

1.0 Introduction

This document lays out the plan for curation of content in the Encyclopedia of Life. This plan has been reviewed by the EOL component leaders and the EOL Steering Committee. After review, the document is available for review and comment by the greater biodiversity community. Following community comment, the EOL Curatorial Network will be implemented in a phased plan.

2.0 Guiding principles

- ✓ Openness – the process and the network, and their evolution, need to be as open as possible
- ✓ Scalability – a process that requires too much staff time from curators or EOL staff will not scale
- ✓ Implementability & usability – EOL wants to take maximum advantage of existing tools and mechanisms
- ✓ Oversight – the process includes checks and balances but avoids top-down management
- ✓ Evolution – the process will change over time, and systems will adjust to these changes.

3.0 Curator roles and policies

Encyclopedia of Life curators are responsible for maintaining the quality of Encyclopedia of Life's vetted content. They are often professional scientists but can also be citizen naturalists who have demonstrated a commitment to quality science. They need not also be content contributors but that is encouraged; curators may affiliate with and/or organize LifeDesks (see 3.3).

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3.1 Curator status

- Curators must use their real names and offer credentials publicly on a profile page. If these credentials cannot be verified, curatorial privileges will be rescinded. Credentials may include one or more of the following:
 - a) An affiliation with a relevant department at a university or college
 - b) Membership in a professional society
 - c) Published peer-reviewed work
 - d) Reference from a credentialed individual.
- There may be multiple curators for any given area of the site. These curators may work together or independently, but to receive credit by being listed on a species page, the curator must have a valid profile.
- To oversee and manage multiple curators, master curators may be appointed by the Species Pages Group in consultation with professional societies.
- Curators will remain curators unless they remove themselves, or have their privileges rescinded by staff or master curators due to violation of policy. Lack of activity by a curator does not preclude future activity.

3.2 Curator activities

- Curators will examine content available for a species, particularly unvetted content. Unvetted content will typically come from the public or non-authenticated large resources, such as from Flickr, or be uploaded directly to our own site via LifeDesks . This content needs to be “approved” to appear on an authenticated page. Some content from trusted sources (e.g. large scientific databases) may be considered pre-approved but is not free of error and so can be rejected if necessary.
- Curators may not alter the content provided by others, but they may reject it, rate it, comment on it, or use the content provider’s own mechanisms for correction. In other words, they may work with a content provider to improve the content. They may then change their decision from “reject” to “approve” or increase the data object’s rating.
- When EOL introduces commenting, curators are expected to leave comments describing problems and to act as moderators for comments that others leave on

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species pages; they may delete comments on pages that violate EOL policy (by being abusive or inappropriate, etc). They should not, however, edit the comments made by others.

- When EOL introduces tagging to the general public and/or generates automatic tags, curators may select some tags or add tags themselves that will be considered “trusted”.
- In the future, curators will enhance the user experience in other ways. For example, they may set preferred common names (so that the best one appears in page headings) and set a page to be listed at the top of the results for a common search term.
- Curators should make their decisions based on accuracy, appropriateness, or effective writing. They may not make their decisions based on favouritism or personal promises. Curators are expected to maintain professional decorum and never engage in *ad hominem* attacks. Their work is subject to review by master curators and EOL staff. Adherence to policies is necessary to remain a curator. Further elaboration of what constitutes accuracy, appropriateness, and effective writing is expected from the curator community.
- Curators are expected to review their pages on a regular basis. Additional curators may be recruited by EOL or by master curators if current curators have not been active or have excessive loads. Curation is a volunteer activity to be taken seriously, but level of effort can vary.
- Master curators shall be responsible for maintaining collegiality among multiple curators. A master curator may follow policy to decide among curators. They may set all disputed content to “unvetted” if necessary. They may temporarily freeze content changes or rescind curatorial privileges if policies are not met. Master curators are expected to follow EOL policy. Master curators may set additional standards for other curators to follow in a particular clade or category of content.
- We expect to develop “bots” (programs) that will assist in the curatorial process, e.g. identifying reversion wars, finding objectionable content, etc.

3.3 LifeDesks

- LifeDesks are customizable working environments for communities of people who wish to contribute to the Encyclopedia of Life. They are web-based and modular, and employ the open-source platform, Drupal, so that EOL and others can contribute new features.

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- A particular LifeDesk may establish a web presence for a community independent of EOL while still providing data for it.
- Curators may choose to organize or affiliate with one or more LifeDesks, and may be reviewing information flowing from them.
- Multiple LifeDesk versions are planned:
 - ✓ LifeDesk:Expert supports communities of scientists. Initial functionality includes importing, exporting, and management of classifications, creation of species pages, uploading of images, bibliographic management. Information flowing to EOL from LifeDesk:Experts is considered pre-vetted.
 - ✓ LifeDesk:Citizen Science and LifeDesk:Education will include modules tailored for the activities of these communities, including observation reporting. The subset of information flowing to Encyclopedia of Life from these sources will be subject to curation.

3.4 Curator rewards

- Curators receive acknowledgement for their work in two ways:
 - ✓ Their public profile on the EOL site indicates they have volunteered to curate pages. This profile indicates their credentials and their rate of activity.
 - ✓ If they have been active as a curator in the prior two years, they will be listed in the suggested citations for the pages they curate.
- Master curators are not listed in species page citations (unless they have curated them), but their status as master curators is indicated on their public profile pages.
- Encyclopedia of Life is happy to provide letters upon request for curators and master curators who wish to demonstrate to their commitment and status to their employers and colleagues. Curators may list their status on their curriculum vitae as curators, editors, or reviewers.
- Taking on curatorial duties may significantly aid an individual's own research. For example, through EOL a curator may become aware of new species, new literature, new observations, or possible collaborators. In addition, Encyclopedia of Life will offer tools and services to assist online curatorial work.

4.0 Community engagement plan

- These initial curatorial policies will be announced and further input sought from scientific communities via talks and posters at national, regional, and international scientific events and meetings. Policies will be posted online at the EOL Website, and commentary invited through EOL and other forums. They will also be made available to EOL's existing advisory boards.
- After a trial period (during which a selected number of curators will be asked to register and try out the system), wider recruitment will begin (see 5.0).
- Notices will be sent to those who have already contacted us to volunteer their services. Notices will also be sent to mailing lists for scientists (e.g. the EU SYNTHESYS project) and included in EOL newsletters, Web pages, etc. Feedback from the community on these processes and policies will be actively solicited.
- The leadership of scientific societies (at national, regional, and international levels) will be asked to provide comments on the policies and to recruit their membership. They may occasionally be asked to verify curators who self-report membership. Curator profiles on EOL will link to the societies they use as credentials, so the more members a society recruits, the higher its own visibility. They will serve as primary sources of master curators.
- Potential curators will be asked to register themselves online:
 - ✓ Curators need to indicate if they are signing up for a single taxon or all descendents of a node and/or for a particular category of content (e.g. behaviour, conservation).
 - ✓ Potential curators will indicate their credentials. These will not be automatically checked, but will be displayed on a public profile page.
 - ✓ EOL Species Pages staff will initially approve potential curators. This is not expected to scale, so another mechanism will be created subsequently.
 - ✓ EOL Species Pages staff will assign some curators the master curator role, in consultation with appropriate scientific societies and institutions.
- Master curators are identified as such on their profile pages.

5.0 Rollout plan for curator network

Phase 1: Initial Testing

(From 15 Dec 2008)

- Species pages group chooses taxonomic groups and curators for testing in consultation with advisors
- Sign-ups by invitation only (this is purely for testing phase, signups will be open later)
- Limit invitations to single curators
- Species Pages Group and Informatics Group evaluate: rate of vetting, effectiveness of error report mechanism
- Content partners evaluate: effectiveness of error report mechanism
- Curators evaluate: user experience, statistics
- Species Pages Group begins identifying likely master curators through engagement with societies and observation of current curators
- Review policies and modify

Phase 2: Large Scale Testing

(From May 2009)

- Extend testing to more curators and taxonomic groups by invitation
- Roll out most of remaining basic curator functions
- Roll out multiple curator functions
- Requires: detection of conflicts, notification of multiple curators, mechanisms for resolution
- Species Pages Group and Informatics Group evaluate: Are activity statistics effective and citations acceptable? Does this work across taxonomic groups? Is the rate of conflict manageable? How many master curators will be needed? How much staff time is necessary to manage curators? Is staff approval of curators going to scale? What is the typical rate of activity for curators?
- Curators evaluate: user experience, statistics, social experience
- All: do policies need modification?
- Species Pages Group continues to identify likely master curators through engagement with societies and previous experience with curation
- Review policies and modify

Phase 3: Roll Out Curators Programme

(From June 2009)

- Publicly release curator sign-up
- Species Pages Group and Informatics Group evaluate: are mechanisms and rates of signups, vetting, and reporting acceptable? Is the rate of conflict manageable? How many master curators will be needed? How much staff time is necessary to manage curators? Is staff approval of curators going to scale?
- Curators evaluate: user experience, statistics, social experience
- Review policies and modify

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Phase 4: Roll Out Master Curator Programme

(From Oct 2009)

- Roll out master curator functions and assign master curator roles to some individuals
- Species Pages Group and Informatics Group evaluate: Are things still acceptable? How much staff time is necessary to manage master curators, and how much do they reduce load of staff to manage curators?
- Master curators evaluate: master curator experience
- Review policies and modify