



Newsletter of the Association for Tree-Ring Research

No. 7, March 2010

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**Election of the ATR executive board
2010-2012**

According to ATR regulations, board elections are carried out every two years. Presently, the executive board is composed of the following positions and people:

ATR Board

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

Every ATR member can run for any of the positions mentioned. Please announce interest to Achim Bräuning (abraeuning@geographie.uni-erlangen.de) before April 15th, 2010. Elections will be held during the annual membership meeting in Freiburg during TRACE conference 2010 (see below). The presently active ATR board members have also expressed their willingness to be available for another campaign.

ATR AWARDS 2010

Every year, the Association of Tree-Ring Research is presenting awards to early career scientists for the best master and PhD theses as well as the best student oral and poster presentations.

Best thesis awards

The ATR invites applications for the best theses awards in dendro research. Two prizes are awarded each year, one in the category master thesis and one in the category PhD thesis. Excellent and innovative PhD or master theses should be proposed by the supervisor of

the candidate. Applications must be submitted to Ingo Heinrich (heinrich@gfz-potsdam.de) including the pdf-file of the thesis (an English summary is expected) and a short recommendation latest by 1st of April 2010. A supervisor can only submit one application per category. All theses will be reviewed by the ATR scientific board and the board will decide upon the results of the reviewing process which theses to reward. The ATR award ceremony will take place during the TRACE conference 2010 in Freiburg (Germany). The prizes are honoraria of €250, - and a certificate each. We are looking forward to receiving your proposals.

**Best oral and poster presentation award
at TRACE conference**

At the annual meeting TRACE, one award will be given to the best student oral presenter and another one will be handed out for the best student poster presentation. A poster and oral presentation jury will judge each student presentation by a list of criteria. For talks these criteria include structure, take-home message, readability of overheads, interaction/speech, originality, content and time management. For posters the criteria are overview, take-home message, text, figures, interaction, originality and content. The prizes will be handed over at the end of the TRACE 2010 conference and are an honorarium of €150, - each.

**10th annual ATR meeting in Freiburg
(Germany)**

This year, ATR can celebrate its 10th anniversary after being founded in September 2001 in Davos, Switzerland. This year's annual meeting will be held during the 2010 TRACE meeting in Freiburg (www.trace2010.uni-freiburg.de, see also the Introduction of the host lab in the chapter 'tree-ring labs in Europe' at



the end of this newsletter). 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 Otocek (April 2009)
- 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
- TOP 6: Preparation of the 8th ICD in Finland 2010
- TOP 7: Bestowal of the ATR-Award for the most trendsetting Dendro-Master-Thesis and PhD Thesis of the year 2008/09 and public offer of the ATR-Award
- TOP 8: Exoneration of the executive board
- TOP 9: Election of the ATR executive board
- TOP 10: Location of the next annual meeting of ATR and TRACE11
- TOP 11: Other topics

Please indicate additional topics of interest that should be added to the agenda to Achim Bräuning before April 15th (abraeuning@geographie.uni-erlangen.de).

Series: Tree-Ring Labs in Europe

By Marieke van der Maaten-Theunissen

The Tree-Ring Laboratory at the Institute for Forest Growth, University of Freiburg, Germany

The laboratory of the Institute for Forest Growth in Freiburg consists of a fully-equipped dendro-lab, a wood preparation lab, a precision engineering, and an electronic lab. Semi-automatic tree-ring measurements can be performed, besides cell structural and wood density analyses (Schinker et al. 2003). The stem disk archive of the Institute contains more than 10.000 disks from all continents.

Tree growth studies are performed not only in Germany, but throughout the world. For example, two major research activities are currently going on in China and Brasil.

Permanent plots with point dendrometers are monitored by the Institute in south-western Germany, Brasil, Canada and Russia.

Scientific team involved in dendro-chronological and -ecological studies

Felix Baab, technical staff
 Bela Bender, PhD-student
 Simon Boden, PhD student
 Andreas Dörr, PhD student
 Olaf Grobbel, technical staff
 Hans-Peter Kahle, Senior Researcher
 Clemens Koch, technical staff
 Martin Schinker, Researcher
 Heinrich Spiecker, Professor
 Dominik Stangler, PhD student
 Johanna Storch, PhD student
 Karl Tojic, PhD student
 Willy Tegel, Senior Researcher/PhD student
 Ernst van der Maaten, PhD student
 Marieke van der Maaten-Theunissen, PhD student

Fields of Research

- Ecological bases of forest growth: the analysis of tree growth responses to site conditions (soil, climate, weather, emission, nutrition and water supply) and of biotic interactions
- Controlling forest growth: analysis of tree growth response to genetics, growing space (spacing, thinning, final cut and self thinning) and to pruning, fertilization, melioration on

growth, quality and mortality of trees in forests

- Methods of forest growth research: Development of methods for quantitative analysis and prognosis of growth reactions of trees to environmental changes

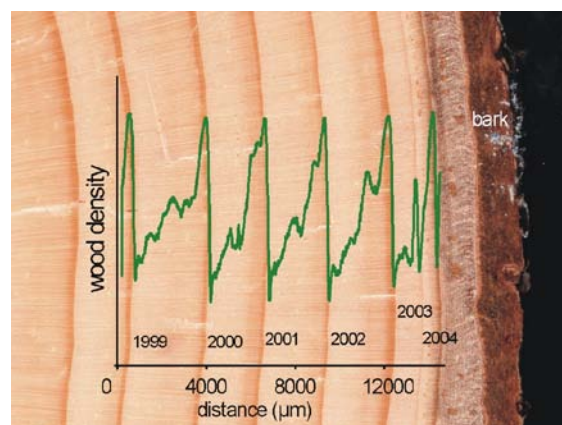


A point dendrometer on a Yellow birch in Haliburton Forest, Canada

Ongoing research activities in dendro-chronological and -ecological studies

- "Drought resistance and climate-sensitive growth dynamics of selected Douglas-fir provenances" – in cooperation with FVA-Baden-Württemberg, Department of Forest Growth – Contact: bela.bender@iww.uni-freiburg.de
- "Variation of tree-ring components of Norway spruce in Baden-Württemberg under different site conditions and climate. Statistical analysis and models of wood density and radial growth" – Contact: simon.boden@iww.uni-freiburg.de
- "Determining biomass increment of Chinese tree species by tree ring analysis and densitometry to optimize growing space and rotation time for biomass production" – Contact: andreas.doerr@iww.uni-freiburg.de
- "Wood anatomy of Norway spruce and European beech on sites of the Forest Soil Monitoring Network in Baden-Württemberg" – in cooperation with FVA-Baden-Württemberg, Department of Forest Ecology. – Contact: hans-peter.kahle@iww.uni-freiburg.de

- "Dendroecological analysis of high resolution measurements of radial displacement and secondary growth of European beech and Norway spruce along an altitudinal gradient in the south-western Black Forest" – Contact: dominik.stangler@iww.uni-freiburg.de
- "Branch development and natural pruning of oak and beech depending on diameter growth" – Contact: johanna.storch@iww.uni-freiburg.de
- "Growth of European beech and Norway spruce between the two National Forest Inventories (1987-2002)" – Contact: karl.tojic@iww.uni-freiburg.de
- "Reconstruction of Holocene cultural and environmental history based on tree-ring analyses of archaeological and subfossil wood" – Contact: tegel@dendro.net
- "Impacts of summer droughts on wood formation of common beech at different stand densities and expositions in south-western Germany using dendrometers and stem analyses" – Contact: ernst.van-der-maaten@iww.uni-freiburg.de
- "Growth reactions and cell characteristics of silver fir and Norway spruce at different altitudes in south-western Germany" – Contact: marieke.theunissen@iww.uni-freiburg.de



Wood density variations in Norway spruce from 1999 till 2004. In 2003 latewood is missing because of the extreme drought.



Selected publications

Kahle, H. P., Karjalainen, T., Schuck, A., Agren, G. I., Kellomäki, S., Mellert, K., Prietzel, J., Rehfuss, K.E., Spiecker, H., 2008.

Causes and consequences of forest growth trends in Europe: results of the Recognition project. European Forest Institute research report; 21, Leiden, Brill.

Park, Y. I., Spiecker, H., 2005. Variations in the tree-ring structure of Norway spruce (*Picea abies*) under contrasting climates. *Dendrochronologia*, Volume 23 (2): 93-104.

Schinker, M., Hansen, N., Spiecker, H., 2003. High-frequency densitometry - a new method for the rapid evaluation of wood density variations. *IAWA Journal*, 24 (3): 231-239.

about new methods or developments in certain disciplines associated with dendro-sciences, announcements or reports on forthcoming meetings, introductions about tree-ring laboratories, etc. are warmly welcome. Please send newsletter articles to:

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University of Erlangen-Nürnberg
Kochstraße 4/4
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abraeuning@geographie.uni-erlangen.de

Announcement: Lab visit

From 22-25 April 2010 the annual ATR-conference **TRACE** will take place in Freiburg. There will be a guided tour through the Tree-Ring Lab of the Institute for Forest Growth on Friday 23 April, from 18⁰⁰ till 19³⁰, where we will show the equipment and software we are working with. Posters will explain about the measurement procedures and data application.

Contacts

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Editorial

The attractiveness of an information organ of a society also depends on contributions of its active members. Therefore, articles on all tree-ring related matters, e.g. scientific discussions