

## A Leap for All Life: World's Leading Scientists Announce Creation of "Encyclopedia of Life"

Biodiversity, Science Communities Unite Behind Epic Effort To Promote Biodiversity, Document All 1.8 Million Named Species on Planet

WASHINGTON (May 9, 2007) – Many of the world's leading scientific institutions today announced the launch of the Encyclopedia of Life, an unprecedented global effort to document all 1.8 million named species of animals, plants, and other forms of life on Earth. For the first time in the history of the planet, scientists, students, and citizens would have multi-media access to all known living species, even those that have just been discovered.

The Field Museum, Harvard University, Marine Biological Laboratory (Woods Hole), Smithsonian Institution, and Biodiversity Heritage Library joined together to initiate the project, bringing together species and software experts from across the world. The Missouri Botanical Garden has become a full partner, and discussions are taking place this week with leaders of the new Atlas of Living Australia. The Encyclopedia today also announced the initial membership of its Institutional Council, which spans the globe, and whose members will play key roles in realizing this immense project. An international advisory board of distinguished individuals will also help guide the Encyclopedia.

The effort is spurred by a \$10 million grant from the John D. and Catherine T. MacArthur Foundation and \$2.5 million from the Alfred P. Sloan Foundation, and will ultimately serve as a global beacon for biodiversity and conservation.

"The Encyclopedia of Life will provide valuable biodiversity and conservation information to anyone, anywhere, at any time," said Dr. James Edwards, currently Executive Secretary of the Global Biodiversity Information Facility who today was officially named Executive Director of the Encyclopedia of Life. "Through collaboration, we all can increase our appreciation of the immense variety of life, the challenges to it, and ways to conserve biodiversity. The Encyclopedia of Life will ultimately make high-quality, well-organized information available on an unprecedented level. Even five years ago, we could not create such a resource, but advances in technology for searching, annotating, and visualizing information now permit us, indeed mandate us to build the Encyclopedia of Life."

Over the next 10 years, the Encyclopedia of Life will create Internet pages for all 1.8 million species currently named. It will expedite the classification of the millions of species yet to be discovered and catalogued as well. The pages, housed at <a href="https://www.eol.org">www.eol.org</a>, will provide written information and, when

available, photographs, video, sound, location maps, and other multimedia information on each species. Built on the scientific integrity of thousands of experts around the globe, the Encyclopedia will be a moderated wiki-style environment, freely available to all users everywhere.

"The Encyclopedia of Life will be a vital tool for scientists, researchers, and educators across the globe, providing easy access to the latest and best information on all known species," said Jonathan F. Fanton, President of the John D. and Catherine T. MacArthur Foundation. "Technology is allowing science to grasp the immense complexity of life on this planet. Sharing what we know, we can protect Earth's biodiversity and better conserve our natural heritage."

"For more than 250 years, scientists have catalogued life, and our traditional catalogues have become unwieldy," said Ralph E. Gomory, President of the Alfred P. Sloan Foundation. "The Encyclopedia of Life will provide the citizens of the world a 'macroscope' of almost unimaginable power to find and create understanding of biodiversity across the globe. It will enable us to map and discover things so numerous or vast they overwhelm our normal vision."

Scientists began creating individual web pages for species in the 1990s. However, Internet technology needed to mature to allow fast and efficient creation of a comprehensive Encyclopedia. While specific Encyclopedia of Life efforts, including the scanning of key research publications and data, have been underway since January 2006, work has accelerated due to the support provided by the John D. and Catherine T. MacArthur Foundation and the recent discussion of the Encyclopedia of Life by renowned biologist Edward O. Wilson at the March 2007 Technology, Entertainment, Design (TED) Conference.

One of the world's foremost scientists and environmentalists, Wilson, professor emeritus at Harvard University, "wished" for the establishment of the Encyclopedia of Life during his TED Conference address. Noting that "our knowledge of biodiversity is so incomplete that we are at risk of losing a great deal of it before it is ever discovered," Wilson called for a contemporary, dynamic portrait of the living Earth.

"I wish that we will work together to help create the key tool that we need to inspire preservation of Earth's biodiversity: the Encyclopedia of Life," Wilson said at TED. "What excites me is that since I first put forward this idea, science has advanced, technology has moved forward. Today, the practicalities of making this encyclopedia real are within reach as never before."

Ultimately, the Encyclopedia of Life will provide users the opportunity to personalize the learning experience through its "my eol" feature. The site can be made available in all major languages and will connect scientific communities concerned with ants to apples to zebras. As part of its work, the Encyclopedia of Life will collaborate and partner with a wide range of organizations, individuals, and experts to help strengthen the Encyclopedia and its impact on communities throughout the world.

"The solidarity of the U.S. and global communities for the Encyclopedia of Life is tremendously exciting and lifts my confidence that this vast, romantic global effort will succeed," Edwards said. "We are also encouraged by the declaration in March 2007 by the environment ministers of the G8 nations to foster a global species information system."

While initial work will emphasize species of animals, plants, and fungi, the design can be extended to encompass microbial life.

To provide depth behind the portal page for each species, the Biodiversity Heritage Library (BHL), a consortium that holds most of the relevant scientific literature, will scan and digitize tens of millions of pages of the scientific literature that will offer open access to detailed knowledge. In fact, the BHL now has scanning centers operating in London, Boston, and Washington DC, and has scanned the first 1.25 million pages for the Encyclopedia.

"I dream that in a few years wherever a reference to a species occurs on the Internet, there will be a hyperlink to its page in the Encyclopedia of Life," concluded Edwards.

## ABOUT THE ENCYCLOPEDIA OF LIFE

The Encyclopedia of Life is a collaborative scientific effort led by the Field Museum, Harvard University, Marine Biological Laboratory (Woods Hole), Missouri Botanical Garden, Smithsonian Institution, and Biodiversity Heritage Library, a consortium including the core institutions and also the American Museum of Natural History (New York), Natural History Museum (London), New York Botanical Garden, and Royal Botanic Garden (Kew). Ultimately, the Encyclopedia of Life will provide an online database for all 1.8 million species now known to live on Earth. When completed, <a href="https://www.eol.org">www.eol.org</a> will serve as a global biodiversity tool, providing scientists, policymakers, students, and citizens information they need to discover and protect the planet and encourage learning and conservation.

## ABOUT THE JOHN D. AND CATHERINE T. MacARTHUR FOUNDATION

The John D. and Catherine T. MacArthur Foundation is a private, independent grantmaking institution dedicated to helping groups and individuals foster lasting improvement in the human condition. Through the support it provides, the Foundation fosters the development of knowledge, nurtures individual creativity, strengthens institutions, helps improve public policy, and provides information to the public, primarily through support for public interest media. With assets of over \$6 billion and grants totaling \$225 million annually, MacArthur is one of the nation's largest private philanthropic foundations. For more information please visit <a href="www.macfound.org">www.macfound.org</a>.

## ABOUT THE ALFRED P. SLOAN FOUNDATION

The Alfred P. Sloan Foundation, established in 1934, makes grants in science, technology, and the quality of American life. Major science initiatives of the Foundation in recent years include the Sloan Digital Sky Survey (the most ambitious astronomical survey ever undertaken, to provide detailed optical images covering more than a quarter of the sky and a 3-dimensional map of about a million galaxies and quasars); the Census of Marine Life (a decade-long program to culminate in 2010 to assess and explain the diversity, distribution, and abundance of ocean life from microbes to mammals); and the Barcode of Life Initiative (to develop short DNA identifiers for all plants, animals, and fungi). For more information please visit <a href="https://www.sloan.org">www.sloan.org</a>.