

New York Botanical Garden, Bronx, New York April 25-29, 2016

Monday, 25 April

1. Introduction and Update

9:00 Welcome and Logistics

Barbara Thiers welcomed everyone to the New York Botanical Garden. The Co-chair, Dr. Peter Wyse Jackson thanked NYBG for hosting.

It was noted that a meeting of the international **Melastome group** would be held during the meeting and would join the Council for selected sessions.

Welcome to new WFO members.

New members in the Consortium were welcomed: Allan Herbarium, Landcare Research, New Zealand; University of Vienna Botanical Garden; Euro+Med Plantbase; Instituto de Ecología in Veracruz and the Natural History Museum, London, United Kingdom.

The following participants attended:

2. Self-introduction by members of the Council (footnotes are for location in the group photo in Annex 4).

- Peter Wyse Jackson². Co-chair of the Council. Missouri Botanical Garden
- Pierre-Andre Loizeau⁵, Co-chair of the Council. Conservatory and Botanical Garden of Geneva
- Paul Smock²³, Missouri Botanical Garden
- William Ulate¹³, Missouri Botanical Garden (note-taker)
- Rob Turner, Biodiversity Informatics at Royal Botanic Gardens, Kew
- Walter Berendsohn²², Berlin Botanical Garden, Berlin
- Marc Sosef¹⁷, Botanic Garden Meise
- Douglas Stone²⁴, University of KwaZulu-Natal, South Africa Melastome
- Renato Goldberg²⁰, Federal University of Parana, Curitiba, Brazil Melastome
- Frank Almeda⁶, California Academy of Science, San Francisco, California Melastome
- Mark Watson¹, Royal Botanical Gardens, Edinburgh co-chair Technical Working Group and Editor Flora of Nepal
- Raoul Palese²⁷, Geneva Flora project
- Victoria Sosa¹¹, Mexican Biodiversity Commission

- Sandy Knapp²¹, Natural History Museum, London & Solanaceae Source
- Carmen Ulloa⁴, Missouri Botanical Garden Melastome
- Barbara Thiers¹⁵, VP Science NYBG
- Fabian Michelangeli¹², NYBG, Melastome
- Melissa Tulig¹⁸, NYBG Digitization Staff.
- Jim Miller³, Missouri Botanical Garden
- Thomas Haevermans⁸, MNHN Paris
- Chuck Miller²⁵, Missouri Botanical Garden co-chair Technical Working Group.
- Colin Pendry⁷, Royal Botanical Gardens, Edinburgh
- Marianne LeRoux⁹, SANBI, South Africa,
- Eduardo Dalcin²⁶, Rio de Janeiro
- Haining Qin¹⁹, Institute of Botany in Beijing.
- Wayt Thomas¹⁴, NYBG

3. Adoption of the Minutes of the previous Council Meeting

The Minutes of the previous Council Meeting (Rio de Janeiro, October, 2015) were adopted with no corrections suggested. These minutes will be put on the web as soon as possible. We will look at the Annex 3 of Action Items.

4. Review and adoption of the Agenda for the Council meeting.

The Agenda for the Council meeting was adopted, providing a flexible framework for the meeting. (See Annex 1. WFO Meeting Proposed Agenda NYBG Apr 25-29).

NYBG President and CEO Introduction and Welcome.

The President and CEO of the New York Botanical Garden, Gregory Long, welcomed the WFO Council to the New York Botanical Garden during this its 125th anniversary.

5. WFO Portal Presentation

(See Presentation 1 in the Supplementary Materials - Presentations)

William Ulate presented the WFO Demo Portal live (from eMonocot).

Rob Turner from Royal Botanic Gardens, Kew presented on the work of the Plants of the World Portal (POWOP) project.

6. Joint session with Taxonomic and Technical Working Groups

The relationship between the Botalista software and the WFO system was discussed.

Following this discussion the meeting was adjourned for the day.

Tuesday, 26 April

9:00 Group Session

The Taxonomic Working Group requested to move the demo of the WFO Specimen Portal to the afternoon. The group went on to review the presentation on Botalista.

7. Nomenclature & Taxonomic Management System

Pierre André Loizeau indicated that since the beginning of the WFO project they saw the need to have a system to manage the taxonomy before ingesting the taxonomic information into the WFO Backbone. The reasons for having a tool to upload and curate taxonomic data was outlined.

Botalista Harvester

(See Presentation 8 in the Supplementary Materials - Presentations)

8. Second Joint session with Taxonomic and Technical Working Groups

Recommendations from Taxonomic Working Group:

Wayt Thomas presented the following recommendations from the Taxonomic Working Group.

- It was proposed that the WFO could work with Pensoft for publication of datasets.
- It was agreed that the WFO needed to define the list of DwCA fields that will be needed in order to contribute information to WFO.
- It was also agreed on the need to define diverse groups that can provide taxonomic data for several small families.
- Also focus on how to get regional content using our local Consortium Members institutions: Qin for China, Flora for Australia or New Zealand, World Checklist of Selected Plant Families (pointer to Global Checklist of Compositae)
- Sources that have descriptive data ready for inclusion in the WFO were mentioned: Flora Neotropica from NY. MO: Flora Mesoamericana, Flora of Nicaragua, Flora of China, Flora of Costa Rica, Part of Flora of Venezuelan Guayana, Flora of Panama and Novon and Annals. There's a whole list of contributors ready to go from places we don't have much content.

These recommendations were accepted.

The meeting was adjourned for the day.

Thursday, 28 April

9:00 Full WFO Council Meeting

Peter Wyse Jackson welcomed everyone again to the Council Meeting and requested the following apologies to be recorded in the Minutes: Abigail Barker from Kew, Michael Kiehn from Vienna, Markus Döering from GBIF, Maïté Delmas from Paris Museum, Paramjit Singh from India, John Parnell from Trinity College Dublin, and Thomas Borsch, from Berlin.

9. Update on WFO Consortium membership.

Peter Wyse Jackson reminded the meeting that the WFO Consortium includes 34 members of the Consortium who have signed the MOU and a series of institutions that have expressed interest but not yet signed the MOU: Flora Malesiana, Institute of Ecology, Botanical Society of India, Indonesia, von Humboldt Institute in Colombia, EuroMed, and the University of Vienna.

Peter Wyse Jackson asked to formally record our sincere thanks to the colleagues of Rio de Janeiro Botanical Garden in the minutes for hosting the previous meeting and he thanked again NYBG for hosting our meeting this year.

10. WFO Communication Working Group Report

(See Presentation 2 in Supplementary Materials - Presentations.)

Eduardo Dalcin informed that the members of the group, Barbara Thiers, John Parnell and he, had started producing a communications document but had underestimated the time required to finalize it. The document is focused on Social Media (FB, Twitter, Instagram, Pinterest and others). They have also installed a Calendar of Events.

RECOMMENDATIONS

- The group recommends the need for someone to be given charge of the Social Media.
- We need to build up a Communication Strategy.
- Proposal to the bigger institutes, who have the potential capability to help run the website in a distributed manner, might be something to consider.

The recommendations were accepted.

11. WFO Taxonomic Working Group Report

(See Presentation 3.in Supplementary Materials - Presentations)

Wayt Thomas presented the Taxonomic Working Group report.

Recommendations

1st **RECOMMENDATION:** Establish a Content Management Subcommittee to manage the search for contributors, the invitations to contributors, and the progress being made by contributors. Needs to describe terms of reference, including prioritizing institutional commitments. Provisional subcommittee established now, while TOR are established.

2nd RECOMMENDATION: Once we have an operational WFO Consortium site, or sooner, we should stop using the name "TPL" and choose another name for the taxonomic backbone.

3rd RECOMMENDATION: Work with data publishers, such as PenSoft, to enable the publication of datasets. Sandy Knapp will contact Lyubo Penev from Pensoft and Vince Smith from Biodiversity Data Journal to start this process.

4th **RECOMMENDATION:** We request that a data set format, with DCA fields be provided, with clear instructions as to how data should be formatted and provided.

All in favor, Peter Wyse Jackson proceeded to consider this recommendation as ADOPTED.

The Melastomataceae Group joined back and it would be the next one to report.

Sympathies extended

On behalf of the Council, Peter Wyse Jackson expressed our sympathies to the family and the New York Botanical Garden for the terrible tragedy with one of the students of NYBG.

11. Melastomataceae Editorial Group Report

(See Presentation 4. in Supplementary Materials - Presentations)

Fabian Michelangeli presented the report from the Melastomataceae Editorial Group.

The group thanked Fabian and the Melastomataceae group for their report.

12. WFO Technical Working Group Report

(See Presentation 5 in Supplementary Materials - Presentations)

Mark Watson presented the Technical Working Group report and first reviewed the action items from the previous meetings.

Previous Action Items

11. Create a Harvester administration/operations guide.

Action: Complete discovery process for the Harvester and create the administration guide should be done by Pretoria.

12. Form a Technical Subgroup for the Backbone.

Action: 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.

13. Complete gap analysis of the portal use cases.

Gap Analysis was started but will be deferred to the Pretoria meeting. *Action:* Defer to next meeting.

14. Revise WFO server infrastructure.

Action: Linux expert needed (probably a week's work) to discover what infrastructure is needed and create these systems.

15. Install BGBM Specimen Portal.

Specimen portal installed and working in Berlin. No current need to install it on the Google Server *No Action Needed*

16. Implement Botalista software.

Botalista server was installed in Google Server, though not the latest version. *Action:* Need to clarify how to use the Botalista in the WFO data pipeline

17. Solve the use of Identifiers.

To solve the use of identifiers, we will set the IDs to the providers list. Agreed to use wfoIDs from the WFO backbone.

No Action Needed

19. Organize a mechanism for data ingestion.

Exemplar ingestion is done *Action:* Resolve issues found with Harvester.

23. Update guidelines for contributors.

Action: Contributor Guidelines available need to be updated.

28. Create a policy on IPR for WFO.

Action: The Council could decide on the IPR policy proposal prepared for their approval.

29. Markup tools.

SANBI has developed a Markup tool and is available for others to use Available from GitHub: <u>https://github.com/rudivs/SpeciesMarkupAddIn</u> *No Action Needed*

38. Ask GBIF for continued support.

Action: Get support from GBIF.

39. Create a list of who is creating what.

Eduardo explained he proposed a Redmine tool that was installed in Google Cloud and they are just finishing the configuration of redmine.worldfloraonline.org. Chuck indicated we could provide project management and task management with this tool.

Action: It was suggested to present the tool next Meeting.

RECOMMENDATIONS

1. Identifiers (wfoIDs) required for all WFO name records.

- 2. WFO will use existing TPL identifiers for all wfoIDs.
- 3. All wfoIDs to be mapped to ScientificNameIDs from IPNI or bryophyte sources.
- 4. All Effectively Published names will be assigned wfoIDs.
- 5. During backbone updates, names already in WFO should be retained, not deleted.

There recommendations were accepted.

A further recommendation was added:

RECOMMENDATION 6. Take the Botalista for the backbone management.

Agreement on this recommendation was deferred.

14. A WFO Specimen Portal

The World Flora Online Specimen Explorer for Plant Taxonomists (See Presentation 6 in Supplementary Materials - Presentations)

Walter Berendsohn presented an update on the WFO Specimen Portal.

15. Recent Progress on Digitized Specimens, Plant Catalogue, ABCDNet and Flora of Pan Himalaya

(See Presentation 7 in Supplementary Materials - Presentations)

Haining Qin from the Chinese Academey of Science, Institute of Botany & Biodiversity Committee presented

Pierre-André Loizeau thanked Qin for his presentation. He meeting then adjourned until the following day.

Friday April 29, 2016

16. Nomenclatural and Taxonomic Management System (cont.)

Update from the Conservatoire et Jardin botaniques, Ville de Genève (See Presentation 9 in Supplementary Materials - Presentations)

Pierre-André Loizeau made a presentation to clarify yesterday's discussions about the taxonomic backbone and *Botalista*.

Therefore, they propose the following recommendation to come from the group:

"Botalista should be developed as a primary tool for verifying and preparing data".

All agreed.

17. Review of the Action Items from the previous Council meeting in Rio de Janeiro, Brazil

(See Annex 3 of the Rio Meeting Minutes and the Action Items and Recommendations in Annexes 2 and 3 for an updated version from the meeting.)

#	TASKS	RESPONSIBLE PERSONS	STATUS
1.	Upload Minutes from Geneva. Upload the Approved Updated Geneva Minutes to the Website	William Ulate	Done
2.	Extract action Items. Get action items to the meeting participants after the meeting.	William Ulate	Done
3.	Presentations on WFO. Take advantage of the meetings we attend to present about the WFO.	All	Continuously
4.	Update current signatories. Update the list of Consortium members on the website.		Done
5.	Send copies of signatories' files. Send scanned copies of signatories' files to Mark Watson.	Peter Wyse Jackson	Not necessary anymore
6.	Keep a list of contact suggestions. Make a list of names and suggestions to find the proper person to ask.	William Ulate	We have a list of contacts
7.	Update Facebook page. Keep updating Facebook page with news and current information.		Discussed this topic as part of the Communications Strategy
8.	Create WFO Pamphlet. Create a pamphlet for WFO, taking the one from CETAF as an example. Jim Miller said we are going to need a Communication plan and presence for the Botanical Congress.		Haven't created a Pamphlet, passing it to the Communication Committee
9.	Videos. Put videos of institutions on Website.		Peter Wyse Jackson asked to consider having links rather than uploading the videos themselves
10.	Enhance Demo Portal with Descriptive Data. Demo portal should be enhanced with descriptive data content as advised by the Data Content subgroup for the April meeting.	William Ulate	April 2016
11.	Create a Harvester administration/operations guide. The development of a Harvester	William Ulate	April 2016

Action Items not covered in the Agenda or Working Group Reports.

	administration/operation guide should be carried out	[
	immediately through testing and collaboration		
12.	Form a Technical Subgroup. A Technical		Report at next
	subgroup should be formed to test backbone		meeting in
	changes, investigate author attribution storage,		Pretoria
	document DwCA elements and report at NY		T Tetona
	meeting.		
	A Technical subgroup formed to test backbone		
	changes, investigate author attribution storage,		
	document DwCA elements and report at next		
	meeting in Pretoria		
13.	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.		
14.	Revise WFO server infrastructure. Revise the		
	WFO server infrastructure and tune it for production		
	performance utilizing a configuration with		
. –	development, test and production virtual servers.		
15.	Install BGBM Specimen Portal. Align the	BGBM	Report
	Specimen Portal with WFO as a taxonomic tool for		presented by
	contributors.		Walter
16.	Implement Botalista software. Implement the	Geneva	Presentation
	Botalista software on the WFO Google Server and		given by Raoul
	work together to further develop it as collaborative		
	tool for expert networks to contribute backbone		
	data.		
17.	Solve the use of Identifiers. Form a subgroup to	Subgroup?	Done
	look into the use of taxonIDs vs name ID in the		
	demo portal and the issue of missing name IDs.		
18.	Make a Survey of existing global taxonomic		Made great
	networks. Make a Survey of existing global		progress at the
	taxonomic networks and the systems used and ask		Taxonomic
	if they are willing to be responsible to match names		Working Group
	to treatments.		
19.	Organize a mechanism for data ingestion.	Technical Group	Next meeting in
	Demonstrate that the ingestion of taxonomic		Pretoria
	backbone and contents data into the WFO Portal is		
	feasible using a few prioritized exemplar groups.		
20.	Provide standards for genus and species of		Covered by the
	angiosperms and gymnosperms.		Taxonomic
			Working Group
21.	Identify specialists to review parts of the	Taxonomic Group	
	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.		
22.	Promote crediting of contributors.	Technical Group	Discussed
	Acknowledgement system implemented as soon as		
	possible because this is an important incentive for		

23.	Update guidelines for contributors. Guidelines		In hand
Z J.	for contributors available (June 2014) need to be		III Hallu
	updated.		
24.	Look for existing nearly complete online	Taxonomic Group	April 2016
24.		Taxonomic Group	April 2016
	treatments. Look for existing globally sliced on-line		
~ ~ ~	treatments that could provide exemplar group.	- / - /	
25.	Create an up-to-date taxonomic backbone by	EachTaxonomic	First Priority
	taxonomic networks/specialists for their groups.	Network /	
	Accomplish an up-to-date globally sliced taxonomic	Specialist	
	backbone for their corresponding group.		
26.	Organize link to ingest existing descriptions by	EachTaxonomic	
	taxonomic networks/specialists. Organize link to	Network /	
	ingest existing descriptions from Flora	Specialist	
	Treatments/Monographs.		
27.	Prepare short paper for TAXON. Prepare a draft	Peter Wyse	
	explaining the WFO taxonomic backbone approach,	Jackson	
	describing the acknowledgement structure and the		
	available technological tools (for ingestion).		
	Jim said he didn't think we were ready for that now.		
	Sandy added that it could be useful to publish what		
	Fabian has done.		
28.	Create a policy on IPR for WFO. Based on	IPR Task Force	Discussed
20.			Discussed
	existing and current work on the topic, prepare a	(Melissa Tulig,	
	policy document for WFO on IPR, to be approved	Chuck Miller,	
	during our next meeting.	Abigail Barker &	
		Walter	
	Development on Table (on a Table) (Constitution	Berendsohn)	
29.	Develop markup Tools for a Toolkit. Consolidate	All (doing	Discussed
	the Markup Tools being used; develop them from	Markup)	
	now and until the next meeting in New York to		
	integrate them into a toolkit.		
31.	Create document on web strategy based on	Communications	April 2016
	CBD CHM work. Create a document on web	Working Group	
	strategy for the next meeting based on the work	(Eduardo Dalcin,	
	being done by the CBD CHM. Suggest ideas on	Barbara Thiers,	
	materials like meetings where WFO should present	John Parnell)	
	(e.g. IBC) a keynote or at least a Symposium on		
	WFO.		
32.	WFO Symposium at the IBC. Approach the IBC	Peter Wyse	Done
	Committee to express our interest in having a	Jackson	
	Symposium.		
33.	Make presentations available. Make all		
	presentations available in an easy to access place.		
34.	Create a proper space in Dropbox. Make sure	Communications	Done
	we have the right structure in Dropbox to share the	Working Group	
	presentations and documentation.		
	Eduardo created a space for our own cloud at Google		
	Cloud		
35.	Follow up on Resources offers. Follow up on	Erik Smets,	We did follow
00.	resources offers: a developer from Naturalis,	Eduardo, Peter	up, some didn't
	Natalia from JBRJ, William from MBG, a developer	Wyse Jackson,	come
		wyse Jackson,	COME

36.	for 3 months from Geneva, a project from the CS Dept. of Trinity College Dublin by John Parnell., support from SANBI, contribution from Institute of Botany in China, Write letter to institution heads for help with Resources. Send a letter to the heads of	Pierre-André Loizeau, John Parnell, Marianne Le Roux, Qin Hai- Ning Peter Wyse Jackson	available and we'll touch on that again when we discuss resources Deferred
37.	Institutions to help gathering resources. Indicate contact to produce exported content for uploads. Indicate contact person to produce exports of data in your Institution.	All	Deferred, premature
38.	Ask GBIF for continued support. Ask Donald Hobern for their continued support with Markus Döring and Matt. Chuck made contact there.	Chuck Miller	Done
39.	Create a list of who is creating what. Produce a list of who is in charge of a certain task including the development of the Users Management Module, a module to import a taxonomy to the backbone and to update the eMonocot backbone database with the taxonomic backbone.		Has moved forward very well.
40.	Save the Dates. Save the dates for the 5th meeting 25-29 April, 2016 in New York. Marianne will confirm the dates and venue for the 6th meeting in South Africa.	All	8-11 Nov, 2016
41.	Create a List Server for the Council and the Working Groups. Produce an email list for the members of the Council and another one for each of the Working Groups.	Eduardo Dalcin	Listserver for the Council and the Working Group.

William Ulate will set up a list of Action Items as soon as possible.

18. Other issues

A general discussion followed.

19. Arrangements for the next meeting of the WFO Council

WFO Meeting, Pretoria, South Africa

(See Presentation 10 in Supplementary Materials - Presentations)

Marianne LeRoux presented the Venue for the next meeting. The meeting is planned to be in Gauteng Province, in Pretoria, known as the Jacaranda City or Tshwane during the week of November 8-11, 2016. Everyone thanked Marianne for her presentation and kind invitation.

Next Meeting

The next meeting would be in Paris (could be March/April or September), either before or after the IBC 23-29 July 2017 in China. Peter Wyse Jackson suggested to meet after IBC in Paris, sometime later in 2017.

20. Resource mobilization: Fundraising initiatives and strategies

A general discussion was held on fundraising initiatives possible.

21. Discussion and adoption of Proposals

None received, item completed.

22. WFO Updates and Other Reports or Demos from participants

No additional presentations.

23. Election of Chairs of the Council

Mark and Chuck were re-elected as Chairs of the Technical Working Group. All in favor, none opposed,

Sandy was elected to join the Communications Working Group: Barbara, Sandy, Eduardo and John Parnell. All in favor, none opposed.

Taxonomic Group: Walter will discuss with Thomas Borsch, if he is willing to continue as Co-Chair. Wayt Thomas was proposed as Co-Chair and seconded. All in favor, none opposed. Depending on what Thomas Borsch decides after the meeting, there will be three or two Co-Chairs. Thomas Haevermans indicated that he would be willing to become a Co- Chair of the Taxonomic Working Group. This was enthusiastically endorsed by the Council.

Election of Co-Chairs of the WFO Council. Pierre-Andre Loizeau and Peter Wyse Jackson were reelected as Co-Chairs of the Council. All in favor, none opposed.

Marc Sosef asked the Communications Working Group if they needed a Chair to be elected. Barbara indicated there is no need because it's a small group and Eduardo added they are all four co-chairs.

24. Conclusion and Close of Meeting

On behalf of the Consortium, let it state in the minutes of this meeting, our sincere thanks to the NYBG, particularly to Barbara, Wayt and Melissa, for their generous hospitality and for the great work in organizing the meeting. The time we spent here has been a pleasure and we would like to have a full resolution of thanks. All applauded. Barbara responded they were very happy to have us all and hoped we had a great time here. Meeting adjourned.

Annexes

Annex 1. WFO Meeting Agenda NYBG Apr 25-29



World Flora Online Council Meeting Hosted by the New York Botanical Garden, U.S.A.

This Agenda will act as a flexible framework for the Council meetings. The order of items may change according to the results of discussions in the Working Group meetings or other inputs.

Breakout sessions for the Taxonomic, Technical and Communications Working Groups or other topic groups may be organized as required and agreed during the meeting.

- 1) Introduction and Update Welcome to new WFO members.
- 2) Self-introduction by members of the Council
- 3) Adoption of the Minutes of the previous Council Meeting (Rio de Janeiro, October, 2015)
- 4) Review and adoption of the Agenda for the Council meeting
- 5) Update on WFO Consortium membership.
- · Current signatories to the WFO.
- Pending WFO Consortium members.
- Expressions of interest from possible future members.

6) Review and update on Action Points from Rio de Janeiro meeting (those which will not otherwise be covered in the Agenda or Working Group Reports).

7) Reports from the Chairs of WFO Working Groups:

- · Report and Update from the Technical Working Group
- Report and Update from the Taxonomic Working Group
- Report and Update from the Communications Working Group
- 8) Report and update from the Melastomataceae Editorial Group (Fabian Michelangeli).

9) Other issues (some of the following may be covered in discussions that result from the Working Group reports).

 \cdot Web WFO Portal – processes, priorities, plans and procedures for data ingestion, searching, display and functionalities.

 \cdot The Taxonomic Backbone –procedures and processes for modifications, updates and accommodating differences of opinion, higher order ranks, documentation needs etc.

• Content – mobilization of content and priorities, processes, plans and procedures for ingesting content into the portal. Progress on Markup tools.

• Data use agreements and Intellectual Property Rights – what will be needed and how should such agreements be negotiated?

· Software development needs – addressing gaps; staffing software development, etc.

10) Nomenclatural and Taxonomic Management System – update from the Conservatoire et Jardin botaniques, Ville de Genève

11) A WFO Specimen Portal – update from the Botanic Garden and Botanical Museum, Berlin-Dahlem.

12) Outreach and promotion of the World Flora Online

• including management and updates to the WFO information website, presentations and other promotional material. Management of social media aspects of the project. Guidelines for participants and content providers. Upcoming opportunities for WFO publicity, WFO information website. WFO logo and portal design, etc.

13) Resource mobilization and fund-raising initiatives and strategies

- 14) Discussion and adoption of proposals
- 15) WFO Updates and Other Reports and Demos from participants
- 16) Election of Chairs of the Council and Working Groups

17) Arrangements for next meeting of the WFO Council (Johannesburg, South Africa, Nov, 2016)

18) Conclusion and Close of Meeting

Annex 2. Recommendations from WFO Council Meeting, New York, April 2016

TaxWG.R1. Establish a Content Management Subcommittee to manage the search for contributors. Needs to describe terms of reference for contributors, including prioritizing institutional commitments. Provisional subcommittee established now, while TOR are established.

TaxWG.R2. Choose another name for our backbone (instead of TPL).

TaxWG.R3. Work with data publishers, such as PenSoft, to enable the publication of datasets. Sandy Knapp will contact Lyubo Penev from Pensoft and Vince Smith from Biodiversity Data Journal to start this process.

TaxWG.R4. Provide a data set format, with DwCA fields, with clear instructions and fields for backbone data and content data separate, as to how data should be formatted and provided.

CommWG.R1. We need someone in charge of Social Media

CommWG.R2. Build up the Communication Strategy

CommWG.R2.1. Establish Content Management Subcommitee. Describe terms of reference for contributors. Search for contributors. Prioritize institutional commitments.

CommWG.R2.2. Define diverse groups that can provide taxonomic data for several small families. Also focus on how to get Regional content using our local Consortium Members Institutions: Qin for China, Flora for Australia or New Zealand, World Checklist of Selected Plant Families (pointer to Global Checklist of Compositae)

CommWG.R2.3. Develop a communication strategy for WFO specific for the IBC in China next June 2017.

CommWG.R3. Put up to the bigger institutes who have the capability to help running the website in a distributed manner.

TechWG.R1. Identifiers (wfoIDs) required for all WFO name records.

TechWG.R2. WFO will use existing TPL identifiers for all wfoIDs.

TechWG.R3. All wfoIDs to be mapped to ScientificNameIDs from IPNI or bryophyte sources.

TechWG.R4. All Effectively Published names will be assigned wfoIDs.

TechWG.R5. During backbone updates, names already in WFO should be retained, not deleted.

TechWG.R6. Discuss and reword the recommendation on the use of Botalista to support the taxonomic backbone for Pretoria.

#	TASKS	WHO?	WHEN?
1.	Upload Minutes from New York. Upload the Approved Updated New York Minutes to the Website	WU	As soon as they are approved.
2.	Extract action Items. Get action items to the meeting participants after the meeting.	WU	Done
3.	 Presentations on WFO. 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 he would mention WFO during his talk as keynote speaker. Peter Wyse Jackson will circulate the link through email of the copy of the CBD document with the progress of the targets of the GSPC implementation. 	All	Continuously
4.	 Update current signatories. Update the list of Consortium members on the website. Approach the California Academy of Science and the other 4 institutions that haven't signed the MOU. 		
5.	Send copies of signatories' files. Send scanned copies of signatories' files to Mark Watson.	PWJ	Not necessary anymore
6.	Keep a list of contact suggestions. Make a list of names and suggestions to find the proper person to ask.	WU	We have a list of contacts
7.	Update Facebook page. Keep updating FB page with news and current information. - <i>Included in the Communications Strategy</i>		Done.
8.	Create WFO Pamphlet. Create a pamphlet for WFO, taking the one from CETAF as an example. - Pamphlet should be something simple to inform our community about the Consortium to put in our own institutions.	Comm. Cmt.	Once content is agreed on, PWJ could organize staff to create the pamphlet and make sure every institution has hundreds of copies.
9.	Videos. It was recommended that we include the links to videos of institutions on Website.		
10.	Enhance Demo Portal with Descriptive Data. Demo portal should be enhanced with descriptive data content as advised by the Data Content subgroup for the Nov.	WU	Nov. 2016

	Annex 3. Action Items U	odated at WFO Council Meeting	1, New York, April 2016
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	meeting. 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 and Annals.		
11.	Create a Harvester administration/operations guide. The development of a Harvester administration/operation guide should be carried out immediately through testing and collaboration. <i>Find out how to upload a Reference</i> <i>Extension file. Complete discovery process for the</i> <i>Harvester and create the administration guide should be</i> <i>done by Pretoria.</i>	WU	Nov. 2016
12.	Test backbone changes and document. A Technical subgroup formed to test backbone changes, investigate author attribution storage, document DwCA elements and report at next meeting. - 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. - Define the list of DwCA fields we need in order to contribute information to WFO. - Create 2 contributing guides: taxonomic backbone datasets and content datasets - Find out if Plants Of the World Online Portal (POWOP) will take attribution to a lower level.	Tech. Group	Nov. 2016
13.	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. <i>Defer to next meeting</i>		Nov. 2016
14.	Revise WFO server infrastructure. Revise the WFO server infrastructure and tune it for production performance utilizing a configuration with development, test and production virtual servers. <i>Linux expert needed (probably a week's work) to discover what infrastructure is needed and create these systems</i>		
15.	Install BGBM Specimen Portal. Align the Specimen Portal with WFO as a taxonomic tool for contributors. Specimen portal installed and working in Berlin. No current need to install it on the Google Server - Walter will discuss use of AnnoSys in GPI Meeting in June 2016 in Berlin.	Walter	

16.	Implement Botalista software. 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. Once the guidelines for contributing to the backbone are done they should be checked with Botalista then. Pierre-Andre, Walter, Eduardo, Marianne and Raoul would get together and come with an option for rewording the recommendation on the use of Botalista to support the taxonomic backbone before Pretoria.	Pierre- Andre, Walter, Eduardo, Marianne and Raoul	
17.	Solve the use of Identifiers. Form a subgroup to look into the use of taxonIDs vs name ID in the demo portal and the issue of missing name IDs. <i>To solve the use of identifiers, we will set the IDs to the providers list.</i> Agreed to use wfoIDs from the WFO backbone. Determine workflow to Assign wfoIDs to harvested data		
18.	Make a Survey of existing global taxonomic networks. 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>Made great progress at the Taxonomic Working Group.</i>	Tax.WG	
19.	Organize a mechanism for data ingestion. Demonstrate that the ingestion of taxonomic backbone and contents data into the WFO Portal is feasible using a few prioritized exemplar groups. Exemplar ingestion is done in demo. Identify something on Solanaceae to use as a demo for uploading. By November, concentrate in finding and adding backbone exemplary sets of taxonomic data. Resolve issues found with Harvester. TaxWG to contact Barbara who has some datasets with 100,000 species descriptions ready and in electronic format.	WU	Nov. 2016
20.	Provide standards for genus and species of angiosperms and gymnosperms. Covered by the Taxonomic Working Group	Tax. WG	
21.	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.	Tax. WG	?
22.	Promote crediting of contributors. Acknowledgement system implemented as soon as possible because this is an important incentive for specialists.	Tax. WG	?

	- Work with data publishers, such as PenSoft, to enable the publication of datasets. Sandy Knapp will contact Lyubo Penev from Pensoft and Vince Smith from Biodiversity Data Journal to start this process.		
23.	Update guidelines for contributors. Guidelines for contributors available (June 2014) need to be updated. <i>Contributor Guidelines available need to be updated.</i> - <i>The process on how to contribute data should be in</i> <i>place, the draft guidelines for contributors should tell how</i> <i>to proceed. One person should receive all comments</i> <i>and redirect by June.</i> - <i>Develop two sets of Guidelines for Contribution:</i> <i>Backbone and Content before Pretoria.</i> <i>Have by June, along with the technical capability to</i> <i>handle the responses.</i>	WU	Nov. 2016
24.	 Look for existing nearly complete online treatments. Look for existing globally sliced on-line treatments that could provide exemplar group. Establish Content Management Subcommitee. Describe terms of reference for contributors. Search for contributors. Prioritize institutional commitments. Define diverse groups that can provide taxonomic data for several small families. Also focus on how to get Regional content using our local Consortium Members Institutions: Qin for China, Flora for Australia or New Zealand, World Checklist of Selected Plant Families (pointer to Global Checklist of Compositae) Peter Wyse Jackson will write to Erik Smets about the possibility of support from Naturalis to finalize the digitization of all Flora Malesiana. 	Tax. WG	April 2016
25.	Create an up-to-date taxonomic backbone by taxonomic networks/specialists for their groups. Accomplish an up-to-date globally sliced taxonomic backbone for their corresponding group. - Come up with a new name for the Taxonomic Backbone.	Each Tax. Network / Specialist	First Priority
26.	Organize link to ingest existing descriptions by taxonomic networks/specialists. Organize link to ingest existing descriptions from Flora Treatments/Monographs.	Each Tax. Network / Specialist	?
27.	Prepare short paper for TAXON. Prepare a draft explaining the WFO taxonomic backbone approach,	PWJ	

	describing the acknowledgement structure and the available technological tools (for ingestion). - Not ready now. Publish Melastome group work.		
28.	Create a policy on IPR for WFO. Based on existing and current work on the topic, prepare a policy document for WFO on IPR, to be approved during our next meeting. Defined an IPR Subcommittee (Melissa Tulig, Chuck Miller, Abigail Barker & Walter Berendsohn). <i>The</i> <i>Council could decide on the IPR policy proposal</i> <i>prepared for their approval.</i>	IPR Cmt.	Nov. 2016
29.	Develop markup Tools for a Toolkit. Consolidate the Markup Tools being used; develop them from now and until the next meeting in New York to integrate them into a toolkit. - SANBI has developed a Markup tools and is available for others to use. Available from GitHub: <u>github.com/rudivs/SpeciesMarkupAddIn</u> - The Technical WG should look into the next steps for the Markup Tools. - Mark and Chuck, should keep in contact with SANBI and identify what concrete collaboration could be given to SANBI. - Qin should make contact with Chuck Miller and Mark Watson after contacting his director about a technical person joining the Technical Working Group.	TechWG	
31.	Create document on web strategy based on CBD CHM work. 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. - Communications Working Group (Eduardo Dalcin, Barbara Thiers, John Parnell) - Communications Committee will define Communication plan and presence for the Botanical Congress as a bigger topic. - 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. - Launch of our communications strategy to raise awareness when we have a portal that people could use. Communicate key advances and specific strategy. - Put content in a blogging platform to be reused in FB or other platforms. Have a post so we don't create false	Comm. WG.	April 2016

	expectations. - Eduardo will provide a copy of the Communication Working Group report and William will modify it to include the action points indicated here. - Eduardo will create a list for Comm. discussions so that they get recorded. - Eduardo will create a repository of public documents to be made available through the website - Demonstrate a joint Consortium web site to promote fundraising.		
32.	 WFO Symposium at the IBC. Approach the IBC Committee to express our interest in having a Symposium. Sent a request for contributions, got proposals from those attending. WFO will be mentioned at keynote. Develop a communication strategy for WFO specific for the IBC in China next June 2017: "How we are going to big up the WFO in Shenzen?". Having a (virtual) meeting of taxonomists on July 22nd in China should be discussed and come up with a proposal. 	Comm. WG Tax WG	
33.	Make presentations available. Make all presentations available in an easy to access place.		Continuous
34.	Create a proper space in Dropbox. Make sure we have the right structure in Dropbox to share the	Comm. WG	Done
	presentations and documentation. Eduardo created a space for our own cloud at Google Cloud		
35.	presentations and documentation. Eduardo created a	E.Smets, E.Dalcin, PWJ, PA. Loizeau, J.Parnell, M.Le Roux, Qin Hai-Ning	

37.	Indicate contact to produce exported content for uploads. Indicate contact person to produce exports of data in your Institution.	All	Not appropriate yet
38.	Ask GBIF for continued support. Ask Donald Hobern for their continued support with Markus Döring and Matt. <i>Chuck made contact.</i> - Walter could talk to the GBIF Executive about an effort to improve the taxonomic background so that WFO could assume the Botanic part of GBIF's backbone.	C.Miller Walter	
39.	Create a list of who is creating what. Produce a list of who is in charge of a certain task including the development of the Users Management Module, a module to import a taxonomy to the backbone and to update the eMonocot backbone database with the taxonomic backbone. <i>The list has moved forward very well.</i>		
40.	Save the Dates. Save the dates for the 6th meeting 8- 11 November, 2016 in Pretoria, South Africa, hosted by Pretoria National Botanical Gardens.		Done Nov. 8-11, 2016
41.	Create a List Server for the Council and the Working Groups. Produce an email list for the members of the Council and another one for each of the Working Groups.	Eduardo Dalcin	Done List Servers created.

Annex 4. World Flora Online Council Meeting Attendees Final List

- 22. Walter Berendsohn, Berlin Botanical Garden and Museum, Berlin, Germany
- 26. Eduardo Dalcin, Rio de Janeiro Botanical Garden, Rio de Janeiro, Brazil
- 8. Thomas Haevermans, Museum of Natural History, Paris, France
- 21. Sandra Knapp, Natural History Museum, London, U.K.
- 9. Margaretha Marianne Le Roux, Biodiversity Institute, Pretoria, South Africa
- 5. Pierre- André Loizeau, Conservatory and Botanical Garden of Geneva, Switzerland
- 25. Chuck Miller, Missouri Botanical Garden, St. Louis, MO
- 3. James Miller, Missouri Botanical Garden, St. Louis, MO
- 7. Colin Pendry, Royal Botanic Gardens Edinburgh, U.K.
- 19. Haining Qin, Chinese National Herbarium, Beijing, China
- 10. Rashad Salimov, National Academy of Sciences, Baku, Azerbaijan
- 23. Paul Smock, Missouri Botanical Garden, St. Louis, MO
- 11. Victoria Sosa, Instituto de Ecologica, Xalapa, Mexico
- 17. Marc Sosef, Botanic Garden Meise, Belgium
- 13. William Ulate, Missouri Botanical Garden, St. Louis, MO
- 1. Mark Watson, Royal Botanic Gardens Edinburgh, U.K.
- 2. Peter Wyse Jackson, Missouri Botanical Garden, St. Louis, MO

Melastome group

- **6. Frank Almeda**, California Academy of Sciences, San Francisco, CA **Eldis Bécquer**, National Botanical Garden, Havana, Cuba
- **20. Renato Goldenberg**, Federal University of Parana, Curitiba, Brazil
- 24. R. Douglas Stone, University of KwaZulu-Natal, Pietermaritzburg, South Africa
- 4. Carmen Ulloa, Missouri Botanical Garden, St. Louis, MO
- 12. Fabian Michelangeli, New York Botanical Garden, NYC, NY

NYBG Attendees:

14. Wm. Wayt Thomas15. Barbara Thiers

18. Melissa Tulig 16. Charlie Zimmerman

