

Technology

Cataloguing the cool way

New Internet sites take scientific archiving to the next level

|Joseph Wilson

Wired world news, issues, games and gadgets Cataloguing the cool way history is replete with attempts to catalogue the living curios on our planet.

Ever since Carolus Linnaeus determined the taxonomic system for classifying life in 1735, we've been making lists and taking photos like obsessive-compulsive collectors.

The Internet takes this task to a whole new level.

Consider the live webcam streaming from a watering hole in Botswana (www.nationalgeographic.com/ngm/wildcamafrika). Although the content on the site is usually pretty banal, every now and then the camera captures a moment worthy of the Discovery Channel.

Above all, it does an excellent job of archiving the state of the natural world, dull bits and all.

But get ready for the Encyclopaedia Of Life (EOL). Touted as the biggest thing since Linnaeus by famed biologist E.O. Wilson, the hugely ambitious project will consolidate the various catalogues and databases currently available and will present them for free online.

When the site launches in 2010 (www.eol.org), the EOL will compile information on the 1.8 million known species in a multimedia-rich environment as well as links to open-source pages co-written by the scientific community.

The beauty of the project is that, unlike in a traditional encyclopedia, people can search through the database in a myriad of ways. Do you like the colour blue? Use a filter to see all the blue animals in the world. Enamoured with South America? Search for all the plants in Uruguay.

You can delve into the piles of scientific papers published on a particular species, analyze genetic information or examine high-resolution pictures.

While we're waiting for EOL, other sites devoted to scientific inquiry, cataloguing and connection are worth checking out.

In September 2005, a paper published in the influential journal Nature called for an international database of scientific names for all the species on earth. Another website, Zoobank (www.zoobank.com), has since sprung up to deal solely with the classification of species and the particularities of zoological taxonomy.

Poking around this site feels a lot like flipping through the card catalogue at your elementary school library, but the dryness of Zoobank is balanced out by its sister site Morphbank, devoted to "biological images documenting specimen-based" morphological phylogenetics," which, for us mortals, means cool pictures of really weird-looking animals (www.morphbank.com).

The massive push to archive the minutiae of the natural world extends to sounds as well. Biologist Bernie Krause, through his company Wild Sanctuary in California, has collected 3,500 hours of sounds from the natural world everything from songbirds to the crackle of melting ice.

Instead of creating a static archive, Krause has created a lovely mashup of the sound files with the GoogleEarth platform (www.wildsanctuary.com).

What makes the project more than a glorified version of Dan Gibson's Solitudes series is that the sound files are tagged with time, date, weather quality and of course location, allowing audiophiles to zoom into specific spots and discover the tenor of the local wildlife. As the database grows, the sound collection could also provide an audio record of species unable to adapt to climate change by allowing scientists to browse previously recorded files.

Scientists' ability to utilize the non-linear power of the Internet is also affecting the way they collaborate on projects. Although they're not famous for their social acumen, they rely more than most on social networking. Scientific progress is based on a continual tension between collaboration and competition between peers.

Myexperiment.org is a "MySpace for scientists" that allows members to share experiments, search each other's CVs and chat with like-minded professionals about projects.

Myexperiment is currently in beta-testing mode, so while the site creators dawdle, the Facebook platform,

naturally, has risen to fill the niche. Run by the Nature publishing group, Nature Network is a social networking site for scientists who want to join discussions and social groups to exchange thoughts on hot scientific issues.

The early adopters in the scientific community are eagerly anticipating a flurry of discovery as these new tech tools work their way into wider use.

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