

# Life



Life is beautiful. Life is complex. Life is fragile.

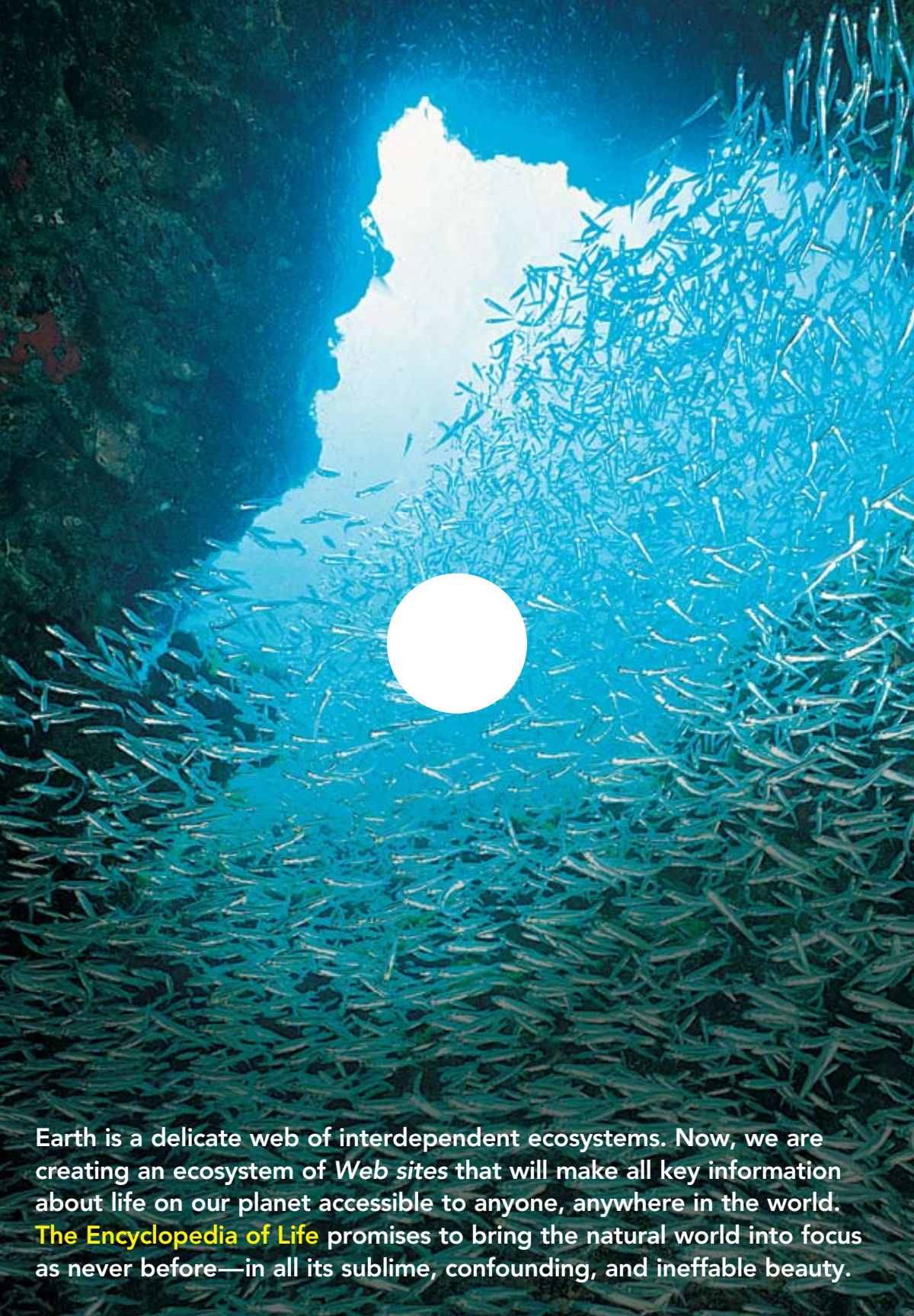


Photo: Jon Chase/Harvard

One of the world's foremost scientists and environmentalists, **Edward O. Wilson** has been a leading proponent of the Encyclopedia of Life. Addressing the 2007 Technology, Entertainment, Design (TED) Conference, Wilson called for a global effort to create a contemporary, dynamic portrait of the living Earth—a "key tool" to inspire biodiversity preservation. "What excites me," he added, "is that since I first put forward the idea, science has advanced, technology has moved forward. Today, the practicalities of making this encyclopedia real are within reach as never before."



Encyclopedia of Life



Earth is a delicate web of interdependent ecosystems. Now, we are creating an ecosystem of *Web sites* that will make all key information about life on our planet accessible to anyone, anywhere in the world. **The Encyclopedia of Life** promises to bring the natural world into focus as never before—in all its sublime, confounding, and ineffable beauty.

# Encyclopedia of Life

**What is EOL?** The Encyclopedia of Life will provide anyone in the world—scientists, educators, students, and ordinary citizens—a “macroscope” of almost unimaginable power.

In essence, EOL will offer a multimedia Web page for each of the approximately 1.8 million known species on Earth—all through a single, free portal. In addition, it will offer resources to expedite the classification of the millions of species yet to be discovered.

EOL will be a moderated, wiki-style environment. This format encourages anyone with curiosity about the living world to become a roving field reporter.

**Why EOL now?** EOL is a project driven by both innovation and urgency.

Advances in technology for searching, annotating, and visualizing data now make it practical for EOL to offer high-quality, well-organized information on an unprecedented scale. When available, text will be complemented by photographs, video, sound, location maps, and other media.

Ultimately, EOL’s purpose is to transform our collective understanding of life on Earth. With countless species going extinct before we can even glimpse them, we must safeguard the richest possible spectrum of biodiversity. EOL will increase our appreciation for the immense variety of life and the challenges to it. It will inspire new generations of scientists and stewards of the environment.

**Built for a world of users.** EOL will be a source for accurate and relevant information for people of all ages and backgrounds. Eventually, EOL will provide users with the opportunity to personalize the learning experience through a “My EOL” feature.

**Bringing EOL to life.** This project is a collaboration of several of the world’s leading natural history institutions and research facilities, including the Smithsonian Institution, the Field Museum, Harvard University, the Marine Biological Laboratory, Missouri Botanical Garden, and the Biodiversity Heritage Library consortium.

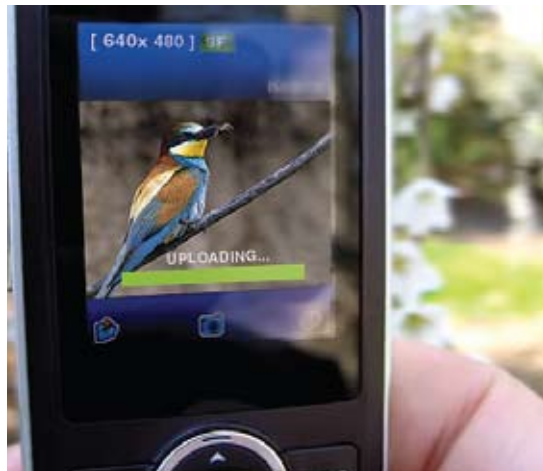
Other institutions in the United States and around the world have been invited as collaborators, and links have already been established with many relevant efforts (such as the Global Biodiversity Information Facility, FishBase, Tree of Life Web, Catalogue of Life, and AmphibiaWeb).

The cost for the first five-year phase of the Encyclopedia of Life is estimated at \$50 million. Although much of this money needs to be raised, the initial stages of the project are made possible by generous funding from the John D. and Catherine T. MacArthur Foundation and the Alfred P. Sloan Foundation. Please visit their Web sites: [www.macfound.org](http://www.macfound.org) and [www.sloan.org](http://www.sloan.org).



## How you can be part of EOL

- Visit [www.eol.org](http://www.eol.org) to see species pages, videos, and more.
- Join our electronic mailing list to receive updates and quarterly newsletters.
- Participate in the EOL forum at [www.eol.org/forum/](http://www.eol.org/forum/) Post your comments and see what others have said about the project.



EOL users will have free, on-demand access to the world’s most expansive collections of scientific records and literature.

# The richness of life at your fingertips.

Currently, information on the estimated 1.8 million living species is scattered around the world in libraries, museums, herbaria, databases, and other storehouses of expert knowledge. The Encyclopedia of Life has the goal of a "one-stop knowledge shop" that will provide access to information for every living thing.

The name can be shown as a common name, as here, or as the Latin name. As the project proceeds, a click here will lead to more information about the name.

This panel shows images, videos (including animations) or distribution maps from expert sources, and shows the source and conditions under which you may use this information.

Use this slider to select the amount of information you wish to see.

Select, from different sources, descriptions and information about evolution, ecology, or distribution; or access the Biodiversity Heritage Library. The information available will increase as contributions are made.

The screenshot shows the EOL website interface for the Atlantic Cod. At the top, there is a navigation bar with 'LANGUAGE: EN', 'FEEDBACK', 'PRESS ROOM', 'USING THE SITE', and 'ABOUT EOL'. Below this is a search bar with the text 'NAME SEARCH' and a 'Find' button. The main heading is 'ATLANTIC COD' with the scientific name 'Gadus morhua' below it. There are tabs for 'COMMON NAME', 'LATIN NAME', and 'VOICE'. A large image of the Atlantic Cod is displayed on the left. To the right of the image is a 'CLASSIFICATION' tree showing the hierarchy from Kingdom to Genus. Below the image is an 'OVERVIEW' section with a 'TABLE OF CONTENTS' on the left and a main text area. The 'TABLE OF CONTENTS' includes links for Overview, Introduction, Description, Ecology and Distribution, and Conservation. The 'OVERVIEW' section contains a 'STATUS' indicator, a 'SOURCE' link, and a detailed description of the species. At the bottom right, there is a 'RELATED' section with links to other species like 'Gadus macrocephalus' and 'Gadus aoteanus'.

Customize your experience and find out more about the project.

See how this species is classified, browse through a classification using either names or diagrams. EOL currently uses the Catalogue of Life classification with about 1 million species, but additional classifications will be available in the future.

Discover taxonomically related species or explore the wealth and richness of life.



The enterprise of cataloging Earth's 1.8 million species is just beginning.



# EOL Component Groups

**The Species Sites group**, based at the National Museum of Natural History, Smithsonian Institution, works with the scientific community to develop entry-level species pages for all the 1.8 million known and named species. These species pages are at the heart of the EOL. Each site consists of an entry-level page, designed for the general public, and more specialized resources for particular audiences. This group also recruits experts from the scientific community to act as “curators” to ensure that the information on each page is up-to-date and correct.

**The Biodiversity Informatics group**, housed at the Marine Biological Laboratory, is developing the software to seamlessly move data into the species pages. Unique tools will help the group capture, organize, and reshape knowledge of biodiversity. EOL visitors will also have advanced search capabilities and the ability to personalize the species pages based on the information they seek.

**The Scanning and Digitization group** managed by the Biodiversity Heritage Library consortium is digitizing and indexing the biodiversity literature held in major natural history museums, botanical gardens, and other repositories. This historical documentation of the earth’s biosphere will be made freely available to anyone, anywhere to search, read, and download. The digitized literature will be especially valuable to individuals in developing countries who do not have access to comprehensive libraries.

**The Biodiversity Synthesis group** works from its base at the Field Museum to develop tools and procedures for searching across and mining information from large numbers of species pages. This will lead to the synthesis of new knowledge about biodiversity and the evolution of life. The group will also forge links among diverse communities of researchers and users to demonstrate how the EOL can be a tool for improved conservation of the planet.

**The Education and Outreach group**, based at Harvard’s Museum of Comparative Zoology, seeks to explore and promote the EOL’s use in schools and universities and for citizen science. It will also collaborate with “informal education” groups, such as natural history museums and nature centers to show how the EOL can extend learning beyond classroom walls. Citizen scientists are another important partner for the EOL, helping to provide species data and information while at the same time reaching out to other interested individuals and groups through the EOL networks.