

**MEMORANDUM OF UNDERSTANDING**  
Between  
The Smithsonian Institution  
And  
The Regents of the University of California

**The Parties**

This Memorandum of Understanding ("MOU" or "Agreement") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_ 2008, by and between THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, a California corporation acting on behalf of its Berkeley Natural History Museums, University of California, Berkeley ("University"), and THE SMITHSONIAN INSTITUTION ("Smithsonian") acting on behalf of The Encyclopedia of Life ("Encyclopedia of Life" or "EOL").

**Introduction**

The University's Biodiversity Sciences Technology group ("BSCIT") develops web-based, database-driven software systems for biological and natural history museum collections, biodiversity science projects, and other research projects. BSCIT's online software system enabling anyone with a Web browser to search and retrieve information relating to amphibian biology and conservation is AmphibiaWeb, and BSCIT's online image database specializing in natural history subjects is CalPhotos.

The Encyclopedia of Life serves as an online reference source and database and seeks to include a web site for each of the species named and known on Earth, and to make these web sites accessible through a single portal. EOL desires to include access to the University's AmphibiaWeb program ("AmphibiaWeb"), and the University desires to furnish such access to its AmphibiaWeb.

This Memorandum of Understanding provides the basis for the Encyclopedia of Life and AmphibiaWeb to work together to develop and share information and informatics tools facilitating the dissemination of knowledge about conservation, declines and extinctions, distribution, systematics, and life history of amphibian species worldwide. In particular, AmphibiaWeb will allow the Encyclopedia of Life to access and incorporate information from its species lists and accounts, and will provide amphibian images via a University of California CalPhotos web service. In return, AmphibiaWeb will gain access to the resources of the Encyclopedia of Life, including species pages, scanned literature, and informatics tools. In addition, EOL and AmphibiaWeb will continue to collaborate on the development of shared software tools, procedures and protocols, including a synonymy server to facilitate searches for species that have undergone name changes.

**AmphibiaWeb** is the world's premier source for information on amphibian conservation, declines, and natural history, providing on-line access to an ever-growing data base currently containing complete taxonomic summaries, more than 11,000 photos of amphibians from around the world via CalPhotos and over 1,700 species accounts. AmphibiaWeb's programs and partners include:

- *Species Accounts*—describing the morphology, distribution, natural history, and conservation-related population trends and threats for every amphibian species in the world, including accounts written in English, Spanish, French, Portuguese, and Chinese. AmphibiaWeb partners with CalPhotos to maintain a database of amphibian photos, currently numbering more than 11,000 images. For species

where it does not yet have its own account, it partners with (and links to the webpages of) Global Amphibian Assessment (<http://www.globalamphibians.org/>). AmphibiaWeb also successfully partners with authors and publishers to make use of species accounts from published field guides where possible.

- *Taxonomy*—providing a publicly available compendium of newly named amphibian species from the scientific literature, by date, species name, family, and country, and within the United States, by state; incorporating new amphibian species into the AmphibiaWeb database as they are described in the literature; providing an up-to-date list of all amphibian species recognized worldwide, by family, striking a balance between the most current taxonomic research and standards accepted by the herpetological community at large. AmphibiaWeb links to the Amphibian Species of the World database (<http://research.amnh.org/herpetology/amphibia/index.php>) to provide searchable information on taxonomic history of amphibian names, and historical references for taxonomic changes.
- *Conservation and Decline*—providing reviews of the current status of amphibians worldwide; a list of current scientific papers on amphibian conservation and decline, updated each month (contributed by Tim Halliday, former director of DAPTF/Declining Amphibian Population Task Force); the most current protocols for detecting the presence of infections of the amphibian pathogen *Batrachochytrium dendrobatidis*, including a video on how to do chytrid swabs; cartograms showing the most recent data on worldwide amphibian diversity and declines by country.
- *HerpNet*—AmphibiaWeb's links to HerpNet provide access to HerpNet's distributional data on amphibian specimens contained in museum collections worldwide.
- *Dynamic Mapping*—creating bioinformatics tools to integrate worldwide museum specimen information, facilitating dynamically generated, up-to-date range maps for every amphibian species, based on known specimen localities.

AmphibiaWeb's steering committee is composed of scientists with herpetological expertise and the programmer who designed and maintains AmphibiaWeb's database. AmphibiaWeb relies on internal staff, volunteers, and collaborative partnerships to accomplish its goals.

**The Encyclopedia of Life** is an informal consortium of institutions and organizations dedicated to building an on-line Encyclopedia of Life composed of content-rich multimedia web pages for each of the presently known species on Earth. Currently, the EOL is composed of five working groups:

- *Species Sites Group*—defines the composition of information on species pages; works with the scientific community to identify potential sources of information (such as FishBase) for the species pages and to authenticate the information on the species pages; establishes licensing agreements with data providers.
- *Biodiversity Informatics Group*—conceptualizes and prepares the software needed to host and to search the species pages; applies taxonomic intelligence to the scientific names on the species pages and in the literature.
- *Scanning and Digitization Group*—working with the Biodiversity Heritage Library, a consortium of many of the world's largest natural history libraries, digitizes and marks up the world's biodiversity literature.
- *Education and Outreach Group*—exploits the EOL's potential by exploring and

promoting its educational uses.

- *Biodiversity Synthesis Group*—holds synthesis meetings to help reach taxonomic consensus on megadiverse groups; develops tools for analyzing and synthesizing information across species pages.

EOL's membership is composed of universities, museums, and other similar organizations. EOL is a facilitating and organizing activity that relies on partnerships with others to accomplish most of its goals.

### **Objectives**

To establish a framework for co-operative work between the ongoing EOL and AmphibiaWeb programs:

- AmphibiaWeb will provide access to information contained within amphibian species accounts (including any scanned range maps attached to species accounts, but not dynamically generated ones), and to amphibian digital photographs via CalPhotos' web service, with copyright owner(s) retaining the intellectual property rights of all photos. EOL and the University agree that access AmphibiaWeb's information is subject to AmphibiaWeb's standard published Restrictions on Use.
- EOL will provide access to species information, in a standardized, easy to use format, tools and web services for sorting and analyzing species-level data, and collaboration on the progressive development of AmphibiaWeb's resources, especially programming updates to improve accessibility, production of additional species accounts, acquisition of photos, and amphibian-related information.

Further cooperative activities may include

1. Identifying and implementing collaborative projects of value to both organizations. Examples include a synonymy server, which will allow users to retrieve a species account and photos by searching on the current species name as well as any former names.
2. Considering the sharing of personnel, such as detailing individuals to work with or at the other organization on topics of interest to both.
3. Developing joint workshops and meetings.

All such specific activities will be drafted as Addenda to this MOU with details and objectives captured on a case-by-case basis. Ownership of any collaborative intellectual property created under this Agreement shall be agreed upon in advance in writing between the parties.

### **Conditions of Use**

1. Both parties agree that they will clearly label the source of all content and require users to indicate those sources in any subsequent re-use. For EOL-supplied data, AmphibiaWeb will indicate that the information came from the EOL and will include all further attribution metadata. For AmphibiaWeb-supplied data, EOL will require users to meet AmphibiaWeb's standards of attribution for its data providers and its Portal.

2. Each party agrees to fully acknowledge the other (verbally and by including EOL and AmphibiaWeb logos) when citing or promoting jointly developed products, subject to section 3 and section 4 below.
3. Smithsonian owns, controls, and has registered certain trademarks and service marks, including, but not limited to "Smithsonian," "Smithsonian Institution," and the Smithsonian sunburst logo (collectively "Names"). Except as expressly provided by the Smithsonian's prior, written consent, AmphibiaWeb shall not use the Names or refer to Smithsonian or any of its museums, programs, organizations, or facilities in any manner or through any medium, whether written, oral, or visual for any purpose. Upon the expiration or termination of this agreement, AmphibiaWeb shall immediately cease to use the Names, and shall not exploit in any manner its association with Smithsonian, unless otherwise agreed to in writing by Smithsonian at the time of such expiration or termination. AmphibiaWeb shall incorporate the provisions of this Section into any potential AmphibiaWeb subcontracts, if any, entered into in connection with this MOU.
4. The Smithsonian or EOL shall not use the name of the University of California, or any abbreviation thereof, or any name of which "University of California" is a part, or any trademarks of the University, in any commercial context, such as may appear on products, in media (including web sites) and print advertisements in cases when such use may imply an endorsement or sponsorship of the Smithsonian or EOL, their products or services. This policy is in compliance with the State of California Education Code Section 92000.
5. EOL will provide AmphibiaWeb with monthly statistics of usage of AmphibiaWeb-provided content accessed through the EOL portal (such as unique users, visits, pages, hits, bandwidth), and *vice versa*.

#### **Amendments and Modifications**

Either party may amend or modify this Memorandum of Understanding by notifying the other party in writing and with the agreement of the other party through a duly executed written amendment to this MOU.

#### **Authorized Representatives**

1. **Smithsonian Representative.** For purposes of liaison, providing guidance and direction in daily operational matters, granting approvals or withholding same, and for general contract coordination as detailed herein, the Smithsonian Institution, on behalf of the EOL, shall be represented by **James Edwards, Executive Director, Encyclopedia of Life.**
2. **AmphibiaWeb Representative.** For the purposes of liaison and direction in daily operation matters, AmphibiaWeb shall be represented by **David B. Wake, Director, AmphibiaWeb**, or an authorized representative thereof.
3. **Substitution of Representative.** Smithsonian and AmphibiaWeb shall advise one another in writing of any substitution for said representatives.

**Notices.**

Any notices and consents required hereunder shall be in writing and deemed delivered upon actual receipt of such notice when hand-delivered or sent by certified mail, postage prepaid, return receipt requested, or overnight express courier to the address listed below. All written consents required hereunder shall be sent as provided above to the following addresses:

**To SMITHSONIAN:****For Technical Matters:**

James Edwards  
Encyclopedia of Life  
Smithsonian Institution  
PO Box 37012 MRC 106  
Washington, DC 20013-7012  
+1.202.633.8730

**To AMPHIBIAWEB:**

David B. Wake  
University of California, Berkeley  
Department of Integrative Biology  
Curator, Museum of Vertebrate  
Zoology,  
3101 VLSB  
Berkeley, CA 94720-3160  
510 845-1627

**For Contractual and Legal Matters:**

Contracting Officer  
Office of Contracting  
Smithsonian Institution  
PO Box 37012  
Washington, D.C. 20560-1200  
Attn: Elizabeth Hochberg  
+1.202.633.7267

Brian C. Donohue  
University of California, Berkeley  
Business Contracts Office  
6701 San Pablo Ave., Ste. 218  
Berkeley, CA 94720-8604  
510 642-3128

**Not a Legal Partnership.**

The parties do not intend to create a legal partnership, principal/agent, or joint venture relationship and nothing in this MOU shall be construed as creating such a relationship between the parties. Neither party may incur any obligation on behalf of the other.

**Reciprocal Indemnification**

1. **Indemnification** To the extent permitted by law, each party shall indemnify and hold the other party, its officers, employees and agents harmless from and against any and all liability, loss, expense, including claims for injury or damages arising out of that party's performance of this Agreement but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the indemnifying party's negligent or intentional acts or omissions.
2. **Proprietary Rights Indemnity** To the extent permitted by law, each party shall indemnify, defend, and hold harmless the other party, its officers, agents, and employees against all losses, damages, liabilities, costs, and expenses resulting from any judgment or proceeding in which it is determined, or any settlement agreement arising out of the allegation that, one party's furnishing or supplying the other with graphic designs, marketing concepts, style guides, artwork, web site design, and/or software under this Agreement or the use of such, constitutes an infringement of any patent, copyright, trademark, trade name, trade secret, or other proprietary or contractual right of any third party. The foregoing shall not

apply unless one party has been informed as soon as practicable by the other of the suit or action alleging such infringement, and each party is given the opportunity as afforded by applicable laws, rules, or regulations to participate in the defense thereof. No limitation of liability set forth elsewhere in this Agreement shall be applicable to this paragraph.

#### **Non-exclusive Agreement**

This Memorandum of Understanding is non-exclusive, and in no way restricts either EOL or FishBase from participating in similar activities or arrangements with other public or private initiatives, organizations, or individuals.

#### **Term**

This agreement is effective as of the date of the last signature and is effective for five (5) years.

#### **Termination**

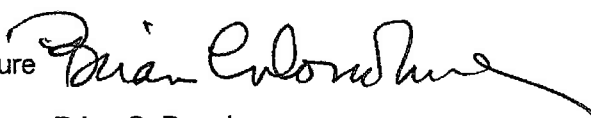
The parties reserve their right to terminate this Agreement without cause upon 30 days written notice to the other party. Upon termination, EOL shall promptly cease providing access to AmphibiaWeb and vice versa.

#### **Governing Law**

This Agreement is governed by applicable federal law and the laws of the State of California.

#### **Signatures**

For The Regents of the University of California

Signature  Date: 6.13.08  
Name: Brian C. Donohue  
Title: Business Contracts Administrator

For The Smithsonian Institution, on behalf of the Encyclopedia of Life

Signature  Date: 6.17.08  
Name: Cristian Samper  
Title: Director, National Museum of Natural History