



# Meeting of the ICP Forests Programme Co-ordinating Group (PCG)

## Online Meeting, 25-26 November 2020

## **Minutes**

#### **Opening**

1 Mr Ferretti (Chair of ICP Forests) welcomed all participants. He chaired the meeting on day 1, Mr Kai Schwärzel (Head of PCC) on day 2. The agenda was adopted.

#### Report by the PCC on progress, publications, and recent activities

- 2 Mr Kai Schwärzel gave a short overview on the progress and past activities of the PCC.
  - (a) The **Manual updates** are still under language review and technical changes are being implemented.
  - (b) The PCG approved (a) the new layout of the **2020 Technical Report** following the new ICP Forests corporate design developed earlier that year and (b) its new publisher. Additional comments can be sent to the PCC by 27 Nov 2020.
  - (c) Three new ICP Forests briefs are in preparation. Additional ideas for new briefs are always welcome.
  - (d) A draft of the new WGE strategy will be distributed in March 2021.
  - (e) Ms Laura Feßler (project secretariat) and Ms Katrin Haggenmüller (web application programmer, temporarily) have recently started to work for the **PCC**. Two additional staff members will be hired for the preparation of the Ecological Studies book.
  - (f) The PCC had joined several **NRC Forests webinars** in the last months. The next webinar on 10 December 2020 will be on the progress of the EU Forest Strategy. Please contact Mr Schwärzel if interested in participating.
  - (g) The development of a new **ICP Forests website** is delayed due to lack of financial resources. It stays on the agenda.
  - (h) Mr Schwärzel informed about the development of a **new strategy for the PCC** of ICP Forests. During the ensuing discussion, he explained the reason for its development in more detail. The PCC will ask the PCG for comments on a draft version to ensure a transparent process.

#### News from the data infrastructure

- 3 Mr Till Kirchner (PCC) reported on the latest developments of the data unit.
  - (a) The **Manual revisions** are not yet finally edited, online, or implemented and they cannot yet be used for the ongoing data submission. They will be finished before the TFM 2021.



- (b) Data reports giving an overview of existing data and on potential problems were introduced at the last TFM. Mr Kirchner introduced **two new data reports** addressing issues with (a) **plot coordinates at Level II** and (b) **tree numbers at Level II**. The PCC will inform the NFCs when these reports are available on the data portal. They encourage the download of the reports from the data portal, the correction of the given information (coordinates, altitude; tree number) and their return to the PCC. The PCC will then harmonize the location of plots and tree numbers in the database in close collaboration with the NFCs.
- (c) Mr Kirchner showed the results from 25 NFCs to an inquiry the PCC had sent on the precision of the provision of Level I and Level II plot coordinates (accuracy level of minutes vs. seconds) in future. The PCC will provide plot coordinates to data users according to the respective NFC's response.
- (d) The compilation of an **open dataset** providing an overview on data availability had been approved at the TFM 2018. At Level II, a general plot description, a list of tree species, and data availability information will soon be available under icp-forests.org/open data.
- (e) The **speed of (re-)submissions** has increased and there is no more waiting time during which the PCC transfers the data of a submission. This process has been automatized.
- (f) **During data submission, some testing needs to be improved** (e.g. the LQA files). Mr Kirchner suggested checking the completeness of these files better than in the past, e.g. if the STA information is older than 5 years. In general, the last submission of each survey should be examined more carefully.
- (g) He also suggested providing a **welcome screen** on the data portal reminding data providers of the surveys that have to be submitted in addition to the yearly submissions.
- (h) A **new ICP Forests data portal** is in preparation together with the German Level II network and German soil survey but with separated databases. The resubmissions for the Ecological Studies book will still be done using the current portal.
- 4 During the discussion, it is noted that the described problems with tree IDs apply also to Level I and need being corrected there as well. For surveys performed in the buffer zone outside regular plots, there are many possibilities for identification. In the growth survey, a tree can already be identified as in or outside the plot.
- 5 It was explained that the open data dataset is so far only available at Level II. Some partners do not want their Level I plot coordinates published even at a broader level as some are also NFI plots. Publishing Level I metadata without any information on a plot's location seems not useful.
- It is suggested to include information on forest history and forest management from the sites and the respective European Forest Type category in the open data dataset. Mr Kirchner explained that information from the system installment forms is already included in the open data dataset. He will distribute a first draft of a summary to the PCG for discussion. The PCC will also send out a call asking for completion of the system installment forms during the next data submission.

#### Data requests and data policy

- 7 Ms Anne-Katrin Prescher (PCC) presented two proposals on how to make data requests more effective and attractive to external users. She explained the current procedure with which it can take up to eight weeks from data application to data provision.
- 8 Ms Prescher proposed to shorten the NFCs approval time from four to two weeks. Together with a pooling time of two weeks for collecting requests before sending them to the NFCs, data could then be made available to externals after only 2-4 weeks.



- 9 She also proposed to exclude the "wish to be involved" from the data application procedure as data owners and ICP Forests experts always have the right to ask for contribution and negotiate with other scientists.
- 10 During the discussion, it was clarified that only Spain, Sweden, Switzerland, and the UK are regularly responding to data requests and no country has ever refused to provide the requested data.
- 11 It was Germany that had asked for four weeks in the past so that <a href="the-PCC will discuss these proposals with Germany before presenting them at the next meeting of the Task Force and asking for approval.">asking for approval.</a>
- 12 The tracking of output from data requests is still an unsolved issue. It is suggested to contact authors of papers and ask them on which data request their article is based on. First contacts with authors were made the year before, however, there is no template yet and it is still work in progress.

#### Report from the EPs and committees

- 13 All EPs/WGs had been asked to give a short presentation on the most important publications in 2020, issues due to COVID-19, and planned outcomes in 2021, especially activities related to the preparation of the Ecological Studies book.
- 14 From the list of presented publications from EP members using ICP Forests crown data, Mr Potočić (Chair of EP Crown Condition and Damage Causes) highlighted a publication by Brandl et al. (2020) on "The influence of climate and management on survival probability for Germany's most important tree species" and an internal evaluation by the Bavarian State Institute of Forestry LWF/TU München/EP Crown on "Alterations in the lifetime of forest stands: Spatial patterns and robustness of survival models in forestry", resulting in interactive maps on mortality and defoliation and the possibility to also implement them on the ICP Forests webpage. In spite of the COVID-19 pandemic, all countries managed to do their crown survey but not all of them were able to arrange intercalibration courses.
- 15 Mr Tom Levanič (Chair of **EP Forest Growth**) reported on achievements and ongoing activities. Despite the pandemic, all Level II inventories of the 2019/20 periodic growth survey were performed or will be performed this winter. Reporting will be done by February 2021. He listed several publications and projects using ICP Forests growth data. Work for the Ecological Studies book is in under way.
- 16 Mr Roberto Canullo (Chair of **EP Biodiversity and Ground Vegetation**) presented several papers using ICP Forests ground vegetation data, and running projects. The pandemic did not seem to have a serious impact on field work but in general work flows slowed down. EP activities related to the Ecological Studies book have started but are in stand-by at the moment.
- 17 Ms Diana Pitar (Chair of **EP Ambient Air Quality**) highlighted three relevant publications: (1) Sicard et al. (2020) on "Epidemiological derivation of flux-based critical levels for visible ozone injury in European forests", (2) Vollenweider et al. (2019) "Macro- and microscopic leaf injury triggered by ozone stress in beech foliage", and (3) Hoshika et al. (2020) on "Ozone impairs the response of isoprene emission to foliar nitrogen and phosphorus in poplar".
- 18 Only 6 countries participated in the 2020 online photo exercise for ozone-induced foliar symptoms on woody species compared to 15 in 2018. From 2017 to 2018 the number of plots with passive ozone monitoring decreased from 75 to 65. Many activities are planned from several countries, e.g. Denmark and the Czech Republic will start to measure AAQ in 2021. Another online photo exercise is planned with new photos. Work for the Ecological Studies book is under way. No issues were raised by countries with regard to the pandemic.



- 19 Mr Peter Waldner (Co-Chair of **EP Deposition**) highlighted a publication by Karlsson et al. (2019) on "Total deposition of inorganic nitrogen to Norway spruce forests Applying a surrogate surface method across a deposition gradient in Sweden" and by Braun et al. (2020) on "Foliar nutrient concentrations of European beech in Switzerland: Relations with nitrogen deposition, ozone, climate and soil chemistry". The effect of the COVID-19 pandemic can be analyzed at European scale only after the next data submission. The work for the Ecological Studies book is under way. It is unclear, however, whether resubmissions will be available from all countries in 2021. Serbia will start to analyze all mandatory parameters for all of its plots and will also participate in the 2020 water ringtest.
- 20 Mr Bruno De Vos (Chair of **EP Soil and Soil Solution**) reported on the evaluation of heavy metals in forest floors and topsoils of ICP Forests Level I plots as test case for the elaboration of the combined FSCDB.LI (data cleaning, gap filling, online documentation, solving problems) and with the aim of summarizing data and scientific insights of HM in Level I soils at EU level. <u>He would appreciate an overview of Level II and Level I plots and data included in the NEC reporting.</u> Work for the Ecological Studies book at Level I and Level II is under way. No countries reported problems due to COVID-19.
- 21 Ms Prescher showed a presentation on behalf of the **EP Foliage and Litterfall**. A publication by Etzold et al. (2020) on "N deposition is the most important environmental driver of growth of pure, even aged and managed European forests" was highlighted as the most important for their community. Many projects have started but in general it is difficult to follow the use of requested foliar/litterfall data. There were no COVID-19 effects on field work but some delays in pretreatment and analyzing samples due to staff restrictions and tight budgets.
- 22 Mr Stephan Raspe (Chair of **EP Meteorology, Phenology and LAI**) reported the results of the last EP meeting. Mr Stefan Fleck (Co-Chair) summarized publications by Trotsiuk et al. (2020) on "Assessing the response of forest productivity to climate extremes in Switzerland using model-data fusion, by Salehi et al. (2020) on "Leaf morphological traits and leaf nutrient concentrations of European beech across a water availability gradient in Switzerland", by Nussbaumer et el. (2020) on "Extreme summer heat and drought lead to early fruit abortion in European beech" and by Brandl et al. (2020) on "The influence of climate and management on survival probability for Germany's most important tree species". Ms Salehi is already extending her work with ICP Forests data. Only few effects of COVID-19 were reported.
- 23 Mr Alfred Fürst (Chair of **WG QA/QC in laboratories**) reported on the results of the 10<sup>th</sup> Deposition and soil solution working ringtest 2020<sup>1</sup> and on the 22<sup>nd</sup> Needle and leaf interlaboratory comparison test 2019/20<sup>2</sup> available on the ICP Forests webpage. The 23<sup>rd</sup> Needle/leaf interlaboratory comparison test 20/21 is ongoing. The 3 Jan 2021 deadline for data submission may be postponed by one month. If the deadline cannot be met, data submission like a re-qualification may be possible by August 2021. The 11<sup>th</sup> Atmospheric deposition and soil solution working ringtest 2021 will be postponed by about one year. The 10<sup>th</sup> Soil interlaboratory test 2021 will be carried out as planned. The next WG QA/QC labs meeting will be held online together with the joint EP meeting in March 2021. The heads of the labs meeting is moved from Sept/Oct 2021 to May 2022.
- 24 Mr Manuel Nicolas (Chair of the **Quality Assurance Committee**) reported on the history of the QAC and its re-establishment at the TFM 2020 and presented a time schedule for upcoming activities. The QAC will discuss at their next meeting in Feb 2021 the Manual Part III revision, the

 $<sup>{}^{1}\,\</sup>underline{\text{http://icp-forests.net/group/qualityinlaboratories/page/deposition-and-soil-solution-ringtest-and-qa-qc-information}$ 

<sup>&</sup>lt;sup>2</sup> http://icp-forests.net/group/qualityinlaboratories/page/foliage-and-litterfall-ringtest-and-qa-qc-information



- definition of rules for reporting quality control activities, and the respective responsibilities of NFCs, EPs, QAC, PCC. A new mandate will be proposed at the TFM 2021.
- Mr Marcus Schaub (Chair of the **Scientific Committee**) informed about the postponement of the TFM, SC FORECOMON<sup>3</sup> and the ICP Forests-SwissForestLa-NFZ.forestnet Summer School<sup>4</sup> to 2021, at which depending on the COVID-19 pandemic a virtual attendance will be possible but not recommended (see also Item 36). The deadline for abstracts for a special Issue in Frontiers<sup>5</sup> is 15 Jan 2021; the PCC will send a reminder to the ICP Forests community. He presented the new FORECOMON title and logo for the ICP Forests Scientific Conferences. Guidelines for its use and an official launch will be prepared by the PCC. The ICP Forests Researcher ID<sup>6</sup> will be maintained and a link provided on the ICP Forests website. There may be a lockdown effect on deposition and pollution but a prompt evaluation may be hindered by pandemic-caused delays in the labs, the lack of physical EP meetings for developing ideas, and resources already used in the preparation of the Ecological Studies book. The deadline for a special issue in Frontiers on COVID-19 effects is Feb 2021<sup>7</sup>.
- 26 For the incorporation in the annual WGE report, the SciCom supports the proposal that each EP writes a short summary of the main evidence emerging from scientific literature from in- and outside the programme on air pollution, climate change and forests over the past year. The SciCom had agreed to review those summaries and put it together for the PCC to use for the WGE and other reporting requirements. Please refer to Items 42ff for details of the proposal.
- 27 The PCC approaches countries or vice-versa to find a host for future TFM/SC. For a timely communication of the Scientific Conference, the candidacy of one host country and the topic for the Scientific Conference should in future be agreed upon before the preceding TFM/SC.

#### Effects of the COVID-19 pandemic

- 28 Ms Anna Kowalska (Co-Chair WG QA/QC in Labs) showed the results from a questionnaire on the effect of the pandemic on deposition sampling, distributed after the first wave of COVID-19 in May 2020. In most countries the work had proceeded as planned, but in some plots sampling and analyses in labs were temporarily not possible with data gaps of 1-2 months (occasionally more).
- 29 She explained **serious problems that year with the organization of the water ring test** for deposition and soil solution samples, including long discussions with some partners that had problems meeting the deadline for sending their samples. Deposition samples are not as stable as soil or foliar material and postponing a water ringtest requires more stability tests. In case of a detected instability in a parameter or sample, the results of all labs would have to be cancelled and that parameter cannot be evaluated.
- 30 After the deadline, no stability tests are conducted and results cannot be accepted for inclusion in the Technical Report. For reporting, points could be displayed with a special symbol or the data quality requirements softened. Ms Kowalska strongly advised against the latter. This needs to be further discussed at the next EP meetings.
- 31 The PCG agreed to a proposal from Ms Kowalska and Mr Fürst to postpone the next water ringtest for one year to not experience the same problems due to the ongoing pandemic.

<sup>&</sup>lt;sup>3</sup> https://sc2021.thuenen.de

<sup>&</sup>lt;sup>4</sup> https://www.wsl.ch/en/about-wsl/events/details/swissforestlab-summer-school-2021.html

<sup>&</sup>lt;sup>5</sup> https://sc2021.thuenen.de/special-issue-in-frontiers/

<sup>&</sup>lt;sup>6</sup> http://apps.webofknowledge.com/, Author Identifier: F-7626-2019

<sup>&</sup>lt;sup>7</sup> https://www.frontiersin.org/research-topics/14527/covid-19-pandemic-impacts-on-forests?utm\_source=F-RTM&utm\_medium=CFP\_E2&utm\_campaign=PRD\_CFP\_T1\_RT-TITLE



#### Data resubmissions within the framework of the Ecological Studies book

- 32 For the preparation of the Ecological Studies book, Mr Schwärzel proposed a work plan for the completion of survey data and the definition of tasks, responsibilities of the editors, EPs and PCC, and deadlines. He showed the lead author and covered monitoring period of each chapter according to the previously prepared abstracts, and the challenges regarding the survey data.
- 33 The required preliminary work from the EPs together with the PCC includes the harmonization and optimization of the data model of each survey, and the definition of the data needed, its quality and how to close data gaps.
- 34 After discussion, it was agreed that the PCC sends a summary to all EP chairs with the background and aims of the book, a compilation of the abstracts written by the EPs in 2017, and specific questions on the temporal and spatial resolution of the data available and the further approach of the EPs. The PCC will then discuss in more detail with each EP chair the tasks planned and possible constraints when writing a chapter and combine the information from all EPs in order to harmonize the analyses and facilitate a programme-wide synthesis. Two data scientists will be hired at the PCC temporarily to help with data cleaning and analyses for the book. The PCC will contact all EP chairs before March for a bilateral discussion. The discussion will then be continued at the next joint EP meeting in March 2021.

#### **Upcoming meetings**

- 35 The PCG agreed to a proposal by Mr Schwärzel for the organization of the next joint EP meeting of the EPs Crown Condition and Damage Causes, Deposition, Foliage and Litterfall, Soil and Soil Solution, WG QA/QC in labs, held as a virtual meeting on 8-10 March 2021. He offered the PCC's support to the EP chairs during the meeting organization and presented a time schedule and responsibilities. Mr Canullo (EP Biodiversity and Ground Vegetation), Ms Pitar (EP AAQ) and Mr Raspe (EP Meteorology, Phenology and LAI) also showed their EP's interest in joining this year's joint EP meeting. The QAC will already meet in February 2021 and will add the Manual Part III as topic in the joint discussion at the jEPM.
- 36 It is planned to hold the **37<sup>th</sup> Task Force Meeting** and **9<sup>th</sup> Scientific Conference FORECOMON<sup>8</sup>** as a hybrid meeting, offering the possibility for a physical or virtual attendance. Whether or not to hold the meetings virtually will be decided two months prior and depends on the COVID-19 pandemic situation. It is agreed that attendance on a physical or virtual basis will require a registration fee for the Scientific Conference. For the Task Force Meeting, there will be no registration fee. Payment will be requested for both TFM and SC in case of physical attendance in order to contribute to coffee and lunch breaks, official dinner, excursions, etc.

#### **Co-operations**

37 Mr Schwärzel informed about the ongoing work on the MoU with LTER. Mr Kirchner informed that there is no concrete plan for a common data repository. eLTER's currently preferred data repository is B2SHARE<sup>9</sup>. Mr. Johannes Peterseil from the Environment Agency Austria had informed Mr Kirchner that they may build up a new data repository within the eLTER PLUS project<sup>10</sup>. The PCC had also discussed with Mr Peterseil data exchange options according to the ICP Forests data policy and had planned to stay in contact during the project time of eLTER PLUS.

<sup>8</sup> http://sc2021.thuenen.de

<sup>&</sup>lt;sup>9</sup> https://www.eudat.eu/services/userdoc/b2share

<sup>&</sup>lt;sup>10</sup> https://www.lter-europe.net/projects/PLUS



Mr Kirchner will also visit with colleagues in Jülich to discuss whether their data repository platform can be used by us.

- 38 Ms Nathalie Cools (Co-Chair EP Soil and Soil Solution) and Mr Schaub presented past collaboration efforts with **LTER-Europe**. Since 2010, the PCC has encouraged NFCs to register their Level II plots as LTER-Europe<sup>11</sup> master (often with tower) or regular sites with the DEIMS-SDR site and dataset registry<sup>12</sup>. Of the 477 formally accredited LTER-Europe sites across different bioregions, 123 are also ICP Forests Level II plots from 19 countries.
- 39 She explained the elements of the European LTER process starting with LTER-Europe. Since 2018 eLTER RI<sup>13</sup> (eLTER Research Infrastructure) is on the ESFRI roadmap. The aims of the Horizon 2020 projects (both 2020-2025)
  - (a) **eLTER PPP**<sup>14</sup> (Preparatory Phase Project for the eLTER Research Infrastructure) are to explore legal, financial and technical specifics required for the implementation of the eLTER RI, and
  - (b) **eLTER PLUS** (Advanced Community Project for the eLTER Research Infrastructure) are to facilitate networking, joint research activities, and access.
- 40 Both Ms Cools and Mr Schaub are involved in eLTER PPP and eLTER PLUS as national LTER representatives. As such they promote the collaboration with the ICP Forests member countries, emphasize the value of ICP Forests, and encourage the standardization of methods.
- 41 During the discussion, it was highlighted that data users from eLTER need to request ICP Forests data from the ICP Forests central database according to the ICP Forests Data Policy and should not approach countries or even local site managers directly. Site managers should be advised to refer data requesters to the ICP Forests central database.

#### WGE reporting, ongoing and upcoming projects

- 42 Mr Ferretti explained the structure of the **reporting to the WGE** (Working Group on Effects under the UNECE Air Convention). It usually consists of three parts: activities carried out over the previous year, latest scientific results and evidence in the field of air pollution and forests, budget related matters. Until now, the scientific reporting was based entirely on ICP Forests results. To explicitly acknowledge the context of our results and increase their value, Mr Ferretti suggested that the EP chairs prepare a short summary of main evidence emerging from internal and external scientific literature in their respective field to be used in the WGE reporting.
- 43 The suggested short summaries would include key findings in 200 words with max. 5 key references and they would be prepared by each EP. The Scientific Committee had agreed to review those summaries and put it together for the PCC by June for use for the WGE meeting in September and other reporting means.
- 44 During the discussion, it was emphasized that the proposed summary does not need to be a systematic review of each EP in their field, but concentrate on subjects of interest to the WGE such as N deposition, ozone, heavy metals, and air pollution/climate change interactions. The PCG approved this proposal.
- 45 Mr Ferretti also proposed developing a comprehensive assessment of trends in forest condition in Europe 1990-2020 based on Level I data and described basic features and outputs, desired co-

<sup>&</sup>lt;sup>11</sup> https://www.lter-europe.net

<sup>12</sup> https://deims.org

<sup>13</sup> https://www.lter-europe.net/elter-esfri

<sup>&</sup>lt;sup>14</sup> https://www.lter-europe.net/projects/PPP



operations with other EPs, and a provisional plan. The EP Crown Condition and Damage Causes has already started this work together with Mr Ferretti. The aim is to publish a scientific paper, and to contribute to the Ecological Studies book, if it will include Level I results. During the discussion, it was emphasized that the developed procedures could also be used for future reporting activities. There is no specific timeline yet. Many PCG members expressed their support to this initiative.

- 46 Mr Bruno De Vos presented an **internal study on evaluations of heavy metals (HM) in forest floors and topsoils of ICPF Level I plots** led by Ms Tine Bommarez. The aims of the study include the testing of the data quality in the combined FSCDB.LI database prior to release, the provision of maps of concentration levels and pools of Zn, Pb, Ni, Cu, Cr, Cd, and partly Hg, for the 1<sup>st</sup> (1985-1999) and 2<sup>nd</sup> (2000-2015) survey periods, and the development of an evaluation scheme (critical levels) at EU level based on ecotoxicological risk assessment.
- 47 Mr De Vos described the activities undertaken for two months for setting up a reliable and consistent working database, data inconsistencies, and the limitations in data availability with considerable spatial data gaps at EU level. He showed maps with HM data availability at different soil depths of both surveys. Country effects on the maps were probably caused by lab methods and are less visible for the 2<sup>nd</sup> survey due to harmonization efforts. Natural background HM concentrations varied by country, biogeographical region, and survey. Consistent with the moss surveys by ICP Vegetation, many HM concentrations have decreased between surveys with larger changes in the forest floor than the mineral soil. The data could be used in various evaluation schemes and contamination indices, both for concentrations and stocks. Mr De Vos asked for national evaluation schemes/classes for HM in forest floors and/or mineral forest soils.
- 48 Mr De Vos asked the PCG for their opinion on a potential postponement of the **3**<sup>rd</sup> **Soil survey** due to lack of resources in the participating countries if the FORSoils proposal would be successful. If it will not be successful, developing a strategy and workplan in 2021 becomes urgent, possibly synchronizing it with the 3<sup>rd</sup> German national soil survey and making use of the EU Green Deal momentum.
- 49 During the discussion, it was reported that Switzerland is planning their first repetition of the soil survey on Level I for 2022-25. The potential of a 3<sup>rd</sup> Soil survey could also be discussed with the NECD responsibles with the aim to receive adequate financial support.
- 50 In a questionnaire distributed before the last EP meeting on the 3rd Soil survey, most countries expressed their need of co-financing and that they could not do the 3rd Soil survey if the ForSOILS proposal becomes accepted. If the 3rd Soil survey will be conducted, the addition of extra soil physical variables (e.g. measured bulk density and coarse fragments or soil water retention data) and extra biological variables (e.g. eDNA/metabarcoding assessment, mycorrhizae) possibly on a subset along a 32x32 km grid needs to be discussed in the EP Soil and Soil Solution.
- 51 For more elaborate evaluations, Mr De Vos suggested to combine the 3<sup>rd</sup> Soil survey with other ICP Forests surveys (e.g. crown condition, growth/biomass, ground vegetation, deadwood). It may even be an incentive to reactivate the Level I crown condition assessments in the countries that had stopped them. Mr De Vos invited the EP chairs to discuss concepts with him before the next joint EP meeting. After the EPM a workplan should be developed and co-funding applied for.

#### **AOB**

- 52 Ms Juliane Beez (lead country representative from BMEL Germany) who was supposed to give an update on the new lead country representative was not able to join the PCG meeting that day.
- 53 Mr Ferretti closed the meeting and thanked everyone for their participation and input.



### **List of Participants**

Last name	First name	Institution	Country
Beez*	Juliane	Federal Ministry of Food and Agriculture	Germany
Canullo	Roberto	University of Camerino	Italy
De Vos	Bruno	Research Institute for Nature and Forest (INBO)	Belgium
Ferretti	Marco	Swiss Federal Research Institute WSL	Switzerland
Feßler*	Laura	Thünen Institute of Forest Ecosystems	Germany
Fleck	Stefan	Nordwestdeutsche Forstliche Versuchsanstalt NW-FVA	Germany
Fürst	Alfred	Austrian Research Centre for Forest BFW	Austria
Gottardini	Elena	Fondazione Edmund Mach	Italy
Kirchner	Till	Thünen Institute of Forest Ecosystems	Germany
Kowalska	Anna	Forest Research Institute	Poland
Levanič	Tom	Slovenian Forestry Institute SFI	Slovenia
Michel	Alexa	Thünen Institute of Forest Ecosystems	Germany
Nicolas	Manuel	Office national des forêts ONF	France
Nieminen	Tiina M.	Natural Resources Institute Finland LUKE	Finland
Pitar	Diana Maria	National Institute for Research and Development in Forestry "Marin Dracea"	Romania
Potočić	Nenad	Croatian Forest Research Institute	Croatia
Prescher	Anne-Katrin	Thünen Institute of Forest Ecosystems	Germany
Raspe	Stephan	Bavarian State Institute of Forestry LWF	Germany
Rautio	Pasi	Natural Resources Institute Finland LUKE	Finland
Schaub	Marcus	Swiss Federal Research Institute WSL	Switzerland
Schwärzel	Kai	Thünen Institute of Forest Ecosystems	Germany
Timmermann	Volkmar	Norwegian Institute of Bioeconomy Research NIBIO	Norway
Ukonmaanaho	Liisa	Natural Resources Institute Finland LUKE	Finland
Vesterdal	Lars	University of Copenhagen	Denmark
Waldner	Peter	Swiss Federal Research Institute WSL	Switzerland

<sup>\*</sup>Ms Beez and Ms Feßler were attending the meeting on day 1.



# Agenda

Symbols:

<>: approx. time foreseen (xx): contribution from

25 Nov 2020	Chairperson Day 1: Marco Ferretti			
Start: 13:00	Opening <0:05> (Marco Ferretti) - Adoption of agenda			
	Report of the PCC, recent activities, publications and progress <0:15> (Kai Schwärzel, Alexa Michel)			
	News from the data infrastructure <0:40> (Till Kirchner)  - Implementation manual changes  - New submission procedure to speed up resubmissions  - Data availability reports  - Harmonization of tree numbers and plot co-ordinates			
	Data requests & policy <0:15> (Anne-Katrin Prescher) - Current procedure - Making requests more effective and attractive			
	Report from the EPs and committees <0:35> (EP chairs, each EP has 7 minutes)  Short presentation of the most important publication in 2020 Issues due to COVID-19  Planned outcomes in 2021, esp. activities related to Ecological Studies book  - EP Crown Condition and Damage Causes (Nenad Potočić, Volkmar Timmermann)  - EP Forest Growth (Tom Levanič, Tanja Sanders)  - EP Biodiversity and Ground Vegetation (Roberto Canullo, Jean-Luc Dupouey)  - EP Ambient Air Quality (Diana Pitar, Elena Gottardini)			
14:50-15:10	Coffee break <0:20>			
	Report from the EPs and committees <1:05> (continued)  - EP Deposition (Arne Verstraeten, Daniel Žlindra, Peter Waldner)  - EP Soil and Soil Solution (Bruno De Vos, Nathalie Cools, Tiina Nieminen)  - EP Foliage and Litterfall (Pasi Rautio, Liisa Ukonmaanaho)  - EP Meteo, Phenology and LAI (Stephan Raspe, Stefan Fleck)  - Working Group on QA in Labs (Alfred Fürst, Anna Kowalska)  - QA Committee (Manuel Nicolas)  - Scientific Committee (Marcus Schaub, Lars Vesterdal)			
End: 16:45 26 Nov 2019	Effects of COVID-19 pandemic <0:30>  - Data quality vs. gaps in deposition time series (Arne Verstraeten, Anna Kowalska)  - Current and future likely impact of pandemic on monitoring activity, and possible countermeasures  Chairperson Day 2: Kai Schwärzel			
20 NOV 2019	Chair person Day 2. Kar Schwarzer			
Start: 9:00	Data resubmissions in the frame of the Ecological Study Book. <0:45> (Kai Schwärzel, Till Kirchner)  - Revised time schedule - Data issues? - Which data will be used and needs further cleaning/gap filling for trend analyses?			
	Upcoming meetings <0:30> - Combined meeting of the Expert Panels; March 2021 (PCC) - 37 <sup>th</sup> Task Force Meeting 2021: Zurich (Peter Waldner) - 9 <sup>th</sup> Scientific Conference 2021: Zurich (Marcus Schaub) - Other meetings/conferences			



	Co-operations <0:30>			
	<ul> <li>LTER</li> <li>MOU (Kai Schwärzel)</li> <li>Data exchange with eLTER RI (Till Kirchner)</li> <li>Report about activities from eLTER PPP (Marcus Schaub) and eLTER PLUS (Nathalie Cools)</li> <li>LifeWatch RI (NN)</li> </ul>			
10:45-11:05	Coffee break <0:20>			
	<ul> <li>WGE Reporting, ongoing and upcoming projects/studies&lt;1:10&gt;         <ul> <li>Incorporating review of results from non-ICP Forests studies on air pollution effects on forests into ICP Forests report to WGE (Marco Ferretti, Kai Schwärzel)</li> <li>Developing a comprehensive assessment of trends in forest condition in Europe 1990-2020 (Marco Ferretti)</li> <li>WGE focus on Heavy Metals. Results from the ongoing internal FSCC project studying HM in Level I forest soils and combined LI soil database improvement. (Bruno De Vos)</li> <li>H2020 proposal FORSoils - participation of (selected) ICPF countries. Limitations for use of ICPF databases when granted? (Bruno De Vos)</li> <li>Strategy for the 3rd Pan-European Level I soil survey: just soil or another BioSoil or even wider LI survey (growth, foliage,?) (Bruno De Vos)</li> </ul> </li> </ul>			
	AOB <0:30>			
End: 12:45	- Up-date on new representative of lead country (Juliane Beez)  Closing of the PCG Meeting			