



Summary Report on the World Flora Online Council Meeting
Villa de Leyva, Colombia
Hosted by Universidad Nacional de Colombia, Bogota

The ninth meeting of the World Flora Online Council was held at the Instituto Von Humboldt in Villa de Leyva, Colombia from 21-22 June 2018, preceded by Taxonomic and Technical Working Group meetings at the Universidad Nacional de Colombia in Bogotá from 18-19 June. Over the four days, 17 individuals participated, representing 10 institutions, organisations or projects.

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

The report from the previous Council Meeting in Paris in November 2017 and the proposed agenda were accepted.

MEMBERSHIP

Peter Wyse Jackson (Co-chair) reported there are currently 41 members of the Consortium. There are no pending members in process. The Council agreed to invite organisations that may be involved in WFO Taxonomic Expert Groups (TENS) to become members of the WFO Consortium, but not the TENS themselves.

RECOMMENDATIONS ADOPTED

The following recommendations were adopted by the WFO Council:

TECHNICAL WORKING GROUP RECOMMENDATIONS

1. Communications Working Group to reassess the 'About' page content and explore adding acknowledgements to the About page.
2. Modify code to enable ingestion of Scientific Name with authors.
3. Expand use case gap analysis by creating a subgroup to evaluate current Public Portal functionality and create a user survey for general feedback.
4. Give priority to fix the functionality to harvest distribution data.

TAXONOMIC WORKING GROUP

1. A feedback mechanism is needed to alert the TENS when a new name is incorporated in the pre-harvesting Taxonomic Backbone (eventually this will be facilitated through *Botalista*).
2. New names from IPNI should be treated as if coming from a non-TEN content provider.
3. Nine TENS are accepted as the first WFO endorsed Taxonomic Expert Networks.

4. An RBG Edinburgh offer to provide a TENS Manager was accepted.
5. WFO will take on management of The Plant List (TPL) since this provides a fundamental reference for WFO, i.e. the basis for the first 'Taxonomic Backbone'.
6. The Taxonomic Working Group workplan for June – December 2018 was accepted.

BOTALISTA DEVELOPMENT

Raoul Palese gave a report on the development of *Botalista* and indicated that they hope *Botalista* will be able to manage the backbone, receive the Darwin Core (DwCA) archives and produce the archive for harvesting by the Portal by the end of the year, although the development of the interface for TENS to manage the content directly in *Botalista* will not be ready by then.

TAXON PAPER

Thomas Borsch reported on the progress on the paper for *Taxon*. He will finalize the manuscript with Marc Sosef and Mark Watson to submit by the end of July.

THE PLANT LIST

The Plant List (TPL) was incorporated into the WFO Taxonomic Backbone. Kew announced that it would not intend to host and sustain TPL 1.1. Kew suggested that WFO should maintain the infrastructure of TPL. The Council approved that the management of TPL 1.1 be taken over by WFO.

WFO REGISTRATION CENTER

It was suggested that WFO could become a Registration Centre. The timeline and different ways to approach this were commented upon by the Council. The Council agreed that WFO should demonstrate that things are up and running successfully before the next Nomenclatural Meeting (at the IBC) but in the meantime WFO should express its interest to the Nomenclatural Registration Committee.

CATALOGUE OF LIFE COLLABORATION

Peter Schalk and one other person representing CoL will come to participate in the WFO Meeting in Dublin. CoL will invite a plant expert from WFO to join the CoL global team as WFO representative. Olaf Banki has been designated as the CoL contact person for WFO.

The Catalogue of Life is very keen to have close involvement with the WFO and very interested that, while developing the WFO TENS, there are some elements of mapping between their Plant Expert Network and the TENS, but Catalogue of Life would like WFO to be one of the sources of information for the CoL database, not the only one. The Council indicated that in-depth discussions are needed on how we could possibly work together, if there are multiple taxonomic backbones in use. Marc Sosef, Mark Watson and Thomas Borsch agreed to represent the WFO Council in discussions with CoL.

DIGITAL SEQUENCE INFORMATION (DSI)

Thomas Borsch gave a presentation on Digital Sequence Information and the potential impact on scientific research. The Council suggested continuing to watch this issue. Peter Wyse Jackson would

review at what developments comes out of upcoming CBD meetings on this issue and will keep in contact with other WFO members to watch the pulse on this.

IAPT COLLABORATION

The International Association for Plant Taxonomy (IAPT) has expressed its interest to collaborate with WFO. Michele Price, chair of CETAF, had made the link with IAPT. A new IAPT Council was elected and will meet in October. Patrick S. Herendeen, new IAPT chair, is interested, according to the information from Michele, and collaboration will be examined during their next meeting in October. The situation is currently positive for collaboration and the WFO Council decided that the topic should be discussed in the next meeting in Dublin.

COMMUNICATIONS STRATEGY

The Council pointed out some of the Communications issues that have already been dealt with:

- A FAQ document is now available online
- A draft FAQ document for the Taxonomic Expert Networks is available
- The TAXON paper is very close to be completed.

The Council recommended that the Communications Working Group should work on a Communications Strategy that identifies the target audiences (TENS, General Public, Taxonomic Community and others), feeling free to draw on the resources of the Council for their work. No timetable for such work was agreed.

GPPC MEMBERSHIP

The Council decided that the Co-Chairs of WFO should write to the Chair of the GPPC formally requesting to become a member of The Global Partnership for Plant Conservation (GPPC).

REVIEW OF ACTION ITEMS

The following action items from the Paris meeting were reviewed.

#	TASKS	STATUS
1.	Presentations on WFO. Take advantage of the meetings we attend to promote the WFO.	<i>Need to upload prior presentations to ownCloud folder</i>
2.	Update current signatories. Update the list of Consortium members on the website.	<i>Ongoing and up to date. Wayt Thomas to indicate to Peter Wyse Jackson what might be the next step to pursue for the membership of the Flora of the Guyanas in WFO.</i>
3.	Update Facebook page. Keep updating FB page with news and current information.	<i>Refer to Communications WG. for Communications Strategy. Any Member may suggest a volunteer to Co-Chairs.</i>
4.	Create WFO Pamphlet. Create a pamphlet for WFO, taking the one from CETAF as an example.	<i>Pamphlet was created for IBC. Melissa will upload to ownCloud.</i>

#	TASKS	STATUS
5.	Videos. <i>It was recommended that we include the links to videos of institutions on Website.</i>	<i>No videos included. If any institution has a video, please provide the link.</i>
6.	Enhance Production Portal with Descriptive Data	<i>Ongoing task and no further discussion needed.</i>
7.	Create a Harvester administration/operations guide.	<i>Ongoing task.</i>
8.	Test backbone changes and document.	<i>Done.</i>
9.	Complete gap analysis of the portal use cases.	<i>Continues in progress.</i>
10.	Implement Botalista software.	<i>Ongoing. Change date to December 2019. Split into phases with end of 2018 for Ingestion</i>
11.	Make a Survey of existing global taxonomic networks.	<i>Continuing as we build the list of actual and potential list of TENS</i>
12.	Provide standards for genus and species of angiosperms and gymnosperms. Address suprafamily classification.	<i>Follow up with Barbara for ferns and bryophytes.</i>
13.	Taxonomic Expert Networks (TENS)	<i>Continues in progress.</i>
14.	Update guidelines for contributors.	<i>In progress, shortly to be finished.</i>
15.	Develop markup Tools for a Toolkit.	<i>No current update, not priority for 2018, but continue for future</i>
16.	Communicate document on web strategy based on CBD CHM work.	<ul style="list-style-type: none"> – Web strategy. Multiple discussions. – Marianne sent message that ResearchGate WFO project was set up. Completed. FAQs have been added to About portal. Completed. – Need to have Communications Strategy session in Dublin. – Content management system easier than HTML. – Reassess content of About page. – Explore adding an Acknowledgments section in the About page where members of the Consortium can list supporters and acknowledgements. - Then put together some guidelines about contributing to the Acknowledgments section and submit them to the Council for acceptance. After acceptance, ask the members to send any acknowledgements of supporters with the relevant logo.

#	TASKS	STATUS
17.	Prepare short paper for TAXON.	<i>Excellent progress. Close to being able to submit.</i>
18.	Save the Dates. Save the dates for the 9 th meeting: Bogota, Colombia. June 18 th – 22 nd , 2018 And 10 th meeting: Dublin, Ireland. December 3 rd – 7 th , 2018 And the 11 th meeting: Istanbul, Turkey. April 23 rd – 27 th , 2019	
19.	Create a list of institutions relevant to promote WFO and interact with.	<i>- Handle in context of the Communications Strategy.</i>
20.	Hybrid formulae are not included in WFO.	<i>Done</i>
21.	Names included in WFO will be governed by the International Code of Nomenclature for algae, fungi, and plants (ICN	<i>Done</i>
21.	Identifiers for scientific names in WFO were changed to be 'WFO-<unique10-digits integer>	<i>Done</i>
23.	Prepare WFO Portal for IBC.	<i>Done</i>
24.	Add Emails to the WFO List.	<i>Has worked very well with lists through Rio.</i>
25.	Data Sharing Agreement. Develop further the existing Draft Sharing Agreement to share content with other Taxonomic Networks.	<i>Prepare some materials on Data Sharing Agreements for Dublin</i>
26.	Update the list of Floras from different providers.	<i>Done.</i>
27.	Advise users in the website how to cite the WFO content using an indication “as of <THIS DATE>”	<i>We have it in the FAQs. Pending to add to the Webpages.</i>
28.	Ingest new Version 3 IUCN data interface.	<i>Ongoing. Requires code change.</i>
29.	DOIs for datasets and downloads.	<i>Pending code change.</i>
30.	WFO Darwin Core extensions. WFO Terms not included in Darwin Core standard: 1. localID: Record identifier used by the data contributor. E.g. Tropicos ID, Flora of S Africa ID, EDIT ID 2. Alternate Taxon/Name IDs: E. g. Catalogue of Life ID 3. taxonomicStatusReference: Accepted or	<i>Consult with TDWG with formal request for DwC extensions</i>

#	TASKS	STATUS
	<p>Synonym status by/according to publication. E.g. Accepted according to GrassBase</p> <ol style="list-style-type: none"> 4. sourceCitation (of the name record): Not namePublishedIn or bibliographicCitation. E.g. Solanaceae Source is source of the Backbone name record. 5. VerbatimSpecimenList: Currently using Specimens extension. 6. VerbatimDistribution: Using "Distribution" Description Type in Descriptions.txt file 7. Protologue: Using Description Type of Original Publication in Descriptions.txt file 8. nomenclaturalNote 	
31.	Send formal request to GBIF for WFO-tailored versions of IPT and DwCA Validator, involving SANBI and Flora do Brasil	<i>Botalista replaces tailored version of DwCA Validator. Tailored IPT still needed.</i>
33.	Resolve insufficient resources to support: <ul style="list-style-type: none"> - Software development staffing. - Fund TEN Manager position - Institution to maintain OwnCloud 	<ul style="list-style-type: none"> - Missouri is committed to providing William's role, but we have an issue with software development staffing - Acknowledge support from RBGE for TEN Manager position. - Defer decision to Dublin.
34.	Test Harvester with new Data Types.	<p><i>Ongoing.</i></p> <p><i>Distribution data needs more work.</i></p>
35.	<p>Implement the following tasks (not high-priority):</p> <ol style="list-style-type: none"> 1. <i>Modify code to add dynamic totals for counts of objects on Home page</i> 2. <i>Modify code for Search "quick link" drop down to include the terms being searched (e.g. Poa annua)</i> 3. <i>Modify code to enable ingestion of Scientific Name field with authors</i> 4. <i>Activation of requests for registration (e.g. downloading)</i> 5. <i>Ingest scientific names with authors included (not eMonocot function)</i> 6. <i>Change reference link to full source name for Synonyms section</i> 7. <i>Add "How to Cite" in page footer.</i> 8. <i>Reveal hidden fields (e.g. Basionym)</i> 9. <i>Enable alternate classifications</i> 	<ol style="list-style-type: none"> 1. <i>Done</i> 2. <i>Done</i> 3. <i>Done</i> 4. <i>Done</i> 5. <i>Done</i> 6. <i>Done</i> 7. <i>Pending</i> 8. <i>Pending</i> 9. <i>Pending</i>
36	Integrate authoritative information on accepted names and synonyms from a well-defined geographic area into the WFO backbone	<i>Ongoing – Endemics from Madagascar and African Plants Database.</i>
37	Taxonomic Working Group follow up.	<i>WebEx Conference Calls to be held in Aug, Sept,</i>

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		<i>Oct/Nov.</i>
38	Formalize relation with IAPT	<i>Patrick S. Herendeen, new IAPT chair, is interested, according to Michelle Price and collaboration will be examined during their next meeting in October. The situation is currently positive for collaboration and the Council decided to discuss the topic in the next meeting in Dublin.</i>
39	Catalogue of Life	<i>The Council indicated that in-depth discussions are needed on how we could possible work if there are multiple taxonomic backbones in use. To be addressed in Dublin.</i>

ELECTION OF CHAIRS

The chairs of the Council and Working Groups were all unanimously reelected.

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

2019 MEETING

Adil Güner offered to host the Spring 2019 Council meeting in Istanbul, Turkey and his kind offer was accepted by the Council. The dates of the meeting need to be worked out, but April 23-27 was suggested.

THANKS TO THE HOST

Peter Wyse Jackson and Pierre-André Loizeau expressed the Council's sincere thanks to the Universidad Nacional de Colombia, and in particular, our sincere thanks to Lauren Raz, for the great organization and wonderful venues.

Thanks were given also to all the Co-Chairs for their hard work and their reports, who all deserve credit for the very positive way the meeting moved forward. The co-chairs expressed thanks to William for his continued hard work and for capturing the records of the meeting. Thanks to Jim Miller for his work as temporary TEN manager and to Mark Watson and the Royal Botanic Garden Edinburgh for their kind offer to provide a TEN Manager for the project. Thanks to both institutions, the Universidad Nacional de Colombia and the Instituto von Humboldt for hosting our meetings. A brief thank you to Raoul Palese and Pierre-André for the wonderful progress they have made and will be making on *Botalista*.

On behalf of the co-chairs, Peter Wyse Jackson concluded giving thanks to all the participants for attending and sharing their time, expertise and enthusiasm for the World Flora Online project; indicating

it's been a great meeting where considerable progress was made in clarifying many issues and setting work priorities for the coming period; he also added that clearly, we can be very proud of the work done for World Flora Online and we need to share with our colleagues and throughout the conservation community that this is a successful project. He also stated that he believed that we are well on track to deliver an excellent product to achieve Target 1 of the GSPC by 2020 and that we look forward to our meeting in Dublin.

Pierre-André Loizeau thanked his co-chair, Peter Wyse Jackson, for coordinating our group and the project so well and Peter Wyse Jackson thanked Pierre-André for his wonderful collaboration as Co-Chair.

Finally, Lauren Raz officially closed the World Flora Online meeting.

ACTION ITEMS FOR DUBLIN

The following action items were carried forward or added:

#	TASKS	WHO?	WHEN?	COMMENTS
1.	<p>Presentations on WFO. Take advantage of the meetings we attend to promote the WFO.</p> <ul style="list-style-type: none"> - <i>Presentations on WFO were given at the Botanical Congress in Geneva.</i> - <i>Chuck and William also presented a technical talk about WFO at TDWG2017 in Ottawa, Canada</i> - <i>Peter Wyse Jackson outlined the WFO project during his talk as keynote speaker at IBC.</i> 	All	<p><i>Continuously .</i></p> <p><i>Upload to WFO Presentations folder in ownCloud.</i></p>	<p><i>Next presentations:</i></p> <ul style="list-style-type: none"> - <i>Latin America Botanical Congress 21-28 Oct.</i> - <i>6th Monocots Congress Natal Brazil. 8th – 12th October</i> - <i>GBIF in Ireland, this year</i> - <i>May in Lisbon</i> - <i>TDWG Meeting in New Zealand</i> - <i>GPPC. Peter Wyse Jackson will lead.</i> - <i>Caryophyllales Network Congress in Mexico City. Walter Berendshon.</i> - <i>COP, Egypt 12th – 22nd November 2018. Peter Wyse Jackson and Mäite may attend.</i> - <i>Caribbean Botanical Garden Network, Cuba April 2nd -5th Berlin and MBG will have representatives.</i> <p><i>Need to upload presentations to ownCloud folder</i></p>
2.	<p>Update current signatories. Update the list of Consortium members on the website.</p> <p><i>Maintain an archive of hard copies of the Agreements between Data Providers and the World Flora Online stored at the Secretariat.</i></p>		<i>As new members join.</i>	<ul style="list-style-type: none"> - <i>All current signatories were updated in the Website.</i>
3.	<p>Update Facebook page. Keep updating FB page with news and current information.</p> <ul style="list-style-type: none"> - <i>Included in the Communications</i> 	Communic. Committee		<p><i>Refer to Communications WG. for Communications Strategy.</i></p> <p><i>Any member may suggest a</i></p>

#	TASKS	WHO?	WHEN?	COMMENTS
	<i>Strategy</i>			<i>volunteer to Co-Chairs.</i>
4.	<p>Create WFO Pamphlet. Create a pamphlet for WFO, taking the one from CETAF as an example.</p> <p>- Pamphlet should be something simple and brief to inform our community about the Consortium to put in our own institutions.</p> <p>- Once pamphlet is created make sure every institution has hundreds of copies.</p>	Communic. Committee		<p>- A pamphlet was created and available for the time of the launch at IBC.</p> <p>- Melissa will upload to ownCloud.</p>
5.	<p>Videos. It was recommended that we include the links to videos of institutions on Website.</p>		<i>Continuously</i>	- Anyone with videos in their institution relevant to WFO, please provide.
6.	<p>Enhance Production Portal with Descriptive Data. Production portal should be enhanced with descriptive data content as advised by the Data Content subgroup for the Nov. meeting.</p> <p><i>Send a tweet as content is loaded to Production.</i></p>	WU	<p><i>Ongoing task.</i></p> <p><i>When ready, William Ulate will touch base with the intermediary contacts of the Content providers for the next digital resources to bring into the WFO Portal, as determined by the Taxonomical WG in order to increase the diversity of content and geographic coverage.</i></p> <p><i>Chuck Miller to lead production of a map of WFO current content showing geographical coverage (for website, presentations etc.) for Dublin.</i></p>	<p><i>Re-harvest flora datasets to capture descriptions for new names or newly matched names:</i></p> <ul style="list-style-type: none"> - <i>Solanaceae Source</i> - <i>eFlora of China</i> - <i>NYBG – Flora of NE US</i> - <i>Plants of the World Online -</i> - <i>POWOP data on Flora of West Tropical Africa</i> - <i>IUCN Conservation Status</i> - <i>Images from Solanaceae & Flora of China</i> <p><i>Continue to load remaining and new datasets:</i></p> <ul style="list-style-type: none"> - <i>Flora of Colombia</i> - <i>Australian Floras</i> - <i>Flora of Nepal</i> - <i>Illustrated Flora of Turkey</i> - <i>Illustrated Treatments for Korea: Cyperaceae, Poaceae, Pteridophyta, Coniferae (descriptions in Korean) – Kaesun Chang</i> - <i>Fl. Helvetica (descriptions in French and German) – Pierre-André Loizeau</i> - <i>Fl. Trop. East Africa (Kew, TBC)</i> - <i>eMonocot descriptions (Kew, TBC)</i>

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			<i>The Taxonomic Working Group will define the criteria (scientific credibility, completeness, substantial contribution, currency, etc.), similar to those used for assessing TENS, to judge the authorization of potential Content Providers during the next meeting in Dublin</i>	
7.	Create a Harvester administration/operations guide. The development of a Harvester administration/operation guide should be carried out immediately through testing and collaboration.		<i>Ongoing task</i>	<i>New updates should be included.</i>
9.	Complete gap analysis of the portal use cases. Complete a full analysis of the portal use case gaps, including severity of the gap, difficulty to remediate, resources to mediate and a prioritization.	Mark, Chuck	<i>In Progress</i>	<i>-Subgroup began the first pass of the process, need to continue filling out the rest.</i> <i>Conduct simple survey with generic questions about usability, functionality, user experience (e.g alternate classifications)</i>
10.	Implement Botalista software. Work together to further develop Botalista as collaborative tool for expert networks to contribute backbone data.	Pierre-André and Raoul	December 2019. Ingestion phase: <i>BOTALISTA will be able to manage the backbone, receive DwCA archives and produce the output archive to harvesting into the WFO Portal by Dec.2018</i>	<i>Raoul would test the ingestion to Botalista of the full version of the taxonomical backbone.</i>
11.	Make a Survey of existing global taxonomic networks. Make a Survey	<i>Tax.WG</i>	<i>In Progress</i>	<i>Continuing as we build the list of</i>

#	TASKS	WHO?	WHEN?	COMMENTS
	of existing global taxonomic networks and the systems used and ask if they are willing to be responsible to match names to treatments.			<i>actual and potential list of TENS</i>
12.	Provide standards for genus and species of angiosperms and gymnosperms. Address suprafamily classification.	<i>Tax. WG</i>	<i>- Mark Watson will lead the update of families and higher ranks, liaising with the Technical Working Group for instructions on how this can be done (within Botalista).</i>	<i>Tax WG discussed at Colombia, recommended following up APG IV. Barbara has touched base with her contacts on indications on how to solve taxonomic problems for non-APG groups (ferns and bryophytes). - A new family classification proposed in writing to the Taxonomic Working Group should be accompanied by its higher classification.</i>
13.	Taxonomic Expert Networks (TENS). Identify specialists to review parts of the taxonomic backbone. 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>In Progress Created first draft on the "World Flora Online Collaboration Model and Workflow for Contributors to the WFO Taxonomic Backbone for discussion The list of TENS will be worked by the Taxonomic Working Group during the meeting in Dublin.</i>	<i>Underway. List of 9 TENS approved by the Council at Colombia: 1. Begoniaceae - M. Hughes (E) 2. Cordiaceae - J. Miller (MO) 3. Caryophyllales - T. Borsch (B) 4. Dipterocarpaceae - M. Newman (E) 5. Hypericum - S. Crockett (Graz); N. Robson (BM) 6. Picramniaceae - W. Thomas (NY) 7. Sapotaceae - P. Wilkie (E) 8. Solanaceae - S. Knapp (BM) 9. Zingiberaceae - M. Newman (E) Set up a dedicated email address for WFO TENS Manager, Jim Miller will receive messages until a full-time TENS Manager is appointed. Mark Watson, Wayt Thomas and</i>

#	TASKS	WHO?	WHEN?	COMMENTS
				<i>Jim Miller will include potential contacts/institutions into the shortlist of 60 large to medium size families not covered by WCSP to prioritize and circulate this list to the Taxonomic Working Group for comment and then distribute among the members of the Consortium.</i>
14.	<p>Update guidelines for contributors. Guidelines for contributors available (June 2014) need to be updated. <i>Developed first version of Guidelines for Contribution: Backbone and Content before IBC.</i></p>	<i>Walter, William</i>	<p><i>In Progress</i></p> <p><i>The reviewed Guidelines for Contributors will be sent from the Co-Chairs to the Council in mid-July</i></p>	<p><i>Updates to the three guides are being developed:</i></p> <ol style="list-style-type: none"> <i>1. General introduction on how to become a member.</i> <i>2. Tech-minded, here's the document how to contribute to the taxonomic backbone.</i> <i>3. Content provider.</i> <p><i>The Registration process in the Guidelines is to be separated from the provision of content.</i></p> <p><i>Walter and Chuck would finalize the next version of the Guidelines this week, put them on the ownCloud and send them around in the Committees with a deadline on commentary to make progress before the next meeting.</i></p>
15.	<p>Develop markup Tools for a Toolkit. Consolidate the Markup Tools being used; develop them to integrate them into a toolkit.</p> <p><i>- SANBI has developed Markup tools and are available for others to use. Available from GitHub: github.com/rudivs/SpeciesMarkupAdd</i> <i>In</i></p>	<i>TechWG</i>	<i>Ongoing</i>	<i>No current update, not priority for 2018, but continue for future</i>
16.	Communicate document on web strategy based on CBD CHM work.	<i>Comm.</i>	<i>In Work</i>	<i>We need to have a clear strategy on how the WFO is integrated into</i>

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	<p>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 a keynote or at least a Symposium on WFO.</p> <p>- <i>Communications Committee will define Communication plan as a bigger topic.</i></p> <p>- <i>Put someone in charge of the Social Media</i></p> <p>- <i>Separate production of content from the website administration, tailor-make the strategy for each group in order to facilitate the prioritization.</i></p> <p>- <i>Launch of our communications strategy to raise awareness when we have a portal that people could use. Communicate key advances and specific strategy.</i></p> <p>- <i>Demonstrate a joint Consortium web site to promote fundraising.</i></p> <p>-<i>For a Strategy define Who they are? What to tell them? How to tell them? Who's going to tell them? And when are they going to be told?</i></p>	<p>WG. (Eduardo Dalcin, Barbara Thiers, John Parnell)</p>	<p><i>Draft Web Strategy created.</i></p> <p><i>ResearchGate WFO project was set up. Done.</i></p> <p><i>FAQs have been added to About portal. Done.</i></p> <p>- <i>The Communications Working Group should work in a Communications Strategy that identifies the target audiences (TENs, General Public, Taxonomic Community and others) and bring as a discussion point in Dublin.</i></p>	<p><i>all of the outcomes of CBD, which requires an understanding on how the CBD works and a lot of promotion of the WFO within the CBD Mechanisms.</i></p> <p>- <i>Install a Content Management System (CMS) on Google Cloud (WordPress). Defer to Dublin the recommendation to adopt a CMS for the About page.</i></p> <p>- <i>Make the About web page (currently in HTML) easier to update by multiple partners (migrating to a CMS).</i></p> <p>- <i>Reassess About page content. Put together some guidelines about an Acknowledgements section and submit them to the Council for acceptance in principle.</i></p> <p><i>For the Communication Strategy, define what is WFO doing in the next 6 months to be able to know what to communicate. We need to define what audience we want to attend first and use appropriate platforms to reach them. Peter Wyse Jackson may send a message to the Council asking for names of specialists who could collaborate on a Communication Plan, once we know what we want to communicate.</i></p>
17.	<p>Prepare short paper for TAXON. Prepare a draft explaining the WFO taxonomic backbone approach, describing the acknowledgement structure and the available technological tools (for ingestion).</p>	<p><i>Taxonomic Working Group</i></p>	<p><i>Finalized and open for comments to both Tech and Tax lists soon.</i></p> <p><i>Thomas Borsch will finalize the manuscript</i></p>	<p><i>Underway, excellent progress. Close to being able to submit.as discussed in the Taxonomic Working Group report.</i></p>

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	- <i>Edit, polish and distribute to the group and external people who may have something to add.</i>		<i>of the TAXON paper with Marc Sosef and Mark Watson and submit it by the end of July.</i>	
18.	Save the Dates. Save the dates for the 10 th & 11 th meetings	<i>Peter Wyse Jackson</i>	Dublin, Ireland. December 3 rd – 7 th , 2018 Istanbul, Turkey. April 23 – 28, 2019	<i>Post the report of the previous Council Meeting on the WFO website</i>
19.	Create a list of institutions relevant to promote WFO and interact with.	<i>Barbara will compile</i> <i>All: Send suggestions and contacts to Barbara</i>	<i>Some work done on this already.</i>	<i>Create a list of who we should approach to make the point of the importance of WFO and market our initiative.</i> <i>- Handle in context of the Communications Strategy.</i>
24.	Add Emails to the WFO List. Made list of active members' emails of people involved in WFO. Access to the ownCloud was also reviewed.			<i>Has worked very well with lists through Rio.</i>
25.	Data Sharing Agreement. Develop further the existing Draft Sharing Agreement to share content with other Taxonomic Networks. <i>Any Data Provider Agreement should be harmonized with the Terms of Use.</i> <i>Include current version of the Terms of Use in this Meeting Draft Report and request ideas on how to update both.</i> <i>Maintain an archive of hard copies of the Agreements between Data Providers and the World Flora Online</i>	<i>Peter Wyse Jackson</i>	<i>Peter Wyse Jackson will prepare some materials on Data Sharing Agreements for the Next Meeting in Dublin</i>	<i>This applies for data not shared under CC0. There's a need to define what / how content with restrictions will be shared. The text on how to Cite the WFO should also be developed.</i> <i>Include a leading part to the document saying that we want to encourage access to the information as open as possible.</i>

#	TASKS	WHO?	WHEN?	COMMENTS
	<i>stored at the Secretariat</i>			
27.	How to Cite. Advise users in the website how to cite the WFO content using an indication “as of <THIS DATE>”		<i>Not started</i> <i>Add a link in footer “How to Cite WFO”</i> <i>Create language for citing original publication and the WFO.</i>	<i>Add “as of <THIS DATE>, given the dynamic nature of WFO and while we lack versioning of WFO in a preharvesting system.</i> <i>We have it in the FAQs.</i> <i>Pending to add to the Webpages.</i>
28.	Ingest new Version 3 IUCN data interface. Modify eMonocot code to be able to harvest IUCN data. Currently, only Version 2 is usable with eMonocot.	<i>William</i>	<i>Ongoing</i> <i>Requires code change.</i>	<i>To achieve with limited resources (High Priority).</i>
29.	DOIs for datasets and downloads. Evaluate using GBIF-generated DOIs for WFO contributed datasets and downloads	<i>Technical Working Group</i>	<i>Pending code change</i>	<i>Creation of metadata for downloads for DOI.</i> <i>Evaluate the adding DOIs to uploaded datasets and downloaded reports.</i>
30.	WFO Darwin Core extensions. WFO Terms not included in Darwin Core standard: 9. localID: Record identifier used by the data contributor. E.g. Tropicos ID, Flora of S Africa ID, EDIT ID 10. Alternate Taxon/Name IDs: E. g. Catalogue of Life ID 11. taxonomicStatusReference: Accepted or Synonym status by/according to publication. E.g. Accepted according to GrassBase 12. sourceCitation (of the name record): Not namePublishedIn or bibliographicCitation. E.g. Solanaceae Source is source of the Backbone name record.	<i>Technical Working Group</i>		- Write a white paper on Darwin Core extensions needed for WFO - Formally request Darwin Core extensions from TDWG for WFO

#	TASKS	WHO?	WHEN?	COMMENTS
	<p>13. VerbatimSpecimenList: Currently using Specimens extension.</p> <p>14. VerbatimDistribution: Using "Distribution" Description Type in Descriptions.txt file</p> <p>15. Protologue: Using Description Type of Original Publication in Descriptions.txt file</p> <p>16. nomenclaturalNote</p>			
31.	Send formal request to GBIF for WFO-tailored versions of IPT and DwCA Validator, involving SANBI and Flora do Brasil	<i>Technical Working Group</i>		<p><i>Botalista replaces tailored version of DwCA Validator.</i></p> <p><i>Tailored IPT still needed.</i></p>
33.	<p>Resolve insufficient resources to support:</p> <p>a) Software development staffing. b) Fund TEN Manager position c) Institution to maintain OwnCloud</p>	<i>WFO Council</i>	<i>Defer to next meeting in Dublin</i>	<p>a) <i>Missouri is committed to providing William's role, but we have an issue with software development staffing</i></p> <p>b)- <i>Acknowledge support from RBGE.</i></p> <p>c)- <i>Defer decision to Dublin.</i></p>
34.	Test Harvester with new Data Types as advised by the Council during the Nov. meeting in Paris.	<i>William</i>	<i>Ongoing. Distribution data needs more work.</i>	<ul style="list-style-type: none"> - <i>Harvest distribution data into the Portal</i> - <i>Upload habit from BGCI Global Trees Assessment</i> - <i>Trial harvesting identification keys into the Portal</i>
35.	<p>Implement the following tasks (not high-priority):</p> <ol style="list-style-type: none"> 1. <i>Add "How to Cite" in page footer.</i> 2. <i>Reveal hidden fields (e.g. Basionym)</i> 3. <i>Enable alternate classifications</i> 	<i>William</i>	<i>When possible. Requires code change.</i>	<p><i>To achieve with limited resources, whenever possible</i></p> <ol style="list-style-type: none"> 1. <i>See Item 27</i> 2. <i>Pending</i> 3. <i>Pending</i>
36	Integrate authoritative information on accepted names and synonyms from a well-defined geographic area into the WFO backbone , and thereby improve the overall quality of the latter.	<i>William</i> <i>Pete Lowry</i>	<i>Ongoing</i>	<p>Use the taxonomic backbone of the <i>Catalogue of the Plants of Madagascar</i> project as a test case.</p> <p><i>(Endemics from Madagascar and African Plants Database)</i></p>

#	TASKS	WHO?	WHEN?	COMMENTS
	Prior to engaging Taxonomic Expert Networks (TENs) for a taxon-by-taxon review of the backbone information.			
37	Taxonomic Working Group follow up.	<i>Tax WG</i>		<i>WebEx Conference Calls to be held in Aug, Sept, Oct/Nov.</i>
38	Formalize relation with IAPT	<i>WFO Council</i>	Defer to next meeting in Dublin.	Patrick S. Herendeen, new IAPT chair, is interested, according to Michelle Price and collaboration will be examined during their next meeting in October. - The situation is currently positive for collaboration.
39	Catalogue of Life	<i>Marc Sosef, Mark Watson and Thomas Borsch</i>	Marc Sosef will coordinate the task force for COL with Mark Watson and Thomas Borsch to take forward work on a white paper that will discuss collaboration between WFO and CoL, including a proper mechanism to develop a technical partnership. To be addressed in Dublin.	<i>The Council indicated that in-depth discussions are needed on how we could possible work if there are rival taxonomic backbones in use. The task force with to take forward work on a white paper that will discuss collaboration between WFO and CoL. A proper mechanism to develop a technical partnership should be included.</i>
40	Authorization and Registration Process.	<i>Taxonomic Working Group</i>		- <i>Identify any issues to address or enhancements to add at the workflow of the process of Authorization and Registration derived from the existing Guidelines indications presented by the Technical Working Group.</i> - <i>Separate the Registration process in the Guidelines from the provision of content.</i>
41	Google Cloud Resources	<i>William Ulate</i>		<i>Reduce unneeded Cloud resources</i>

#	TASKS	WHO?	WHEN?	COMMENTS
42	<p>New Names. Implement a mechanism to deal with new names coming from Content Providers or IPNI and updating the Taxonomic Backbone, as recommended by the Taxonomic Working Group.</p> <p><i>A 'new name' is an Effectively Published name not already in the Taxonomic Backbone. Content Providers only provide one name, their accepted name of the taxon which they are providing content</i></p>	<i>Technical Working Group</i>	<p>The Technical WG suggests we need to be deferred due to limitations of eMonocot ingestion process</p> <p>Deferred to next meeting in Dublin</p>	<ul style="list-style-type: none"> - <i>Create a feedback mechanism as needed to alert TENs when a new name is incorporated in the pre-harvesting Taxonomic Backbone (eventually Botalista).</i> - <i>Make an agreement with IPNI to receive their annual updates of new names and new combinations.</i> - <i>Treat new names from IPNI as if coming from a non-TEN Content Provider</i> - <i>Export new names in the backbone in a data format appropriate for the TENs to incorporate into their own system.</i>
43	<p>GLOVAP 4 publication. Minute a formal response to GLOVAP 4 based on the proposed WFO viewpoint.</p>	<i>WFO Council</i>	<p><i>Proposed viewpoint of WFO on the GLOVAP 4 publication</i> <i>The Council of the World Flora Online (WFO) considers the approach taken by the authors of GLOVAP 4 to be contrary to the spirit of WFO, where we have all worked hard to develop and promote a spirit of collaboration and collegiality within the WFO Consortium and taxonomic community. WFO is based on the best scientific practices and peer-reviewed consensus, and we recommend that future taxonomic changes should closely involve those undertaking the original research. Nevertheless, WFO recognises that the numerous new names that are validly published in GLOVAP 4 need to be incorporated into future versions of the Taxonomic Backbone.</i></p>	
44	<p>Duplicates. There are 17.7k name duplications in the Taxonomic Backbone (TPL artifacts)</p>	<i>Taxonomic Working Group</i>	To be completed by end of July	<ul style="list-style-type: none"> - <i>William will provide the list of 17.7k name duplicates for assessment including the taxonomic status</i> - <i>Chuck will build a spreadsheet with selection boxes for reviewers to indicate how these names should be handled, to be completed by end of July</i> - <i>Wayt Thomas will work with Chuck and William to review the spreadsheets of duplicate names, dividing the task between Consortium members.</i>
45	<p>WFO Portal ranks. <i>Include names of obscure ranks in the Taxonomic Backbone as these are needed when basionyms of names</i></p>	<i>William Ulate</i>		<ul style="list-style-type: none"> - <i>Find out what ranks are accepted by the WFO Portal (eMonocot)</i> - <i>Update the Guidelines to reflect this decision to.</i>

#	TASKS	WHO?	WHEN?	COMMENTS
46	The Plant List. <i>The Plant List was incorporated into the WFO Taxonomic Backbone. Kew announced that it would not intend to host and sustain TPL 1.1 and suggested that WFO should maintain the infrastructure of TPL. The Council approved that the management of TPL 1.1 is taken over by WFO.</i>	<i>Technical Working Group</i>		<i>-Pierre-André Loizeau and Peter Wyse Jackson will put together a letter for Kew addressing the decision of the WFO Council to approve the management of TPL1.1 by WFO. - Tech. WG should look for an alternate website to host TPL, make some changes that explain that it is an archived document and direct people to the WFO Portal.</i>
47.	Registration.	<i>Mark Watson, Jim Miller and Pierre-André</i>		<i>The subcommittee will be in charge to express an interest of WFO to become a Registration Centre to the Nomenclatural Registration Committee.</i>

LIST OF ATTENDEES

(as self-introduced during the meeting)

1. Wayt Thomas, New York Botanical Garden, Flora Botanica do Brasil, Co-Chair WFO Taxonomic Working Group,
2. Lauren Raz, University of Colombia, Instituto de Ciencias Naturales, Bioinformatics Program Director
3. Melissa Tulig, New York Botanical Garden, Information Management, WFO Technical Working Group
4. Nelson Zamora, Botanist associated to the National Herbarium in Costa Rica
5. Raoul Palese, Conservatoire et Jardin botaniques, Geneva, Conservation Floras and Informatics Systems, BOTALISTA
6. William Ulate, Missouri Botanical Garden, World Flora Online Data Manager
7. Walter Berendsohn, Biodiversity Informatics Research, Berlin-Botanical Garden and Museum
8. Chuck Miller, Missouri Botanical Garden, Vice-President of IT and CIO, Co-chair Technical Working Group
9. Pierre-André Loizeau, Director of the Conservatory and Botanical Garden of Geneva, co-chair WFO Council
10. Peter Wyse Jackson, President of the Missouri Botanical Garden and co-chair WFO Council
11. Jim Miller, Senior VP Science and Conservation, Missouri Botanical Garden, Taxonomic Working Group
12. Marc Sosef, Meise Botanical Garden in Belgium, Editor for the Flora of Central Africa and Gabon, Taxonomic Working Group
13. Kyung Choi, Ph. D., Head of Plant Taxonomy Lab. Senior Researcher, Korea National Arboretum
14. Kae Sun Chang, Researcher at Korea National Arboretum, Korean Plant Names Index
15. Adil Güner, Editor of Illustrated Flora of Turkey
16. Thomas Borsch, Director of the Berlin-Botanical Garden and Museum, Taxonomic Working Group
17. Mark Watson, Royal Botanic Garden Edinburgh, Head of Major Flora Program, co-chair of the Taxonomical Working Group

Apologies:

Apologies were received from several Council members that were not able to attend for various reasons: **Barbara Thiers** (NYBG), **Abigail Barker** (Kew), **Marianne Le Roux** (Pretoria, South Africa), **Ilse Breitwieser** (New Zealand), **Gideon Smith** (Pretoria, South Africa), **Dmitry Geltman** (Komarov Institute), **Maité Delmas** (Paris), **Thomas Haevermans** (Paris), **Visotheary Ung** (Paris), **Eduardo Dalcin** (Rio), **Rafaela Campostrini Forzza** (Rio), **Sue Fyfe** (Camberra), and **John Parnell** (Dublin).