IAWA Newsletter - August 2017



IAWA Journal with advanced online papers and a selection of papers in open access

An increasing number of IAWA Journal papers is being made available on-line long before becoming available in hard copy Journal Issues. Brill Publishers will also offer a number of recent papers in Open Access free of charge, to help recover the IAWA Journal's Impact Factor which sustained a serious drop for 2016. We are confident that the IF will recover next year thanks to the many citations of papers from the special Functional Traits Issue and the IAWA Bark List published in 2016. Please check Brillonline/IAWA Journal for advance publications. *Pieter Baas*, Netherlands

Wood identification workshop 2017 in Madison, Wisconsin

Dr. Alex Wiedenhoeft, Dr.Yafang Yin, and Richard Soares offered a one-day "Wood Species Identification Workshop: Level 2" for members of the Timber Framer's Guild on May 17, 2017. The small workshop (23 participants) was held at the University of Wisconsin-Madison in cooperation with the Department of Botany, and emphasized light microscopic identification of woods typically used in North American timber framing.

Alex C. Wiedenhoeft, USA



Attendees focused on (pun intended) light microscopic identification of North American structural timbers. Photo Richard Soares.

International symposium on wildlife forensics in Edinburgh, June 6–9, 2017

The SWFS (Society for Wildlife Forensic Sciences) is a young organization that one mostly associates with the identification and provenancing of illegal elephant ivory, rhino horn, protected fish, rare birds and reptiles. However, illegally logged or traded timber easily surpasses the monetary value and ecological impact of all other illegal wildlife trade taken together. This was evident in the program of the highly successful SWFS Conference held in Edinburgh, where Forensic Timber Science figured prominently. Timber presentations were evenly spread over wood anatomy, wood mass spectroscopy (DART TOFMs), DNA analysis, and Stable Isotopes, which in combination provide very strong tools for identification and provenancing of timber – opinions still differ whether the provenancing can be done at the spatial scale of concessions (~10 km), or whether maximum resolution is closer to the

~500 km level. It was clear that cooperation in the sharing of authenticated wood samples from institutional collections and of databases is crucial for progress and for robustness of evidence that will hold up in a court of law. A welcome number of presentations was from implementation officers, revealing the sometimes absurd prosecution of sustainably cultivated CITES-listed timber species. Laws and regulations can still be improved here. I have advocated future cooperation between ISWF and IAWA – we have much to learn from each other, and the WRAITH initiative of IAWA and the goals of SWFS, and for that matter the GTTN and CITES have much in common. *Pieter Baas*, Netherlands

4th International CITES workshop 2017 in Hamburg

The identification of internationally traded timber is of prime importance in enforcing CITES policies regarding protected species, especially with focus on the new Dalbergia (rosewood) listings. The 4th International CITES workshop was organized by the Thünen Institute of Wood Research, Hamburg and the Federal Agency for Nature Conservation (BfN, Germany) from June 8–9, 2017, hosted at the premises of the Thünen Institute. In total 55 participants from 26 countries representing environmental and customs authorities as well as wood anatomists were practically trained in the macroscopic identification and recognition of CITES protected timber by using the database CITES wood ID. The database has recently been updated and adapted to the new CITES timber listings, with focus on Dalbergia and Guibourtia species. It contains descriptions and an interactive identification system for all trade relevant CITES listed (44) timbers, known for their use as lumber and downstream processing into products. In addition, the database covers more than 30 traded timbers which can be mistaken for CITES taxa due to a very similar appearance and/or structural pattern. The practical exercises of the highly motivated participants have demonstrated that the database is ideally suited for all institutions and individuals involved in controlling the import and export of wood and wood products which are regulated by CITES. Furthermore, the database offers a useful tool for educational facilities active in teaching wood anatomy and wood identification. The program of the workshop also included individual presentations regarding the European Timber Regulation (EUTR), applications of DNA fingerprints to control tree species and geographic origin, and a non-destructive wood identification of musical instruments based on 3D-reflected-light microscopy. These presentations can be downloaded, see: https://www.thuenen.de/en/infrastructure/the-thuenen-centre-of-competence-onthe-origin-of-timber/auswirkungen-der-neuen-cites-listungen/. Gerald Koch, Germany



Group photo of all participants from the 4th International CITES workshop.

IUFRO all Division 5 conference 2017 in Vancouver, Canada

IUFRO All Division 5 Conference (http://www.iufrodiv5-2017.ca/) was held in Vancouver, Canada from June 12–16, 2017. In total, 42 sessions were organized and 445 participants from 49 countries provided 465 oral/poster presentations. A very successful Joint IAWA-RG 5.01 Session "Function Driven Variability in Wood and Bark" was organized by Paul McLean and Dr. Pekka Saranpää. Dr. Marcelo Pace gave a presentation to introduce the IAWA Bark List during this joint session. Dr. Yafang Yin and Dr. P.K. Thulasidas (TEAKNET) organized a 5.06 Session "Teak Resources for a Sustainable Future". Thanks to the conference, we believe that more researchers from across IUFRO have a better understanding of the IAWA. For future meetings, I hope that IAWA members will actively work to attract more people (especially young researchers) to join the IAWA and share their scientific interests in wood anatomy.

6th International conference on plant cell wall biology in China

From July 16–20, 2017, the 6th International Conference on Plant Cell Wall Biology (PCWB 2017) was held at the International Conference Center, Dalian, China. This meeting focused on structure and function of cell wall polymers, cell wall biosynthesis, cell wall genomics and evolution, cell wall response and plant defense, emerging technology in cell wall biology, cell wall biotechnology, industrial uses of cell wall biomass. PCWB 2017 was concurrently held with the ICPM 2017 (The 4th International Conference on Plant Metabolism) and TERPNET 2017 (The 13th International Meeting on Biosynthesis, Function and Synthetic Biology of Isoprenoids). Over 800 researchers and students from 26 countries attended. About 20 participants won the Excellent Poster Awards. The 7th PCWB will be held in Asilomar, California, USA from June 18–20, 2018. *Zhang Maomao* and *Li Shan*, China

IAWA special issue 2018 on wood cell wall ultrastructure

IAWA Journal is planning a special issue on "Wood Cell Wall Ultrastructure" to be edited by New Zealand wood anatomist Dr Lloyd Donaldson. This issue is expected to be published in the second half of 2018. IAWA members and others are invited to contribute reviews or original research articles relating to the nanostructure of wood cell walls. To assist with planning, please contact the editor at lloyd.donaldson@scionresearch.com to indicate your interest. Manuscripts can be submitted in the usual way with an indication in your cover letter that the manuscript is for the special issue.

Atlas of vessel elements - identification of Asian timbers

Pulp production worldwide, especially in Asia, is increasing, and the use of tropical timbers from natural forests cannot be excluded. A standardized morphological description of individual elements in different tree species is required for pulp identification. The University of Hamburg and the Thünen Institute (Hamburg, Germany) developed an atlas of vessel elements for the identification of Asian timbers, with funding from the German Environmental Foundation. The vessel atlas has been submitted for publication by the IAWA Journal and describes 38 tropical and temperate Asian timbers, known for their potential utilization for pulp and paper. Each species is illustrated with high quality microphotographs, magnified to the same scale. Important features are detailed for rapid identification. This atlas will assist in identifying tropical and temperate wood genera in pulp, paper and fibreboards to help preserve protected tree species. *S. Helmling, A. Olbrich, I. Heinz* and *G. Koch*, Germany

International cooperative group on wood anatomy in Madison

On June 1, 2017, the Center for Wood Anatomy Research welcomed Dr. Kim Nguyen from the Vietnamese Academy of Forest Science, Research Institute of Forest Industry for a two-month ITTO fellowship "Training Course on Wood Anatomy and Wood Identification". Dr. Kim's work focused on CITES species and forensic wood identification. Dr. Wiedenhoeft, Dr. Kim and Dr. Yin are also planning future research cooperation between their institutes. *Alex C. Wiedenhoeft*, USA



Wiedenhoeft Lab, June-July 2017. From the left, Dr. Yafang Yin, Mr. João Marco, Dr. Kim Nguyen, Mr. Giovanny Caro, Dr. Adriana Costa, Dr. Prabu Ravindran, Mr. Richard Soares, Dr. Alex C. Wiedenhoeft, Mr. Elijah Crosley. Photo: Center for Wood Anatomy Research.

New members of the IAWA Afro-European Regional Group

Prof. Veronica De Micco from the University of Naples Federico II, Italy and Dr. Emmanuel Ebanyenle from the Forestry Research Institute of Ghana have agreed to join the IAWA Afro-European Regional Group from this year onward.

Call for I.W. Bailey Award 2017 nominations and MS submissions

Early career wood anatomists and their supervisors are reminded of the possibilities to nominate their manuscripts or papers submitted or published in IAWA Journal 37 of this year for the prestigious I.W. Bailey Award, sponsored by Brill Publishers and consisting of 1000 EUR plus a certificate. The deadline is 1 September 2017. Meanwhile submissions of manuscripts are invited for the Bailey Award 2018. Candidates should have completed their PhDs not longer than 6 years before submission. *Pieter Baas*, Netherlands

Open call for nominees for the next IAWA Council

Please consider nominating one or more colleagues to the IAWA Council. We have a number of Council members who are reaching their term by the end of 2017 and whose vacancy will have to be filled according to the IAWA Constitution (amended version, 2007). Members serve a three-year term, with the possibility to be re-elected to a second consecutive term. The Executive Secretary and current Council will solicit brief vision statements from those who accept nomination – these statements will be collected and made available to all IAWA Members prior to or at the time of ballot distribution. Please send your nominations to Deputy ES Hisashi Abe, abeq@affrc.go.jp. The deadline for submission is September 15, 2017.

International summer school: from xylogenesis to dendroecology, in Naples, Italy

An international summer school from xylogenesis to dendroecology: dendrochronology, quantitative wood anatomy and stable isotopes will be held in Naples, Italy on 25–29 September 2017, organized by Prof. Veronica De Micco, University of Naples Federico II - I. A call for papers for the IAWA special issue on "From Xylogenesis to Tree Rings" is open to not only the participants of the summer school, but to the whole wood anatomy community. Please send an expression of interest or inquiries to demicco@unina.it for more information. *Veronica De Micco*, Italy

9th PRWAC in Bali, Indonesia

The 9th Pacific Regional Wood Anatomy Conference will be held by IAWA from 26–29 September 2017 in Kute, Bali, Indonesia, jointly with IAWS and IUFRO Division 5. To date, there will be 53 oral presentations and 28 poster presentations from 18 countries, i.e., Australia, Austria, China, France, Germany, India, Indonesia, Japan, Malaysia, Netherlands, New Zealand, Panama, South Korea, Sweden, Taiwan, Thailand, United States, and Zambia to attend the meeting. Among the IAWA sessions, a special session on Plant Biomechanics will be organized. During the same week, the IAWS and the Indonesian Wood Research Society (IWoRS) will meet. The conferences will be held at the same venue (Harris Hotel). We wish to attract more members of the IAWA and IAWS to attend these conferences. Please contact the Conference Office: prwac@ugm.ac.id and check the website for detailed information http://woodconference.fkt.ugm.ac.id/9th-prwac/. Nugroho Marsoem, Indonesia

12th Joint Seminar of China-Korea-Japan on Wood Quality and Utilization (2017) in Kyoto

The 12th Joint Seminar of China-Korea-Japan on Wood Quality and Utilization of Domestic Species, a Joint Conference of the 346th RISH Symposium on Wood Culture and Science XVII, will be held December 18–20, 2017 at Kyoto University, Japan. The aim of the conference is to provide a platform for researchers to meet and exchange the latest research results related to wood quality and utilization of domestic species from China, Korea, and Japan and other countries. The main topics include wood biology, wood physics, wood chemistry, wood composites, timber construction, wood processing, and wood culture. Abstracts should be submitted by August 31, 2017 and registration should be completed by October 31, 2017. Please contact the Seminar Secretary: ckj2017uji@rish.kyoto-u.ac.jp and check the website for detailed information http://www.rish.kyoto-u.ac.jp/CKJ/2017/.

Junji Sugiyama, Japan

Dublin 2018 - Fossil woods - Call for papers and posters

Lisa Boucher, Anaïs Boura and Anne-Laure Decombeix are convening two IAWA sessions at the EPPC2018 to be held in Dublin August 12–17 next year (http://eppc2018.ie/). One session will be on "The Timing of and phylogeny of Functional Traits in Wood", the other will be more general on "Fossil Woods – new research and perspectives". Both sessions will feature invited and contributed papers and posters. Please submit your titles of papers or posters directly to the conference organizers, indicating your session of preference, and please also contact the conveners: anne-laure.decombeix@cirad.fr, anais.boura@upmc.fr and/or lisadboucher@gmail.com.

Description of the general Fossil Woods session: The advent of wood is a key event in plant evolution, and fossil evidence indicates that the production of this tissue by a vascular cambium evolved independently in several major lineages of vascular plants during the Paleozoic (i.e., lycopsids, sphenopsids, some ferns s.l., and the lignophytes). Today, the gymnosperms and angiosperms that dominate most extant ecosystems offer an insight into the complexity and diversity of wood anatomy and how it results from a combination of intrinsic and external factors. In the geological record, wood is one of the most common types of plant macrofossil. Its preservation at the cellular level allows for detailed anatomical studies and fossil wood can thus be used in a variety of approaches to reconstruct ancient plant life and environments. This IAWA-sponsored general session will welcome all contributions linked to the study of fossil wood and bark anatomy, ranging from the description of new taxa to the use of wood to reconstruct the diversity, biology, and/or environment of fossil plants. We also invite contributions that aim to move forward the taxonomy of fossil woods, introduce new methods of analysis, or advance the conservation of fossil specimens and sites. *Pieter Baas*, Netherlands

Call for Newsletter Items

Please send any news items you wish to share with the whole IAWA Membership to the newsletter editor Yafang Yin (yafang@caf.ac.cn), so that we can make it a lively and interesting quarterly periodical. Also, please consider sharing short editorials, communiqués, or position pieces that may not be suitable for IAWA Journal. IAWA benefits from members who are active and engaged in the Association!

Contents of IAWA Journal 38 (3), 2017:

M. Fioravanti, G. Di Giulio, G. Signorini, G. Rossi Rognoni, N. Sodini, G. Tromba, & F. Zanini

Non-invasive wood identification of historical musical bows - 285-296

- N. Lotfiomran & M. Köhl Retrospective analysis of growth – A contribution to sustainable forest management in the tropics – 297-312 (with extensive Supplementary material)
- D.W. Woodcock, H.W. Meyer, & Y. Prado

The Piedra Chamana fossil woods (Eocene, Peru) - 313-365

N.A. Jud & J.I. Dunham

Fossil woods from the Cenozoic of Panama (Azuero Peninsula) reveal an ancient neotropical rainforest – 366-411

C. Souza Gerolamo & V. Angyalossy Wood anatomy and conductivity in lianas, shrubs and trees of Bignoniaceae – 412-432

Letters to the Editor:

- Y.S. Kim, T. Fujii, & K.Yamamoto Soft-rot cavities were first described by Fumihiko Onaka in 1935 433
- T. Fujii "Protective (amorphous) layers" in vessel contact parenchyma cells -