutes for the Environment A Proposal

## The Proposed National Institutes for the Environment

The Unique NIE Mission -

The NIE would create a new forum for environmental scientists, managers, and policy makers in the U.S. Although the NIE would increase funding for environmental research targeted on critical problems, it would not replace existing research efforts; it would complement and strengthen them. There are many established environmental research efforts currently under way among government agencies. The critical missing link in this research has been communication and coordination among diverse scientific disciplines and particularly among scientists, environmental managers, and policy makers. The NIE would supply this missing link.

The main functions of the NIE would be to 1) sponsor environmental research via grants to universities and other qualifying research organizations; 2) increase the U.S. production of environmental scientists; 3) develop a global environmental data base and national environmental library; and 4) promote public environmental education.

Environmental research would be sponsored through competitively awarded, panel-reviewed grants to individual investigators as well as to multidisciplinary investigatory teams. The NIE would sponsor fundamental and applied research among the natural, engineering, and policy sciences. Research would focus on complex issues such as global climate change, sustainable resource use, inventory of biotic resources, habitat destruction, species extinction, and the degradation of the human environment.

#### Creation of NIE Institutes

A major focus of the NIE would be to satisfy the critical need for more research and better coordination and communication among scientific researchers, environmental managers, and policymakers. To do this the NIE would establish a number of research institutes focused on major environmental problem areas, and whose research would be targeted and coordinated through the administrative umbrella of a guiding committee that would set research targets and policy for all institutes.

#### Effects of Establishing the NIE

Through these research institutes, guided by a scientific oversight committee, the NIE would forge a new way for all stakeholders in the environment—academic and government research organizations, environmental groups, industry, and policy analysts—to work together and serve

society's environmental needs. One mechanism could be regular hearings and periodic formal reviews of institute research programs. Input from all stakeholders in the environment would be invited. This new partnership would lead to:

### Improved Environmental Research and Policy Decision-Making

The NIE would promote research among government agencies, academic institutions and industrial scientists, collaborations that currently are difficult to form under our present system of environmental research. Such collaborations would work on common high-priority projects and strengthen the partnership among scientists, managers, and policy makers.

Establishing the NIE would also improve the process of identifying and ranking problems to set a national environmental agenda. The NIE would help set uniform standards and national strategies for environmental action.

## Accelerated Progress Toward Solving Environmental Problems

The NIE would foster mission-oriented research based on its agenda of critical environmental problems. It would help determine which problems could be remedied or mitigated, and assess research progress toward solutions. It would monitor the success of practical applications in order to guide future research directions.

Finally, it would provide graduate fellowships to train the next generation of environmental scientists.

## The Need for the National Institutes for the Environment

Almost everyone today acknowledges that the environment is in trouble. Recent polls show that the environment and the economy are the top two concerns of Americans. But there is disagreement about the extent and even the nature of the problems.

We still suffer from a profound ignorance about the true state of the environment and the best ways to solve our environmental problems. This lack of understanding has hindered the nation's ability to develop and implement policy for sound environmental management and protection.

Our government cannot enact sensible and enforceable regulations unless the scientific issues are understood, the technological expertise exists, and an informed public creates the political will. The result of poorly conceived regulations based on limited or faulty data and a lack of an informed consensus is a tidal wave of environmental litigation that can cost the nation billions in wasted dollars.

Unfortunately, the nation is ill equipped to meet this environmental challenge. Few Americans are aware of the acute and growing national shortage of qualified environmental scientists. The capacity of colleges and universities to train environmental scientists is disappearing nationwide, largely because funding for programs of environmental research and training is inadequate, unstable, and fragmented. We are unprepared to manage and protect the environment because there is no one to do the work.

The U.S. needs better ways to assign priorities to environmental problems and to seek their solution. We need the National Institutes for the Environment to set the priorities, train the necessary scientists to provide the critical data, and sponsor mission-oriented research that will address the priority problems. The results of this research then need to be communicated efficiently to policy-makers and the public.

The NIE would establish a highly credible

applied environmental science agency. No present federal agency effectively sets national priorities for research and graduate training in the environmenta sciences. The NIE would seek scientific understanding of the environment without bias or preconceived notions, through competitively awarded grants. The NIE would recognize the true multidisciplinary character of environmental problems, and support the natural, social, and engineering sciences. In contrast, much current environmental research is in-house and noncompetitively awarded. Too often the research is an ad-hoc reaction to a crisis rather than a carefully planned program to understand the fundamentals of the environmental problem. As a result, environmental research today is of uneven quality and is often conducted by governme the private sector to defend or attack existing proposed regulations.

We need an agency that will quickly inform policy-makers and the public about new scientific discoveries and technological breakthroughs. The NIE will not be a regulatory agency, but will explore the policy implications of its research programs. A key feature of the NIE will be reevaluating its research progress for policy-makers and the public in a timely fashion. NIE research will speed up and improve environmental legislation, rather than be an excuse for inaction.

Finally, we need the NIE because we lack a single, coordinated source for environmental data and information. Monitoring data of vital environmental importance is reported piecemeal, or is restricted or simply unavailable. Development of a successful national and global environmental effor depends critically on having accessible and accurat information. The NIE would create a National Library for the environment, open and accessible to all, and would create and maintain a program on environmental statistics and risk assessment.

Research on Health vs. the Environment (\$ Billions)



The United States currently spends billions on health and environmental research, but most of this money is directed at improving human health. In fact, the U.S. spends about 2200% more on health research than on research to cure all environmental problems combined. This imbalance cannot continue. The graph lists total FY 1991 projected expenditures for investigator initiated research grants by each agency.

New York Times, January 25, 1990, page B9.

### The Proposed Organization of the NIE

To stimulate national discussion of the NIE concept, we propose the following organization for the agency. The NIE would house 5 problemoriented Institutes to fund extramural research and 4 Intramural Centers to provide information and management support for the Institutes.

#### Institute of Biotic Resources

The Institute of Biotic Resources would support research to inventory the biological diversity of the U.S. and the world and to explore its practical values for humanity. It would support taxonomic research and biogeographic surveys. Research topics would include the causes of extinction, methods of conserving germplasm and the maintenance of captive populations in zoos and arboreta. It would support research to discover and develop unutilized sources of useful natural products such as new medicines and pesticides

and new sources for food, fodder, fiber, firewood, timber and other products. It would also sponsor research on the economic valuation of biodiversity.

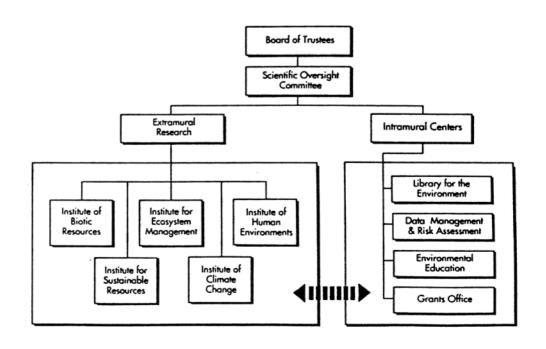
#### Institute for Ecosystem Management

The Institute for Ecosystem Management would sponsor research on the interactions of organisms with each other and with their physical environment. Research topics would include ecosystem function in natural, stressed, and managed systems, responses of plant and animal species to environmental change and the causes and consequences of habitat destruction.

#### Institute for Sustainable Resources

The Institute for Sustainable Resources would sponsor research on the sustainable exploitation of energy, land, soil, water, mineral and biotic (e.g. forest) resources. Research topics would include

Reporting to the Board of Trustees would be a Scientific Oversight Committee made up of eminent scientists selected on a rotating-term basis from each of the Institutes and from other federal agencies engaged in environmental research and management. At-large members from the public, industry, nongovernmental environmental organizations, and academic institutions would also be represented. The Committee would establish overall research policy and conduct or commission studies of environmental problems for possible adoption as targeted research areas.



sustainable agriculture and forestry, environmental engineering, restoration ecology, and energy and renewable resource engineering and policy.

#### Institute of Human Environments

The Institute of Human Environments would sponsor research on the interactions of human societies with their environment. Research topics would include pollution, waste disposal, the economics of environmental degradation and restoration, population growth in relation to

resources, conflict resolution over resources and environment, and cultural survival.

#### Institute of Climate Change

The Institute of Climate Change would support research addressing the effects of climate change on biotic systems, economic development and policy issues. It would monitor biotic responses to climate change and conduct research to anticipate the effects of climate change on ecosystems, food and agriculture.

#### The Intramural Centers

We envision a series of intramural centers in the NIE that would meet needs shared by all of the NIE institutes. We propose the following 4 centers:

- Center for Environmental Data
  Management, Risk Assessment, and
  Statistics would fill the critical need for
  a national database on the environment. It would maintain environmental monitoring records and support
  methods to catalog and inventory
  changing patterns of environmental
  use. It would also analyze trends and
  assess the hazards of environmental
  change. It would conduct economic
  and policy analyses for all the institutes
  and assist in the process of assigning
  research priorities.
- The National Library for the Environment would provide a center for information on the environment.

- It would provide information services to all NIE institutes as well as other agencies, nongovernmental institutions and the general public.
- Center for Environmental Education would support programs on environmental education to improve public and policy-maker understanding of environmental issues and options for environmental management.
- Office of Fellowships and Grants The Office of Fellowships and Grants would administer fellowships and sponsored research programs for all the institutes.



Ecologist studying the pollination system of a rare tropical tree.
Photo: S. P. Hubbell.

### The Cost of the NIE

Estimated Annual NIE Budget in 5 Years (\$ Millions)

Item	Cost
Extramural Research Grants	\$400
Graduate Fellowships and Grants	\$50
Intramural Programs and Centers	\$50
Tota	1 \$500

In comparison to military spending, the proposed annual NIE costs are modest. One to five years of full NIE support could be provided for the cost of a single Stealth bomber (\$500 million each). The possibility of an environmental catastrophe currently poses a much greater long-term threat to U.S. security and health than war. The U.S. must redirect its financial resources to the intensifying problems of the environment.

Cost estimates for the NIE are presently being prepared, but ball-park figures can be given. It is estimated that about \$100 million per year would be required as a minimum starting budget for research (\$50 million), graduate training (\$30 million), and intramural centers and administration (\$20 million). What would this \$100 million buy?

#### Fundamental and Targeted Research

A single-investigator award costs between \$100,000 to \$200,000 per year, including overhead. A multidisciplinary environmental project involving 10 senior scientists costs \$2.5 million per year. Thus \$50 million would buy between 250-500 individual-investigator grants, or 10-25 teams of scientists working on multidisciplinary projects, or some combination of individual investigators and research teams. If we assume that there are 10 broad fields of environmental research supported by the NIE, then we can fund at most 25-50 grants per field per year, depending upon the mix of awards to individual scientists and interdisciplinary teams.

#### Training More Environmental Scientists

Today the cost of training one environmental post-graduate scientist through the Ph.D. degree is between \$12,000-\$25,000 per year (tuition plus stipend, excluding research costs), or a total of \$48,000-\$125,000 per Ph.D. Assuming a 4-5 year degree program, a funding level of \$30 million per year would produce 240-600 new Ph.D.'s per year, with a standing number of about 1200 students in the pipeline. Assuming there are 10 broad fields of environmental research supported by the NIE, then we can produce at most about 24-60 new Ph.D.'s per field per year.

## Intramural Centers and Administrative Costs Central to the function of the NIE are the intramural centers, including the library for the

environment, the environmental data center, and the education center. These centers and administrative offices should be located in the Washington, DC area. The startup cost of these operations is about \$20 million per year, exclusive of new construction and equipment costs.

#### Projected Costs of the NIE in 5 Years

The figures above are ball-park minimal startup costs. They fall short of the funds that the NIE will need to train the numbers of environmental scientists that will be required to monitor the environment and solve environmental problems. The NIE will also need funding to support the research of these newly trained scientists in the coming decade. We estimate that the budget of the NIE will grow to about \$500 million per year within 5 years (table at left).

#### Where Will the Money Come From?

If the U.S. hopes to deal effectively with environmental problems, new federal money must be allocated to solving them. The estimated costs of the NIE (\$100-\$500 million) are very modest by health research (\$5.5 billion) or military (\$200 + billion) standards.

One source of new money comes from the present collapse of the Cold War. This presents the U.S. with an historic opportunity to redirect funds towards solving serious environmental problems. What better time is the nation likely to have than now to create the NIE?

The NIE could also be chartered as partpublic and part-private institution, creating opportunities for nongovernmental endowment support, as has been done with the Smithsonian Institution. This approach would help to foment the partnership among industry, government, and academic institutions on research to solve environmental problems. We, the undersigned individuals and organizations, call for serious study of the NIE concept by Congress and the National Academy of Sciences.

Dr. Stephen P. Hubbell, Co-Chairman NIE Committee, Princeton University

Dr. Henry F. Howe, Co-Chairman NIE Committee, University of Illinois

Dr. Dean Abrahamson, Humphrey Inst. for Public Affairs. Univ. of Minnesota

Dr. A. Karim Ahmed, Environ Corp.

American Institute of Biological Sciences Audubon Society

Dr. Kamal Bawa, Chairman, Biology University of Massachusetts

Dr. Fakhri Bazzaz, Biology, Harvard Univ

Dr. Barbara Bentley, Biology SUNY at Stonybrook

Dr. Brent Berlin, Anthropology University of California Berkeley

Sen. Bill Bradley, N1

Dr. James H. Brown, Univ. of New Mexico

Lester R. Brown, Director Worldwatch Institute

Dr. Clayton Callis.

Dr. Michael Clegg. Botany University of California Riverside

Conservation International

Dr. Walter H. Corson, Director Global Tomorrow Coalition

Dr. Vincent Covello, Public Health mbia University

Dr. John C. Crowley, Vice President Association of American Universities

Dr. Hugh Dingle, Entomology University of California Davis

Dr. Paul Ehrlich, Director, Center for servation Biology, Stanford Univ.

Mohamed T. El-Ashry, Vice President World Resources Institute

Environmental Defense Fund

Dr. Scanley Faeth, Zoology Arizona State University

Dr. J. Farnsworth, Pharmacy University of Illinois

Dr. Chris Field, Carnegie Inst., Stanford

Dr. Jerry Franklin Forestry, Univ. of Washington

Dr. Paul Friesma, Political Science Northwestern University

Dr. David Glenn-Lewin, Chairman, Borany Lowa State University

Dr. K. Elaine Hoagland, Executive Director Association for Systematics Collections

Dr. Richard Holmes, Biology Darrmouth College

Dr. Robert Holt, Natural History Museum University of Kansas

Dr. Makcolm Gillis, Vice Chancellor Duke University

Dr. Bernard Goldstein, Dir., Environ. and Occu. Health Sciences Inst., Rutgers Univ.

Dr. George Gorman, Center for Conservation Biology, Stanford University

Dr. Stephen 1. Gould. President. Society for the Study of Evolution, Harvard Univ.

Edward Groeh III Consumers Union, Vernon, NY Dr. Jonathan Haas, Vice Pres. for Research Field Museum. Chicago

Dr. John Hart, Univ. of Calif. Berkeley Joseph H. Highland, Pres., Environ Corp.

Dr. Theodore Hullar, Chancellor University of California Davis

Dr. Hugh Ilris Director, Herbarium University of Wisconsin

Sen. Frank Lautenberg, NJ

Dr. Paul L. Leath, Provost, Rutgers Univ

Dr. Simon Levin, Ecology and Systematics Cornell University

Dr Daniel Janzen, Univ. of Pennsylvanua

Dr. Leslie K. Johnson, Ecology and Evolutionary Biology, Princeton Univ.

Dr. William Jordan, Pres., Society for Restoration Ecology, Univ. of Wisconsin

William J. Kleinfelter National Wildlife Federation

Drs. Diana and Mitton Lieberman, Biology University of North Dakota

Dr. Eugene Likens. Dir.. Inst of Ecosysten: Studies, NY Botanical Garden

Dr. Orie Loucks. Biology, Miami Univ.

Dr. Thomas Lovejov, President Society for Conservation Biology

Dr. Jane Lubchenco, Chairman, Biology Oregon State University

Dr. John Magnuson, Center for Limnology University of Wisconsin

Dr. Robert J. Mason. Georgraphy and Urban Studies. Temple University

Dr. John Matson, Director, Office of Operations Tech., Johnson & Johns Michael McCloskey, Chmn., Sierra Club

Dr. I. Kenneth Mitchell, Chairman Geography, Rutgers University

Dr. Thomas Mitchell-Olds University of Montana

Dr. J. Peterson Myers, Director W. Alton Jones Foundation

Dr. Russell Mittermeier, President Conservation International

Dr. Gary Nabhan Desert Botanical Garden, Phoenix

Natural Resources Defense Council, NY National Association of State Universities

and Land Grant Colleges Dr. Gordon Orians, Director, Institute for

nental Studies, Univ. of Washington

Dr. Theodore Panayotou, Institute for Int'l

Development, Harvard University Glenn Paulson, Center for Hazardous Waste Management, Inst. of Tech., Chicago

Dr. Robert Pearcy, Botany University of California Davis

Dr. Stuart Pimm, Zoology University of Tennesse

Dr. William Platt, Louisiana State Univ.

Rafe Pomerance, World Resources Inst.

Dr. Ghillean Prance, Director The Royal Botanical Gardens, Kew, UK Dr. George Rabb. Director Brookfield Zoo. Chicago

Dr. Robert Repetto, World Resources Inst. William J. Roberts, Environ Detense Fund

Dr. Richard Rockwell Social Science Research Council

Ren. Robert A. Roe. XI.

Dr. Daniel Rubenstein, Ecology and Evolutionary Biology, Princeton University

William D. Ruckelshaus, Chairman Browning-Ferris Industries, Houston

Dr. Peter Saie, Chairman, Biology University of New Hampshire

Rep. H. James Suzzon, N.J.

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Rep. Claudine Schneider, RI

Dr. Stephen H. Schneider, National Center for Atmospheric Research Sierra Clul:

Dr. John Silander, Ecology University of Connecticut

Society for Conservation Busings

Society for Economic Botany Society for Study of Evolution

Dr. Robert Socolow, Director, Inst. for Energy and Environ. Studies, Princeton U.

Dr. Michael Soule, Chairman Environ. Studies. U. of Calit. Santa Crax.

Dr. John Spears, World Bank Gustave Speth. President

World Resources Institute

The Wilderness Society Dr. Daniel Thompson, Biology

University of Nevada Dr. Graham A. Tobin, Geography University of Minnesota

Dr. Diana Tomback, Environ. Studies University of Colorado

Dr. Joseph Travis, Biology Florida State University

Russell Train, Chairman, World Wildlife Fund/Conservation Foundation

University of California System

Dr. Konrad von Moltke Dartmouth College

Dr. Frederic Wagner, Pres., Asso. of Ecosystem Research Ctrs. Utah State Univ.

Dr. David Wake, Director, Museum of Vert. Biology, Univ. of Calif. Berkeley

Jacqueline M. Warren Natural Resources Defense Council

Dr. Patrick Weber, Dir., Kellogg Biological Station, Michigan State University

Dr. Leonard Weinstein, Director Ecosystem Research Ctr., Cornell Univ.

Dr. John Weins, Zoology Colorado State University

Dr. Edward O. Wilson, Museum of nparative Zoology, Harvard Univ.

Dr. Julian Wolpert, Woodrow Wilson School, Princeton University

World Wildlife Fund Conservation Edtn. Charles Zeigler, CIBA GEIGY Corp. NY Creation of the National Institutes for the Environment.

National and global environmental change will be a dominant issue that shapes the economic and geographic agendas of the next century. The National Institutes for the Environment will help guide the nation and the world to a more secure and sustainable relationship between humanity and the global environment. Through an innovative feedback of science and policy development, and sponsorship of individual research and multidisciplinary task forces, the NIE will assign environmental priorities, focus research, develop policy and educate the public on environmental problems of immense practical significance to human progress. A commitment to the NIE will be a legacy for the 21st century of which the nation can be proud and for which the community of nations will be grateful.

For further information on the NIE, contact:

Dr. Stephen P. Hubbell Department of Ecology and Evolution Biology Princeton University Princeton, NJ 08544 Tel: 609-258-6797 Fax: 609-258-5323

Dr. Henry F. Howe Biological Sciences (M/C 066) University of Illinois

Box 4348 Chicago, IL 60680

Tel: 312-996-0666 Fax: 312-996-2017

Dr. David E. Blockstein, Director NIE Committee-Washington Office

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rom: Henry F. Howe, Bios (M/C 066), UIC, Box 4348, Chicago 60680

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HUBBELL RECEIVES AWARD & HEADS SOUTH, HOWE HEADS COMMITTEE

NIE Committee co-chair Steve Hubbell has escaped to Panama Smithsonian Tropical Research Institute) for the fall semester here he will write a book on tropical forest dynamics. Dr. ubbell was selected as a Conservation Fellow by the Pew Charitable rust. His three-year award of \$50,000 per annum will help support IE activities. Co-chair Hank Howe will head the NIE Committee ntil Hubbell's return in January. Before leaving, Steve printed new brochure, which is enclosed.

#### . WASHINGTON OFFICE OPENS; BLOCKSTEIN HIRED AS DIRECTOR

The NIE Committee has opened a Washington DC office in space rovided by the American Institute of Biological Sciences (AIBS). he office will act as a national clearinghouse for the NIE nitiative. It will also conduct a study of the state of the human esources and funding patterns in environmental sciences. Dr. avid E. Blockstein, a conservation ecologist, has been hired as irector of the Washington office. Dr. Blockstein was the 1987-988 Congressional Science Fellow of the AIBS and the American ociety of Zoologists, and prepared the national biodiversity bill. ost recently he was a project associate on women and minority ssues for AIBS. He is exceptionally well-connected, and we are ery fortunate to have him.

NIE correspondence should be directed to Dr. David lockstein: AIBS, 730 llth St. NW, Washington DC 20001-4521; phone 202)628-4303; FAX (202)628-4311.

#### . NIE COMMITTEE INCORPORATED; tax-deductible status applied for.

The Committee for the National Institutes for the Environment as been incorporated as a non-profit charitable organization in the District of Columbia. The Committee has applied for status as tax deductible 501(c)3 charity, which will allow contributions to be tax-deductible from the moment of application. (Contributors an receive a refund if the application is denied.)

#### . HEALEY HIRED TO HEAD FUNDRAISING EFFORTS

Dr. Marcus J. Healey, an environmental scientist with training n ecology and engineering, has been hired to coordinate undraising efforts and to provide liaison with the physical and ingineering sciences. Dr. Healey is working out of Steve Hubbell's

office at Princeton, phone (609)258-6797, FAX' (609)258-1712.

#### 5. NIE COMMITTEE SEEKS OPERATING FUNDS

WE NEED YOUR HELP TO PROVIDE INITIAL OPERATING FUNDS FOR THE NIE OFFICE. Presently all money received through a contract with the EPA, through the U. of Illinois, and from the Pew Conservation Fellowship goes to salary. AIBS is providing us with facilities, but we must pay for expendable supplies such as postage, FAX, phone calls, photocopying, and brochures. We also need money to support interns and hire a secretary for the Washington office.

He are asking every NIE supporter to contribute \$25 - \$50 (or whatever you feel capable of donating) to cover initial operating expenses. Contributions of this nature should carry us through the next few months while we pursue larger and more long-term funding arrangements from universities, foundations, and corporations. All contributions to the NIE Committee or to AIBS designated for NIE are tax-deductible, and should be addressed to Dr. Blockstein at the Washington address. THANK YOU.

#### 6. LEGISLATIVE PROGRESS TOWARDS NAS STUDY

There is little likelihood of early passage of legislation to elevate the EPA to cabinet status; the relevant Senate bill is stalled. Separate legislation calling for a National Academy of Sciences study of the NIE concept has been introduced in the House (H.R. 5341) and Senate (S. 2371). S. 2371, sponsored by Sen. Bradley (D-NJ) has been approved in committee. The House bill sponsored by Reps. Saxton (R-NJ), Roe (D-NJ), Scheuer (D-NY) and Schneider (R-RI) must be approved by the Science Committee, which approved similar language as an amendment to the House "EPA elevation" bill last spring. For action this session, both bills must be placed on their respective House and Senate calendars for a non-controversial voice vote before ajournment. However, the EPA is likely to fund the NAS study even in the absence of legislation; the Senate appropriations bill has a line item for the NIE study.

We have heard rumors that the EPA is not likely to fund this study. The EPA has been extraordinarily helpful; our problem is the budget crisis and the possibility of Gramm-Rudman-Hollings sequestration - not any rumored difficulty with EPA.

#### 7. RESEARCHERS NEEDED TO ASSIST IN NIE-RELATED STUDIES

We are looking for researchers to conduct studies of the state of the environmental sciences in the U.S., funding patterns in environmental science disciplines, and the effectiveness of government support for environmental research. These studies may be ideal for students who are looking for senior theses related to science and environmental policy. The results of such studies could be useful to the NAS in their study and to the NIE Committee in filling the terms of our contract with EPA. Contact David Blockstein at the Washington office for details.

#### 8. SCIENTIFIC SOCIETIES CONTACTED

We have sent a mailing to the business offices of some 700 scientific societies with an interest in environmental research. The mailing informs each society about NIE; asks for advice; asks for an official liaison; asks for information about the status of funding and human resources in their discipline; and asks for an endorsement of the NIE concept. Please contact officers of your societies and ask them to respond favorably to this request.

#### 9. SEEKING NAMES FOR NIE MAILING LIST

Thanks you for sending names of your colleagues to be included on the NIE mailing list. PLEASE send us more names, especially of colleagues in non-biological environmental disciplines in the natural and social sciences. Send the names to me at the Chicago office where our master mailing list is presently maintained.

#### 10. CORRECTION REGARDING THE ECOLOGICAL SOCIETY.

In an attempt to be brief in the last newsletter, I stated "ESA has endorsed NIE". Actually ESA has formally endorsed the NAS study of the NIE concept. Sorry for the confusion.

#### 11. POSTER DISPLAY AVAILABLE FOR MEETINGS

Miriam Van Zant has prepared a poster display including art and photography for use at meetings; it has been used at the American Institute of Biological Sciences and at the Missouri Botanic Gardens Symposium (37th Annual). The components can be pinned to a poster board; we can lend them if we have sufficient notice to update material. We would appreciate help with \$50 shipping costs (each way). Write to Miriam at the Chicago address.

#### 12. SURVEY OF NIE ACTIVITY ENCLOSED - PLEASE RESPOND

Attached is a survey asking for your assistance in specific NIE-related activities. Please fill out this form and return it to the Washington office.

THANK YOU.

#### SURVEY OF NIE ACTIVITY

PLE	ASE FILL OUT AND RETURN TO:	Your	name and	d address:
COM 730	DAVID BLOCKSTEIN MITTEE FOR THE NIE 11TH ST. NW			
WAS	HINGTON, DC 20001-4521	Phone	:	Fax:
Sta	must determine our strength in d tes; we must know what people are demic disciplines. Would you be e to, help the NIE effort in the	doing, or willing	r will d	lo in various nave you beer
			Have do	ne Will do
1.	Distribute NIE information to cowithin your department.	lleagues		
2.	Advocate NIE to your Chair or Hea	ıd?		
3.	Distribute NIE information to coin other departments in your inst			<del>-</del>
4.	Distribute NIE information to coin other institutions?	lleagues		
5.	Ask your office of research and oment, chancellor, president, or cappropriate administrative office request support of NIE from the Rand Senate delegation from your services.	other er to House		
6.	Contact your Representative and S yourself?	Senators		
7.	Request support for the NAS study professional societies?	from		
8.	Request endorsement of the NIE confrom professional societies?	oncept		
9.	Assist with fund-raising:			
	a. Help write proposals		-	
	b. Contact potential donors			
	c. Other			
	EASE SEND COPIES OF THE BROO			
A C	HECK FOR \$ IS ENCLOSED AS A R OFFICE AND PRINTING EXPENSES.	TAX-DEDU	CTABLE C	CONTRIBUTION