



Newsletter of the Association for Tree-Ring Research

No. 6, April 2007

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**TRACE 2006 in Tervuren**

By Pascale Weber, Kristof Haneca

The TRACE meeting 2006 took place at the Royal Museum of Central Africa in Tervuren, Belgium from April 20th to 22nd. The conference was organized in cooperation by the Laboratory for Wood Biology at the Africa Museum (Hans Beeckman and Anouk Verheyden) and the Laboratory of Wood Technology at Ghent University (Kristof Haneca and Joris Van Acker).

The 120 participants were welcomed by Hans Beeckman of the Africa Museum, as well as by Heinrich Spiecker, the president of ATR. Subsequently, Dieter Eckstein acted as the first invited speaker talking about dendroprovenancing in Central Europe and how regional and sub-regional networks were used to recover the mysterious origin of painted oak panels. A second invited talk was given by "local" scientist Patrick Hoffsummer on the evolution of double-sloped roofs in Northern France and Belgium at the second day of the conference.

Overall, 36 talks and 39 posters were presented, covering a wide spectrum of dendrochronological research, roughly organized in climatology, archaeology, isotopes, geomorphology, wood anatomy and ecology. One of the many young scientists, Anny Weitner from the INRA (France) was rewarded with the ATR poster prize for her poster on chemical content fluctuations in beech wood growing on two different soil types by the honourable jury consisting of Valérie Trouet, Jožica Gričar & Fritz Schweingruber.

The accompanying program matched pleasantly the themes of the Africa Museum: the participants had the chance to visit the Tervuren wood collection, the Africa Museum and the Tervuren Arboretum. The icebreaker, one of the highlights held in the Africa Museum, started with a warm welcome of the director of the

Africamuseum, Guido Gryseels, followed by drinks and excellent fingerfood. The evening was perfectly rounded off with many good discussions held over Moambe or Couscous dinner in the historic building of the Africa Museum.

Warm thanks again to the organisers for this interesting conference and the great atmosphere. The organisers would like to emphasize that they were delighted to have the opportunity to present themselves to the international dendrochronological community as a dynamic research group.

5th Annual Meeting of ATR 2006

By Pascale Weber, Ingo Heinrich, Holger Gärtner

The ATR membership meeting took place during the TRACE conference in Tervuren, Belgium. The president of the ATR, Heinrich Spiecker, opened the meeting with a retrospective summary of the activities during the past year. Thereafter, Holger Gärtner gave his last report of the financial status of ATR, before handing over his duties to Ingo Heinrich, who will act as treasurer in the new administration period. Since the last elections were held in 2004, a whole new Board had to be nominated. Heinrich Spiecker was confirmed as ATR president. Achim Bräuning was newly elected vice-president, as Esther Jansma and Gerhard Schleser had both retreated from their shared vice-presidency. Holger Gärtner and Ingo Heinrich were elected as secretary and treasurer, respectively. After some discussions about the exclusively male board, Pascale Weber was proposed and elected as second secretary. Further elections were undertaken for the two financial controllers. This honorary task will be fulfilled by Kerstin Treydte and Iris



Burchardt. The new board was elected and confirmed by the ATR members present (20/0 votes for/against the new board and 4 abstentions). The members thanked the old board with applause for their excellent work during the last two years and the new board for being ready to continue this effort.

After the elections, the members were told that the winner of the new ATR prize for the best master/PhD thesis had been secretly chosen by the way of a careful scientific review process, but was only to be announced at the last day of the conference. Congratulations to David Frank, the winner of the ATR award 2006, with his PhD thesis entitled "Temperature reconstructions from Alpine tree-rings"!

Afterwards, Gerhard Schleser informed that he could negotiate that the new TRACE volume – proceedings of the Conference 2006 in Tervuren – can once more be printed in Jülich, Germany. However, in the future, it may be necessary to look for a new solution.

Finally, Heinrich Spiecker announced that the location for the TRACE meeting 2007 was open for propositions. Later, it was decided that the next meeting will take place in Riga from May 3rd to 6th 2007.

As a result of the elections, the new ATR board is structured as follows:

(For details see <http://www.tree-ring.org/>)

ATR Board

President	Heinrich Spiecker
Vice-president	Achim Bräuning
Secretary	Holger Gärtner Pascale Weber
Treasurer	Ingo Heinrich

The members of the scientific advisory board were not part of the elections and will remain unchanged until May 2008.

ATR Scientific Advisory Board

Karl-Uwe Heussner	Berlin (D)
Hans-Peter Kahle	Freiburg (D)
Klaus-Felix Kaiser	Birmensdorf (CH)
Kurt Nicolussi	Innsbruck (A)
Constantin Sander	Heidelberg (D)
Matthias Saurer	Villigen (CH)
Burkhard Schmidt	Köln (D)
Uwe Treter	Erlangen (D)
Matthias Winiger	Bonn (D)

**7th INTERNATIONAL CONFERENCE ON
DENDROCHRONOLOGY 2006 IN
BEIJING (CHINA)**

Text and Photos by Kaisu Makkonen-Spiecker, Freiburg

Nearly 300 scientists from 35 countries participated in the 7th International Conference on Dendrochronology on June 11 – 17 2006 in Beijing, China. The conference was organized and hosted by Institute of Botany, Chinese Academy of Sciences in conjunction with IUFRO Working Group 5.01.07, Tree-Ring Analysis and under the auspices of Tree-Ring Society (TRS) and European Association for Tree-Ring Research (ATR). It was sponsored by National Natural Science Foundation of China (NSFC), Chinese Academy of Sciences and Past Global Changes (PAGES). The main goals of the conference were to strengthen communication and cooperation among tree ring researchers all over the world, and to present the state-of-the-science of dendrochronology for better understanding of changing global environments and human cultures. The conference also purposed to promote tree ring research and education in China and other Asian countries.

More than two hundred presentations and around 100 posters covered all aspects of tree



ring research including chemical and physical properties of tree rings; biological basis of tree rings; climatology and hydrology; ecology (e.g. forest dynamics, disturbance studies, animal population dynamics); geology (geomorphology, seismic, volcanic activities); development of methods and models; archaeology and cultural studies; interdisciplinary studies (applications and comparisons of tree rings with other data for studies of multiple disciplines).

Within the scope of the conference, pre-conference field week was organized by the Tree-Ring Lab at the National University of Mongolia taking place in Bogd Mountain near Ulaanbaatar. The field week focused on interrelations between tree growth and site conditions in natural forests as well as influence of a-biotic and biotic stresses on tree growth. Through mid-conference local excursions, the delegates got a possibility to visit the historical heritages and scenery spots in Beijing and the vicinity including e. g. the Great Wall and the Forbidden City. Finally, several post-conference field excursions were organized e. g. to Tibetan Plateau, addressing the perspectives of cultural diversity and environmental variability in a variety of forest landscapes, cultural heritages, and natural landscapes.

China with its millennia-long history of rich and highly developed culture, and Beijing, in particular, turned out to be an excellent venue for the conference to disseminate the message that dendroarcheology and dendrochronology in cultural heritage being present in buildings and constructions like churches, temples, monasteries, castles, palaces, etc. is still alive and in progress. It also became evident that amount, length and quality of chronologies is increasing all over the world, as possibilities to use dendrochronology get continuously better and historical dendrochronology get linked to climatology, ecology and wood biology.

Further successful outputs of the conference were the Chinese decision to establish a new dendrochronological network – *Asian Association for Tree-Ring Research*, and several awards given for the best poster, as well as to outstanding persons, e. g. to Dieter Eckstein, University of Hamburg and Fritz Schweingruber, Swiss Federal Research Institute WSL, Birmensdorf for their merits in dendrochronology. Finally, Rovaniemi, Finland was agreed to be the venue of the next international conference of dendrochronology to be held in 2010.



Responsible for the smooth flow of the conference: ZHANG Qi-Bin and his staff in orange.



Conference Co-Chairs (from right): Peter Brown, President of the TRS, Qi-Bin Zhang, Institute of Botany, Chinese Academy of Sciences, and Heinrich Spiecker, President of the ATR.



Annual ATR meeting in Riga (Latvia)

The annual meeting of ATR will be held on Friday, May 4th at 17:40 in the frame of the TRACE 2007 Conference in Riga (May 03-06, see also <http://trace2007.lu.lv/>). The suggested agenda includes the following items:

TOP 1: Adaptation of the agenda

TOP 2: Report of the chairman on the development and activities of ATR since the last annual meeting in Tervuren (April 2006)

TOP 3: Report of the treasurer on the state of members and the financial situation of ATR

TOP 4: Report of the auditors on the cash auditing

TOP 5: The next TRACE volume: editorial notes and financing (Guntis Brūmelis and others)

TOP 6: Preparation of the 8th ICD in Finland 2010 (Mauri Timonen and Kari Mielikäinen)

TOP 7: Bestowal of the ATR-Award for the most trendsetting Dendro-Master-Thesis of the year 2005/06 and public offer of the ATR-Award 2006/07

TOP 8: Exoneration of the executive board

TOP 9: Location of the next annual meeting of ATR and TRACE8 (presentation by Irek Malik)

TOP 10: Other issues

Additional topics of interest that should be added to the agenda should be announced to Achim Bräuning.

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Series: Tree-Ring Labs in Europe

By Didzis Elferts, Iluta Lūce

The Laboratory of Dendrochronology at the Department of Botany and Ecology, University of Latvia, Faculty of Biology in Riga (Latvia)

At the University of Latvia, there is no separate unit that deals specifically with dendroecological studies, but this field of activity is accented in the Department of Botany and Ecology. The Department offers courses in the fields of Botany, General Ecology, Plant Ecology and Biometry. Research involves the ecology of threatened species, the ecology of invasive species, phytosociology, habitat protection, forest stand structure, dendrochronology, and others. A large herbarium with a vast collection of old specimens is available for plant systematics studies.

Dendroecology and dendrochronology are included in the curriculum within courses such as Plant ecology, Practical ecology, and Field course in Ecology

Regarding tree ring research, the Department of Botany and Ecology is equipped with a LINTAB measuring table with TSAP software and LignoVision software for measuring tree ring widths.

Scientific team involved in dendroecological studies

Guntis Brūmelis, Professor

Valdis Ģirts Balodis, associated Professor

Didzis Elferts, PhD Student

Iluta Lūce, PhD Student

Didzis Tjarve, Lecturer

Fields of research

- Climate influence on the radial growth of *Pinus sylvestris* L. growth on dry soil sites and mires in Latvia
- Age and spatial structure of natural forests
- Effect of sand burial on the tree-ring size
- Dendroecological research to determine stand age and spatial structure
- Changes in forest stand composition. Is spruce replacing broad-leaved tree species?

Ongoing tree-ring research activities

- "Influence of climatic factors on the radial growth of Scots pine in Latvia" – PhD research of Didzis Elferts, partly funded by European Social Fund. Objective: to determine the main climatic factors related to growth of Scots pine in Latvia. Contact: didzis.elferts@lu.lv
- "Climatic influence on Scots pine (*Pinus sylvestris* L.) growth in mires of Latvia" – PhD research of Iluta Lūce, partly funded by European Social Fund. Objective: to determine the climatic influence on tree growth of Scots pine in mires. Contact: iluta.luce@lu.lv
- "Dendroclimatological studies in Latvia" – project funded by Latvian Council of Science (LZP 05.1499). Objective: to find common features in the response of Scots pine to climate in different regions of Latvia. Contact: didzis.elferts@lu.lv
- "Forest structure and regeneration in an old growth wet pine forest" - MSc work of Žanna Osmane. Objective: to reconstruct the past history of development in an undisturbed wet pine forest. Contact: guntis.brumelis@lu.lv
- "Effects of Climate Change on the Nature of Latvia" – project funded by Latvian Council of Science (LZP 06.0033). Objectives: 1. to determine the main factors influencing the growth of trees, 2. distribution and

conservation of species in alluvial forests.

Contact: guntis.brumelis@lu.lv



Collecting stem disks of Scots pine for dendroclimatic studies.



Students coring Scots pine in Seržu mire



Scots pine fallen from a bluff at the Kolka horn (Baltic Sea coast)



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Selected publications:

Brumelis, G., Elferts, D., Liepina, L., Luce, I.,
Tabors, G., Tjarve, D., 2005. Age and spatial
structure of natural *Pinus sylvestris* stands in
Latvia. *Journal of Forest Research*, 20 (6):
471-480

Elferts, D. (submitted): Influence of climatic
factors on the radial growth of Scots pine on
a dune island of Raganas mire.

Editorial

Any contributions (e.g. scientific discussions
about tree-ring topics, announcements or
reports on forthcoming meetings, introductions
about tree-ring laboratories) are welcome and
should be sent to:

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