



## News on the 4D4Life project

### 4D4Life IT Developments

4D4Life Work Package (WP) 6 (ETI) has completed the new software and new interface for the Catalogue of Life Annual Checklist. This includes using a DVD for the first time for the Annual Checklist (AC). The system is now compatible with Mac and Linux platforms. SPICE has been re-designed and a new beta version is being tested at the Reading Secretariat. The AC itself uses the new interface with many new features that will be appreciated by seasoned users!



The Annual Checklist 2010 Special Edition is due to be launched in Nairobi on 19th May at a side meeting at SBSTTA. This year's special edition has been published in cooperation with the CBD and 3,500 additional copies will be distributed by them. Two side-events are arranged:



**12 May 2010:** *GSPC & GTI: COMBINED WORK TOWARDS A GLOBAL TAXONOMIC FRAMEWORK TO SUPPORT THE CBD and*  
**19th May:** *1.25 MILLION SPECIES - LAUNCH OF THE CATALOGUE OF LIFE 2010 SPECIAL EDITION IN SUPPORT OF THE GTI.*

### User-led selection of new services

A successful meeting was held to finalise the new services to be put in place at the request of users – details in next E-Bulletin.

### Second 4D4Life Project Meeting in Faro

The 2nd Project meeting on 16 -18th February in Faro went well. The pilot projects of the GSDs in WP 3 have now been agreed and several have already started. Jiri Kvacek (WP4) led an extremely interesting discussion on the new Multi Hub Network.



### New Species 2000 Project Funded by the EC

The new i4Life project is being funded by the EC for 2.45 million €. With a start date in November i4Life is an exciting new project to harmonise the species discoveries and listings between EBI/GenBank, IUCN Redlist, GBIF, EOL and CBOL/BOLD.

### Diary dates

#### 10 – 21 May 2010

CBD – SBSTTA 14 Nairobi, Kenya  
• CoL/4D4Life Side Meeting 12 May  
• CoL/4D4Life Side Meeting 19 May

#### 25 – 29 May 2010

CoL Global Team Meeting, Rutgers University, New Brunswick NJ, USA  
• Mini Symposium 28 May

#### 13 – 18 June 2010

4th Global Botanic Gardens Congress, Dublin, Ireland  
• CoL/4D4Life presentation and stand

#### 24 June 2010

4D4Life 1st Year Review Meeting, Brussels (WP Leaders)

#### 27 September – 1 October 2010

TDWG 2010 Annual Working Groups and Conference, Marine Biology Laboratory, Woods Hole, USA

#### 18 – 29 October 2010

CBD – COP 10  
Nagoya, Japan

#### Provisionally, early November 2010

4D4Life WP4 Meeting, Chinese Academy of Sciences, China (2 days)

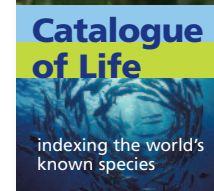
#### 29 – 31 March 2011

4D4Life Third Project Meeting, Prague, Czech Republic

### New Catalogue of Life leaflets are available

Contact the Reading secretariat or BGCI if you would like some.

Wide circulation of these is important to raise awareness of the Catalogue.



# 4D4Life e-bulletin



The 4D4Life employee list is growing as the project reaches its peak of activity in Year 2. The following full-time staff members are up and running on the project.

- Reading Secretariat: Viktor Didziulis, Annie Carpenter, Yuri Roskov and Rebecca Mann.
- Cardiff University: Jonathon Giddy and Hardik Raja.
- Narodni Museum Prague: Jiřina Dašková and Petre Danes.
- ETI: Wouter Addink and Núria Torrescasana Aloy
- MNHM Paris: David Ouvrard.
- Species 2000: Luvie Paglinawan
- BGCI: Meirion Jones

We asked Work Package leaders: What has been the biggest challenge of your Work Package so far and what milestone are you most looking forward to achieving in the next 6 months?

## Contact Details:

### Reading Secretariat (Species 2000, 4D4Life, i4Life)

Annie Carpenter  
Publicity and Project Manager  
Species 2000 Secretariat  
The Harborne Building, School of Biological Sciences  
University of Reading, Reading, RG6 6AS, UK  
Tel: +44 (0)118 378 6466 E: a.m.carpenter@reading.ac.uk

### 4D4Life – WP2

#### Engagement with scientific users and partners, E-Bulletin

Belinda Hawkins  
4D4Life E-Bulletin Editor  
Botanical Gardens Conservation International  
Descanso House, 199 Kew Road, Richmond  
Surrey, TW9 3AB, UK  
Tel: +44 (0) 208 332 5935 E: belinda.hawkins@bgci.org

### WP2. Sara Oldfield of BGCI:

"The biggest challenge has been reaching out to the vast array of potential users. We have achieved our first major milestone of producing a prioritised list of user services and look forward to seeing how new services are implemented. With a much more detailed understanding of the CoL than I had a year ago, it will be very rewarding to promote the Catalogue much more widely in the International Year of Biodiversity".

### WP3. Thierry Bourgoïn in Paris:

"What has been the biggest challenge of WP3 so far? To have all GSDs responding to the questionnaire. What milestone are we most looking forward to achieving in the next 6 months? To have all the pilot projects started. In a more general feeling, the day to day WP3 challenge is to have all the GSDs of the network 1) moving 2) in the same direction 3) together!"

### WP 4 leader Jiri Kvacek:

"The biggest challenge was to get together and negotiate with people from various continents and various cultures, trying to understand their problems and their needs in terms of Multi-Hub Network of CoL.

What milestone are we most looking forward to achieving in the next 6 months? To the end of first pilot project, when we will really connect the Chinese Regional database with CoL. We are going to start with this in the Autumn in Beijing".

### WP5. Yuri Roskov reports:

"The biggest challenge for WP5 so far has been the production of the CoL 2010 Annual Checklist (AC). This is because the 2010 Checklist features a new interface which allows cross-platform usage. For the first time Mac and Linux users will be able to install the CoL 2010 DVD on their computers. We have also made the design of the DVD a special edition featuring the 2010 International Year of Biodiversity logo.

The implementation of new functionalities in AC user interface and taking full control over CoL external services with a newly appointed System Manager have also been big challenges this year. The next big achievement for WP5 will be the creation of the first batch of new user services for the Catalogue of Life. Also next year there will be staged editions during the year as we move towards the unified production workflow."



### WP6. Peter Schalk of ETI:

"WP 6 is a big work package with a very large number (21) of tasks. Making the deadlines is a major challenge. Most of the efforts of the past months were dedicated to improving existing software and getting input from other participants. This meant that we had to sort out various versions and go through (incomplete or lacking) documentation. The second thing we did was fixing known bugs and implementing a substantial set of improvements for the new Annual Checklist software and interface. While this process was going on we had to make sure that the yearly AC production was not disrupted and that the product quality was maintained!"

### WP7. Richard White reports:

"Assembling a list of the requirements for the new "e-2" architecture for enhancing the CoL has been the biggest challenge. We think we have succeeded - we now have a detailed list, based on a large series of scenarios of usage. The task now is to get the other work packages to confirm that we have interpreted their needs correctly and to ensure that it is ready for us to use to design a flexible scalable new architecture. During the next six months, we are looking forward to reaching agreement on the shape of the new service oriented architecture. We are proposing a new approach based on simple open principles which will provide a platform on which existing and new components of the CoL can be built to achieve more efficient data sharing and management."



# 4D4Life e-bulletin

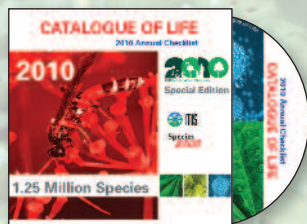


## International Year of Biodiversity

2010 is the International Year of Biodiversity and sees the production of a Special 2010 Edition CoL DVD-Rom. This latest edition represents the most complete species list known to man with some 77 databases listing 1.25 million species and 1.9 million names.

Ten new databases joined the project since last year's edition:

- Brassicaceae Species Checklist and Database
- Early Land Plants Today (liverworts and hornworts)
- Global Compositae Checklist (in 4D4Life project)
- Global Species Database of Salticidae (Araneae) (in 4D4Life project)
- Moss Bug Base
- PhytoseiidBase
- Neotropical Freshwater Crabs Catalogue
- New Zealand Inventory of Biodiversity
- Taxapad Ichneumonoidea and
- TenuipalpBase.



## Results of user survey

A Triage meeting was held in Reading on 17th – 19th March 2010.

The aim of the meeting was to discuss and initially scope the proposed new CoL services, as proposed by users who responded to WP2 questionnaires.

As part of WP2, Botanic Gardens Conservation International (BGCI) located and characterised the main classes of users of the Catalogue of Life (CoL) services, and worked with each class of users to specify a list of proposed new services. This was done via an on-line questionnaire to identify user needs of the CoL, aimed at known existing users and potential users of the CoL (244 completed responses received) and one-to-one-interviews particularly focussing on the major international biodiversity portals and organisations (25 interviews). The complete list of proposed new services was also presented in a follow-up survey to 152 of the original respondents to the user questionnaire.

WP2 provided a compiled new services list prioritised by sector type (Academic, Government, International NGO, National NGO, commercial) and by user class (Biodiversity analyst, Checker, Documenter, Linker, Researcher, Standardiser and Integrator, Taxonomist).

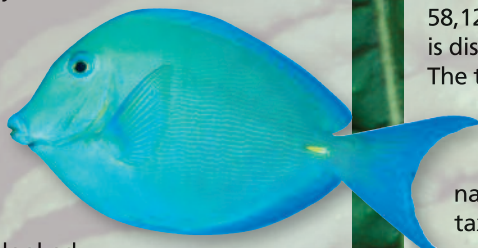
The proposed new services were grouped into the following areas:

- 1) Enhance user interface functionality
- 2) Enhance CoL e-functionality
- 3) Make small additions to the CoL content
- 4) Add external links from CoL to other resources
- 5) Improve internal services
- 6) CoL publicity and promotion
- 7) Miscellaneous

## Commercial potential for CoL

BGCI carried out interviews with representatives from a broad range of companies, including two mining companies, Neals Yard Remedies, The Garden Centre Groups and three publishers. Questions were based on questions used in the original WP2 survey.

Most company interviewees saw a useful role for the CoL as a globally recognised taxonomic standard that could be usefully incorporated in to wider biodiversity analyses. Interviewees stated that they would like to be able to make use of the CoL to verify the spelling and use of species names. Spatial analysis of what species could be found where was also a high priority for most of those interviewed. This was particularly true of the two mining companies interviewed, both of which looked at biodiversity through an assessment of a specific geographical area that the company wanted to work in.



## Taxapad Ichneumonoidea database

The Ichneumonoidea is one of the largest superfamilies of the apocritan wasps with 58,121 described species and is distributed worldwide.



The taxonomic, biological, morphological and distribution information of the group gleaned from over 30,000 references were organized based on scientific names and made accessible by Taxapad, a relational taxonomic database management system. Taxapad was the largest contributor to the Catalogue of Life this year and a species of this super family appears on the front of the Annual Checklist 2010 DVD cover.