



**Summary Report on the World Flora Online Council Meeting**  
*Hosted by South African National Biodiversity Institute, Pretoria, South Africa*

The sixth meeting of the World Flora Online Council took place at the Pretoria National Botanical Gardens from November 10-11, 2016, preceded by Taxonomic and Technical Working Group meetings from November 8-9, 2016. Over the four days, 29 individuals participated, representing 13 institutions or projects.

The following is a summary report of the meeting and decisions adopted.

The minutes of the previous Council meeting in New York were adopted.

**NEXT COUNCIL AND WORKING GROUP MEETINGS**

Dates were set for the 2017 meetings of the WFO Council and Working Groups.

March 27-31, 2017 – Berlin Botanical Garden, Berlin, Germany

November 13-17, 2017 – Muséum National d'Histoire Naturelle, Paris, France

**IBC 2017**

A World Flora Online symposium has been scheduled during the International Botanical Congress, which will be held July 23-29, 2017 in Shenzhen, China. The WFO Council agreed to target a Formal Launch of the WFO Portal at IBC. The Communications Working Group will prepare the communications plan. There will not be a meeting of the Council held in Shenzhen.

**NEW MEMBERS**

Universidad Nacional de Colombia has signed the MoU and joined the WFO consortium as its newest member. The Council was delighted to welcome this new member.

**RECOMMENDATIONS ADOPTED**

The following recommendations were adopted by the WFO Council:

*Taxonomic Backbone Recommendations:*

1. Unique WFO IDs will be assigned to all names in the WFO backbone. The former TPL identifiers will be replaced, but retained for future cross reference.
2. In the short term continue using a manual checking and ingestion process for data loading. Potentially expand the people involved.
3. In the short term accept backbone data only from providers who will provide the time to support the ingestion process.

4. Seek to develop an automated pre-ingestion checking system for taxonomic data sets.
  - a. Form a subgroup to document the requirements for an automated pre-ingestion checking system.
  - b. Mandate Geneva to prepare an assessment of the viability of Botalista to fulfill the pre-ingestion checking system need.
  - c. Ideally, an automated pre-ingestion system can enable self-service in the long term.
5. Tax WG will define which ranks will be used in WFO Backbone below Family (e.g. Tribe).
6. Tax WG will establish what ranks and what sources to be used for Families and above classification (e.g. APG4).
7. Tax WG agreed to the following allowed Nomenclatural Status values – Valid, Invalid (nom inval), Illegitimate (nom illeg), Orthographic Variant (orth var), Conserved (nom cons), Rejected (nom rej)

*Technical Recommendations:*

8. In the short term develop a self-service name checking system.
9. Contact GBIF to request a custom Integrated Publishing Toolkit (IPT) to generate the Darwin Core Archive datasets required for WFO data ingestion.
10. Allow the WFO Technical team to make small changes to the Portal programming code when these modifications are beneficial and don't affect too much the possibility to use the modified eMonocot code from the Kew team. This additional Technical Recommendation was suggested by Mark Watson during the revision for approval of the minutes at the WFO Council Meeting in Berlin on March 2017. The WFO Council then approved the amended Report.

## **WFO VISION EXPANSION**

The Council agreed to adopt the following:

*Expand the vision for WFO to be the primary community-based access point for global taxonomic information for land plants (also beyond 2020). Harmonization with plans for global names architectures should be achieved, where WFO could take care of the land plants part.*

Steps for implementation:

- At short term, contact providers with the goal to provide data for the Launch (the best and most readily available data). Tax WG invites B.
- At short and medium terms, contact the active taxonomic networks (global taxonomic slicing) in order to establish firm contacts with WFO and to achieve the goal to have them curate the taxonomic backbone for their groups.
- Establish terms and conditions of such agreements to be established to make them sustainable (will be based on first discussions with existing networks organized by the Taxonomic Working Group)

## **TERMS OF USE/INTELLECTUAL PROPERTY RIGHTS**

The Council adopted the following Terms of Use for the WFO Portal:

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All nomenclatural, taxonomic status and taxonomic hierarchical classifications in the WFO Taxonomic Backbone is provided with a CCO, or Public Domain, designation.

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#### ELECTION OF CHAIRS

The chairs of the Council and Working Groups were re-elected:

- WFO Council Chairs – Peter Wyse Jackson and Pierre-André Loizeau
- Taxonomic Working Group Chairs – Wayt Thomas, Thomas Borsch, and Thomas Haevermans
- Technical Working Group Chairs – Chuck Miller and Mark Watson
- Communications Working Group Chairs – Barbara Thiers, Eduardo Dalcin, John Parnell

#### THANKS TO THE HOSTS

The Council expressed its grateful thanks to the South African National Biodiversity Institute for hosting the meeting and to all of the staff of the Pretoria National Botanic Garden for their hard work in making arrangements for the meeting, and for their kindness and hospitality. Particular thanks were offered to Dr Marianne le Roux.

#### ACTION ITEMS

The following action items were carried forward:

#	TASKS	WHO?	WHEN?	COMMENTS
1.	<p><b>Presentations on WFO.</b> Take advantage of the meetings we attend to present about the WFO. Sandy agreed to include a slide or two about WFO during IBC and Peter Wyse Jackson offered that he would mention WFO during his talk as keynote speaker.</p> <p>- Peter Wyse Jackson will circulate the link through</p>	All	<p><i>Continuously .</i></p> <p><i>Upload to cloud WFO Presentations folder.</i></p>	<p><i>Still need the CBD document</i></p>

	<p><i>email of the copy of the CBD document with the progress of the targets of the GSPC implementation.</i></p> <p><i>Botany Meetings in Savannah and GPI in Berlin,</i></p>			
2.	<p><b>Update current signatories.</b> Update the list of Consortium members on the website.</p> <p><i>- Approach the California Academy of Science and the other 4 institutions that haven't signed the MOU.</i></p> <p><i>34 signatories</i></p>		As new members join.	Add National University Colombia
3.	<p><b>Update Facebook page.</b> Keep updating FB page with news and current information.</p> <p><i>- Included in the Communications Strategy</i></p>	Comm. Cmte.		Need login information. Social Media coordinator needed.
4.	<p><b>Create WFO Pamphlet.</b> Create a pamphlet for WFO, taking the one from CETAF as an example.</p> <p><i>- Pamphlet should be something simple to inform our community about the Consortium to put in our own institutions.</i></p>	Comm. Cmt.	Once content is agreed on, PWJ could organize staff to create the pamphlet and make sure every institution has hundreds of copies.	
5.	<p><b>Videos.</b> <i>It was recommended that we include the links to videos of institutions on Website.</i></p>			
6.	<p><b>Enhance Demo Portal with Descriptive Data.</b> Demo portal should be enhanced with descriptive data content as advised by the Data Content subgroup for the Nov. meeting. <i>Get descriptive data ready to go from: Flora Neotropica from NY, from MO: Flora Mesoamericana, Flora of Nicaragua, Flora of China, Flora of Costa Rica, Part of Flora of Venezuelan Guayana, Flora of Panama and Novon</i></p>	WU	<i>In Work</i>	<p><i>Missouri data to be added as time allows.</i></p> <p><i>Taxonomic Group's list supercedes.</i></p>

	<i>and Annals.</i>			
7.	<b>Create a Harvester administration/operations guide.</b> The development of a Harvester administration/operation guide should be carried out immediately through testing and collaboration.	WU	<i>In Work</i>	<i>Reference Extension completed.</i>  <i>Harvester discovery completed.</i>  <i>Administration Guide in work.</i>
8.	<b>Test backbone changes and document.</b> A Technical subgroup formed to test backbone changes, investigate author attribution storage, document DwCA elements and report at next meeting.  <i>- Further testing of eMonocot needed to clarify issues relating to author attribution and to fully understand what data elements are used and how they are used/displayed.</i> <i>- Define the list of DwCA fields we need in order to contribute information to WFO.</i> <i>- Create a contributing guide: including taxonomic backbone datasets and content datasets</i>	Tech. Group	<i>In Work</i>	<i>Documented eMonocot issues</i>  <i>Documented references/attribution functions</i>  <i>Documented DwCA fields list Contribution Guides in work</i>
9.	<b>Complete gap analysis of the portal use cases.</b> Complete a full analysis of the portal use case gaps, including severity of the gap, difficulty to remediate, resources to mediate and a prioritization. <i>Defer to next meeting</i>	Mark Watson	<i>In Work</i>	
10.	<b>Implement Botalista software.</b> Implement the Botalista software on the WFO Google Server and work together to further develop it as collaborative tool for expert networks to contribute backbone data.	Pierre-Andre, Walter, Eduardo, Marianne and Raoul	<i>In Work</i>	Pursuing private funding  Council approved pursuit of requirements for a pre-ingestion system as extension to Botalista

11.	<b>Make a Survey of existing global taxonomic networks.</b> Make a Survey of existing global taxonomic networks and the systems used and ask if they are willing to be responsible to match names to treatments.	<i>Tax.WG</i>	In Work	List of specialists and specialist networks by Family created, but incomplete.  Include formal to informal specialist groups.  Include systems used to record data.  Contacts to be made. Question of institutions and ongoing responsibility.
12.	<b>Provide standards for genus and species of angiosperms and gymnosperms.</b> Covered by the Taxonomic Working Group	<i>Tax. WG</i>		Tax WG to discuss.
13.	<b>Identify specialists to review parts of the taxonomic backbone.</b> When no networks exist, identify specialists to review parts of the taxonomic backbone and/or assess the quality of the treatment in the current WFO backbone.	<i>Tax. WG</i>		<i>Tax WG to discuss.</i>
14.	<b>Update guidelines for contributors.</b> Guidelines for contributors available (June 2014) need to be updated. <i>- Develop Guidelines for Contribution: Backbone and Content before Berlin.</i>	<i>Mark Watson, William</i>	<i>In Work</i>	<i>Contribution guidelines in work.</i>  <i>TBD as soon as possible to enable IBC Launch.</i>
15.	<b>Develop markup Tools for a Toolkit.</b> Consolidate the Markup Tools being used; develop them from now and until the next meeting in New York to integrate them into a toolkit.	<i>TechWG</i>	Ongoing	

	<p>- SANBI has developed Markup tools and are available for others to use. Available from GitHub: <a href="https://github.com/rudivs/SpeciesMarkupAddIn">github.com/rudivs/SpeciesMarkupAddIn</a></p>			
16.	<p><b>Create document on web strategy based on CBD CHM work.</b> Create a document on web strategy for the next meeting based on the work being done by the CBD CHM. Suggest ideas on materials like meetings where WFO should present (e.g. IBC) a keynote or at least a Symposium on WFO.</p> <ul style="list-style-type: none"> <li>- Communications Working Group (Eduardo Dalcin, Barbara Thiers, John Parnell)</li> <li>- Communications Committee will define Communication plan and presence for the Botanical Congress as a bigger topic.</li> <li>- Put someone in charge of the Social Media. - Separate production of content from the website administration, tailor-make the strategy for each group in order to facilitate the prioritization.</li> <li>- Launch of our communications strategy to raise awareness when we have a portal that people could use. Communicate key advances and specific strategy.</li> <li>- Put content in a blogging platform to be reused in FB or other platforms. Have a post so we don't create false expectations.</li> <li>- Eduardo will provide a copy of the Communication Working Group report and William will modify it to include the action points indicated here.</li> <li>- Eduardo will create a list for Comm. discussions so that they get recorded.</li> <li>- Eduardo will create a repository of public documents to be made available through the website</li> <li>- Demonstrate a joint Consortium web site to promote fundraising.</li> </ul>	Comm. WG.	In Work	Draft Web Strategy created.
17.	<p><b>Prepare short paper for TAXON.</b> Prepare a draft explaining the WFO taxonomic backbone approach, describing the acknowledgement structure and the</p>	PWJ	Deferred	

	available technological tools (for ingestion). - <i>Not ready now. Publish Melastome group work.</i>			
18.	<p><b>Save the Dates.</b> Save the dates for the 7th &amp; 8<sup>th</sup> meetings:</p> <p>27-31 March, 2017 in Berlin, Germany hosted by Botanischer Garten und Botanisches Museum Berlin-Dahlem,</p> <p>13-17 November, 2017 in Paris, France hosted by Muséum National d'Histoire Naturelle</p>			

### ATTENDEES

The attendees at the Pretoria meeting were:

- Abigail Barker, Royal Botanic Gardens, Kew
- Walter Berendsohn, Berlin Botanical Garden
- Thomas Borsch, Director of the Botanic Garden and the Botanical Museum Berlin-Dahlem, Freie Universität Berlin
- Brenda Daly, SANBI.
- Maïté Delmas, Muséum National d'Histoire Naturelle, Paris
- Ronell Klopper, SANBI
- Marianne LeRoux, SANBI
- Pierre-André Loizeau, Conservatoire et Jardin botaniques de la Ville de Genève, co-chair WFO Council
- John Maning, SANBI
- Siro Masinde, GBIF
- Chuck Miller, Missouri Botanical Garden, co-Chair of WFO Technical Working Group
- Jim Miller, Missouri Botanical Garden
- Raoul Palese, Conservatoire et Jardin botaniques de la Ville de Genève
- Haining Qin, Institute of Botany, Beijing.
- Lauren Raz, Instituto de Ciencias Naturales, Universidad Nacional de Colombia
- Gideon Smith, Nelson Mandela Metropolitan University
- Paul Smock, Missouri Botanical Garden
- Barbara Thiers, New York Botanical Garden, co-Chair WFO Communications Working Group
- Wayt Thomas, New York Botanical Garden, co-Chair of the Taxonomic Working Group
- Melissa Tulig, New York Botanical Garden
- William Ulate, Missouri Botanical Garden
- Visotheary Ung, Biodiversity Informatics Programs at the Muséum National d'Histoire Naturelle, Paris



- Janine Victor, SANBI.
- Mark Watson, Royal Botanic Gardens Edinburgh, UK, co-Chair of WFO Technical Working Group