



DIVISION 7 - FOREST HEALTH

Annual Report, 2015 (March 2016)

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News from our Research Groups and Working Parties

In 2015, the Forest Health Division of IUFRO maintained its usual high level of activity among the three research groups and most working parties. There were nine conferences and meetings of Division 7 working parties and research groups; six of these took place in Europe, two in Asia, and one in South America. A list of meetings held in 2015 as well as upcoming events is given below.

Research Group 7.01, "Impacts of Air Pollution and Climate Change on Forest Ecosystems", held its biennial conference in Nice, France, in June 2015. The conference was attended by 122 delegates from 38 countries. A wide range of topics received attention covering experimental, monitoring, and modelling studies documenting air pollution and climate change impacts on forests worldwide. Conference proceedings are in press in two peer-reviewed journals, *Environmental Pollution* and *iForest*. At the conference it was agreed that WP7.01.02 and WP7.01.04 were merged to facilitate concurrent application of physiological, genetic and molecular approaches. The merged WP will continue as WP7.01.02, "Genetic, biochemical and physiological processes".



Field trip during the combined conference of Working Parties 7.02.02 (Foliage, shoot and stem diseases of forest trees) and 7.03.04 (Diseases and insects in forest nurseries) in Uppsala, Sweden.

RG7.01 was involved in a number of interdisciplinary activities including two IUFRO Task Forces. The new Task Force on 'Climate Change and Forest Health' includes a large membership from many organisations and is coordinated by Elena Paoletti (see <http://www.iufro.org/science/task-forces/climate-change-forest-health/>). Research Group members also contribute to the new Task Force 'Sustainable Forest Biomass Network' which is coordinated by Viktor Bruckman who is also a Deputy Coordinator of WP7.01.03.

Within Research Group 7.02, "Pathology", three meetings were organised last year. A joint meeting of WP7.02.02 (Foliage, shoot and stem diseases of forest trees) and WP7.03.04 (Diseases and insects in forest nurseries) took place in Upsala, Sweden. WP7.02.04 (Phytoplasmas and virus diseases of forest trees) organised a workshop as a satellite meeting to the XVIII International Plant Protection Congress in Berlin, Germany. WP7.02.01 (Root and stem rot of forest trees) met in Antalya, Turkey. Collectively, there were 173 participants at these three meetings, from up to 22 countries. In addition, there was a jointly organised meeting with 7.03.11 (see below).

A new Working Party in RG7.02 was founded last year, on "Forest health in southern hemisphere commercial plantations" (WP7.02.13), coordinated by Rebecca Ganley (New Zealand), Rodrigo Ahumada (Chile), Angus Carnegie (Australia) and Carlos Perez (Uruguay). The first meeting of the new Working Party will take place as a session at the upcoming Division 7 conference in Istanbul. Judging by the interest in this session and the number of abstracts that were submitted, the new Working Party is enjoying considerable interest from the forest health community.



Participants of the biennial conference of Research Group 7.01, "Impacts of Air Pollution and Climate Change on Forest Ecosystems", in Nice, France

In Research Group 7.03, "Entomology", there were three working party conferences last year, as well as an interdisciplinary "International Workshop on the Genetics of Tree-Parasite Interactions" (in Orléans, France) that was a joint activity of 7.03.11 (Resistance to insects), 7.02.05 (Rusts of forest trees), and two RG2.02 (Conifer breeding and genetic resources) working parties (2.02.15 and 2.02.20). WP7.03.10 (Methodology of forest insect and disease survey in Central Europe) met in San Michele all'Adige, Italy, with 54 delegates from 17 countries, primarily from Europe. A conference on "Population Dynamics and Integrated Control of Forest Defoliating and Other Insects" was held in Sopot, Poland, as a joint meeting of three working parties (7.03.07 "Population Dynamics of Forest Insects", 7.03.06 "Ecology and Management of Forest Defoliating Insects", and

7.03.13 “Biological Control of Forest Insects and Pathogens”), with 75 delegates from 23 countries. Finally, a conference on “A Global Perspective on the Ecology and Management of Bark and Wood Boring Insects”, was held in Bariloche, Argentina (as a joint meeting of WP7.03.05 “Ecology and Management of Bark and Wood Boring Insects” and WP7.03.12 “Alien Invasive Species and Global Trade”). There were 68 delegates from 23 countries, with 60% of attendees coming from South America. We are pleased to see the increased activity in Latin America as this is a region where traditionally IUFRO has not had as much participation.

A new working 7.03.15, “Social dimensions of forest health” began its mission last year. Mariella Marzano is the founding Coordinator with Robert Haight, Tom Holmes and Carina Keskitalo acting as deputies. We welcome the addition of social dimensions activities to our Division and we look forward to interactions concerning across all research groups and working parties.



Poster session during the conference “Population dynamics and integrated control of forest defoliating and other insects” (Working Parties 7.03.07, 7.03.06 and 7.03.13) in Sopot, Poland.

We are most grateful for the contributions from conference organisers, working party coordinators and deputies. A number of changes in coordinators of Division 7 working parties occurred last year: After many years of service for WP 7.01.02, Rainer Matyssek stepped down as coordinator, with Zhaozhong Feng taking this role for the expanded WP on “Genetic, biochemical and physiological processes”. Alessandra De Marco is taking over from Salim Belyazid as coordinator of 7.01.05 (Modelling and risk assessment). Matteo Garbelotto passed on the coordinator role of WP7.02.01 (Root and stem rot of forest trees) to Jonas Ronnberg, with Tuğba Doğmuş Lehtijarvi as deputy. Julio Diez is the new coordinator for WP7.02.02 (Foliage, shoot and stem diseases of forest trees) with Glen Stanosz and Tuğba Doğmuş Lehtijarvi serving as deputies. After two terms, Richard Hamelin resigned as coordinator of WP7.02.05 (Rusts of forest trees); he is succeeded by Pascal Frey. Finally, Dave Shaw is the new coordinator of WP7.02.11 (Parasitic flowering plants in forests) with Simon Shamoun and Marcelo Luis Wagner as deputies.

A number of publications were prepared in conjunction with Division 7 conferences. One publication project that has been in the making since the IUFRO World Congress in 2014 will appear shortly as a special issue of the journal ‘Forestry – An International Journal of Forest Research’. The special issue is themed ‘Forest health in a changing world: Effects of globalisation and climate change on forest insect and pathogen impacts’ and it was coordinated by Tod Ramsfield, Barbara Bentz, Massimo Faccoli, Hervé Jactel, and Eckehard Brockerhoff. Another highlight was the publication of a paper entitled ‘Planted forest health: The need for a global strategy’ by Mike and Brenda Wingfield, Eckehard Brockerhoff and Bernard Slippers in the journal ‘Science’.

Much effort went into the planning and organisation of the All Division 7 conference which will take place from 25-29 April 2016 in Istanbul, Turkey. It is themed “Global change and forest health” and we look forward to the interactions with our colleagues across the three research groups. We are grateful to Yusuf Serengil, the local organiser, who has worked hard to make the conference possible. See below for more information.

Finally, we would like to thank our colleagues at IUFRO’s Secretariat in Vienna for their continued support and expert assistance.



Field trip during the joint meeting of Working Parties 7.03.05 (Ecology and Management of Bark and Wood Boring Insects) and 7.03.12 (Alien Invasive Species and Global Trade).

Newsletters and list-servers

Division 7 and our Research Groups produce newsletters on a regular basis, usually one or two per year. These can be found on the IUFRO website at the respective Research Group pages under “Publications & References”. The **three list-servers of the Division 7 Research Groups (ForClimAir, ForPath, and ForEnt)** continue to enjoy much support from the community. Collectively there are about 1200 subscribers, across the 3 list-servers (e.g., <http://lists.iufro.org/mailman/listinfo/rg70300-forent>). There is also a Div. 7 list-server.

Upcoming Division 7 conferences and meetings

An **All-Division 7 Conference** will take place from **25-29 April 2016 in Istanbul, Turkey**, entitled “Global change and forest health - climate change, biological invasions, air pollution, forest pathology, forest entomology, and their interactions.” Main organisers: Yusuf Serengil (yserengil@yahoo.com), Eckehard Brockerhoff (eckehard.brockerhoff@scionresearch.com), Elena Paoletti (elena.paoletti@cnr.it), Jolanda Roux (Jolanda.Roux@up.ac.za), and Andrew (Sandy) Liebhold (aliebhold@gmail.com).

For details see <http://www.foresthealth2016.com>

Abstract submission has closed but registration is still possible.

11 - 15 July 2016, Baie-Comeau, Sept-Iles, Quebec, Canada: Climate-Induced range shifts in boreal forest pests and their ecological, economic and social consequences. Working Parties 8.01.06, 7.03.05 “Bark and Wood Boring Insects”, and 7.03.07 “Population Dynamics of Forest Insects”. Contact: Pierre Godbout, pierre.godbout@canada.ca Website: <http://www.cef-cfr.ca/index.php?n=Colloque.IUFROQuebec2016>

17-22 July 2016, Ashland, Oregon, USA: Working Party 7.02.11 “Parasitic flowering plants in forests” is hosting a global meeting on "Mistletoes: Pathogens, keystone resource, and medicinal wonder". Contacts: brianna.beene@oregonstate.edu and dave.shaw@oregonstate.edu
Conference website: <http://blogs.oregonstate.edu/mistletoe/>

19-22 July 2016, Shepherdstown, WV, United States: Workshop on Biological Invasions in Forests (IUFRO Task Force on Forests and Biological Invasions). Contact: Andrew Liebhold, aliebhold@fs.fed.us

29 August - 2 September 2016, Seoul, South Korea: Working Party 7.02.10, Pine Wilt Disease Conference 2016, Contact: Katsunori Nakamura, Email: knakam@affrc.go.jp
Conference website: <http://www.pinewilt-disease2016.or.kr>

24-27 October 2016, Beijing, China: IUFRO Regional Congress for Asia and Oceania (including sessions organised by Division 7 Research Groups and Working Parties). Contact: Shirong Liu, liusr@caf.ac.cn
Congress website: <http://www.iufro-ao2016.org/>

Please note, the following meeting has been **cancelled**: 4-10 September 2016, Perth, Australia: Disease/environment interactions in Forest decline "integrated ecosystem approach" **Working Party 7.02.06.** Giles Hardy (g.hardy@murdoch.edu.au)



Participants of the “Fifth International Workshop on the Genetics of Tree-Parasite Interactions” in Orléans, France (Working Parties 7.02.05 “Rusts of forest trees”, 7.03.11 “Resistance to insects”, 2.02.15 “Breeding and genetic resources of five-needle pines”, & 2.02.20 “Breeding and genetic resources of southern pines”)

Division 7 meetings and conferences in 2015

24-27 February 2015, Lucknow, India: Fifth International Conference on Plants & Environmental Pollution (ICPEP-5). Co-sponsored by **Working Party 7.01.04**, Conference homepage: <http://isebindia.com/icpep-5/icpep-5.html> Contact: Elina Oksanen (elina.oksanen@uef.fi). Conference website: <http://isebindia.com/icpep-5/icpep-5.html>

1-5 June 2015, Nice, France: Biennial **Research Group 7.01.00** meeting "Global challenges of air pollution and climate change to forests." Contact: Pierre Sicard (Pierre.Sicard@acri-st.fr) and Elena Paoletti, elena.paoletti@cnr.it

7-12 June 2015, Uppsala, Sweden: Joint **Working Party 7.02.02** "Foliage, shoot and stem diseases of forest trees" and **WP 7.03.04** "Diseases and insects in forest nurseries" Meeting. Organisers: Jonàs Oliva (jonas.oliva@slu.se), Jan Stenlid (jan.stenlid@slu.se), Rimvys Vasaitis (rimvys.vasaitis@slu.se) Conference report: http://www.iufro.org/download/file/20983/2749/uppsala15-report_pdf/

22-26 June, 2015, San Michele All'adige, Italy: "Fluctuation of Insect and Diseases" **Working Party 7.03.10**, Methodology of forest insect and disease survey in Central Europe. Contacts: Giorgio Maresi (giorgio.maresi@fmach.it), Cristina Salvadori (cristina.salvadori@fmach.it), Erica Candioli (erica.candioli@fmach.it), Miloš Knížek (knizek@vulhm.cz), Wojciech Grodzki (W.Grodzki@ibles.waw.pl) Conference homepage: <http://eventi.fmach.it/IUFRO> Conference report: http://www.iufro.org/download/file/22948/2622/sanmichele15-report_doc/



Working Party 7.03.10 "Methodology of forest insect and disease survey in Central Europe" meeting in San Michele All'adige, Italy.

23-28 August 2015, Orléans, France: "Fifth International Workshop on the Genetics of Host-Parasite Interactions in Forestry: Novel challenges and opportunities for resistance to pests and pathogens", **Working Parties** 2.02.15 (Breeding and genetic resources of five-needle pines), 2.02.20 (Breeding and genetic resources of southern pines), **7.03.11** (Resistance to insects) and **7.02.05** (Rusts of forest trees). Contact: Arnaud Dowkiw (Arnaud.dowkiw@orleans.inra.fr), Aurélien Sallé (aurelien.salle@univ-orleans.fr), Véronique Jorge (veronique.jorge@orleans.inra.fr). Conference website: <https://colloque.inra.fr/tree-parasite-interactions2015>

25 August 2015, Berlin, Germany: Working Party 7.02.04 "Phytoplasmas and virus diseases of forest trees" (A satellite meeting of the XVIII International Plant Protection Congress). Contact: Carmen Büttner, carmen.buettner@agrار.hu-berlin.de, Conference website: <http://dpg.phytomedizin.org/index.php?id=372>
Report: http://www.iufro.org/download/file/21842/2737/berlin15-report_pdf/

1-4 September, 2015, Bariloche, Argentina: "Bark and Wood Boring Insects: a global perspective on their ecology and management" **Working Party 7.03.05** "Bark and Wood Boring Insects". Contact: Juan C. Corley (elmallin@gmail.com)
Conference website: <https://sites.google.com/site/iufrobariloche2015/>

28 September - 2 October, 2015, Sopot, Poland: Working Parties 7.03.07 "Population Dynamics of Forest Insects", **7.03.06** "Integrated management of forest defoliating insects", **7.03.13**, "Biological control of forest insects and pathogens". Contact: Lidia Sukovata, iufro.poland@gmail.com
Conference website: <http://www.ibles.pl/web/iufro/about>
Report: http://www.iufro.org/download/file/22136/2646/sopot15-report_doc/

12-18 October 2015, Antalya, Turkey: Working Party 7.02.01 "Root and Butt Rot". Contact: H. Tuğba Doğmuş Lehtijarvi, email: tugba@orman.sdu.edu.tr, Conference website: <http://ormanweb.sdu.edu.tr/iufro2015/>

In addition, Research Group 7.01 contributed to the European Geosciences Union General Assembly 2015: ERE3.7/SSS11.7 "Sustainable biomass for raw materials, energy and GHG mitigation" 16 April 2015, Vienna, Austria via Working Party 7.01.03 and the IUFRO Task Force "Sustainable Forest Biomass Network"