

Peter de Groot (aka “Pedro”, “DonPedro” 1954-2010)

The forest entomology community suffered a great loss with the passing of Dr Peter de Groot, on 22 October 2010, after a courageous battle with cancer. Peter's contributions to the science of forest entomology are numerous and diverse. He will be greatly missed not only by family, but also by colleagues, students, friends, and trees (yes, trees – Peter had a little known spring ritual – at the start of the past 35 field seasons, his first deed was to hug a tree).



Peter was born to Paula and Jan de Groot in Amsterdam, The Netherlands, on 14 August 1954. He emigrated to Canada with his parents in 1960, and settled in Brantford, Ontario, where he attended Pauline Johnson High School and graduated in 1972. He became a Canadian citizen, along with his sister Mieke, father and stepmother Frances, in 1967.

Peter began his career in forestry as a Field Technician with the Ontario Ministry of Natural Resources in 1974, after working for a year in British Columbia to pay for travel through Europe. After completing his Forest Technician Diploma (First Class Honours) at Sault College, Sault Ste. Marie, Ontario, in 1975, he was hired as a Research Technician in the Virology Section of the Canadian Forestry Service (CFS) in Sault Ste. Marie. In 1981, he received his Honours (First Class) BSc in Forestry from Lakehead University and received the President's Award for his activities and achievements in student organizations at the University. He was also awarded the Canadian Institute of Forestry Gold Medal for being the best all-round student in scholarship, sports (yes, this was a big surprise to us too, but at the time he enjoyed lumberjack competitions), and citizenship. Peter was chosen as the Valedictorian of the Class of 1981 (this was not a surprise) and he concluded his humorous and insightful address with "We, the class of 1981, not only recognize the need to achieve the goal of an enlightened and enspirited forest management policy for Canada, we want to achieve that goal, and we will". As a highly effective person, he always began with the end in mind. His priority was to protect the forest – to achieve this desire, forest insect pests needed to be managed. It was during his student days at Lakehead University that Peter met Elizabeth (Liz) Rose Deakin. They married at Bala, Ontario, on 18 August 1979.

Upon completion of his undergraduate degree, Peter was promoted to Research Forester for the CFS, working first in the Field Efficacy Section, and later in the Insect Pest Management Section. Peter took educational leave from Forestry Canada to undertake a PhD degree at Simon Fraser University, under the tutelage of Dr John Borden, which he completed in 1991. His thesis was titled "Biosystematics of *Conophthorus* Hopkins (Coleoptera: Scolytidae) in eastern North America" wherein he synonymised two species and stated that "... lack of distinct ecological, behavioural, morphological, karyological and biochemical taxonomic characters in *C. banksiana* does not support its designation as a species...". The scope and attention to detail displayed in this work epitomizes Peter's approach to research. Upon completion of his degree, Peter was promoted to the position of Research Scientist in Applied Insect Ecology, where he rose to the distinctive level of Senior Scientist. Initially, Peter's research focused on the management of the spruce budmoth, but shifted soon after to insects attacking conifer seed cones in general, but pine in particular (Peter's favourite trees). This research then morphed into his interest in the semiochemical ecology of wood-boring insects. It was a natural transition to invasive forest insects, considering that most recent exotic forest insects were wood borers. During his distinguished career, he was awarded the CFS Excellence in Technology Transfer Award in 1993 for his contribution to the guide titled, "Management of Insect Pests of Cones in Seed Orchards in Canada"; the Ontario Federal Council Leadership Through Collaboration Award in 2004; the CFS Merit Award in 2007 for Collaboration

and Partnership addressing "Alien Species Through Collaboration and Science"; and Natural Resources Canada, Departmental Merit Award, Collaboration and Partnership in 2007.

Peter was a great champion and advocate of the written word. He was a gifted writer, with an uncanny ability to share his thoughts and ideas, putting them down on paper in easy to understand language for very different targeted audiences. He published 69 scientific papers in refereed journals (many more will see the light of day in the near future), 7 books, 12 book chapters, many publications in conference proceedings, and innumerable government publications and reports. Many of Peter's publications can be found online at: <http://cfs.nrcan.gc.ca/publications/>. Remarkably, but not surprisingly, Peter is the only scientist known to have published journal articles on all five of the newest alien invasive species that currently plague Canadian forests, namely, the larger pine shoot beetle (4), brown spruce longhorn beetle (3), emerald ash borer (5), Asian longhorned beetle (2), and Sirex woodwasp (10). At the time of his death, he was co-editing a book with colleagues from South Africa on *Sirex noctilio*. This book titled "The Sirex woodwasp and its fungal symbiont: Research and management of a worldwide invasive pest" will come out later this year. He was also halfway through writing his own book "Forest Insect Pest Management". We have no doubt that forests and all of their creatures were looking forward to that book. Peter was an Associate Editor of both *The Canadian Entomologist (TCE)* (1995-2001) and *The Forestry Chronicle* (1999-2010). For many years, Peter served as a Member (2001-2008), and later as Chair (2009), of the Publications Committee for the Entomological Society of Canada (ESC). Peter also served as Guest Co-Editor for the special issue of TCE (Volume 132[6]) published in 2000 as a tribute to his former supervisor and mentor Dr Borden. He was also a member of the editorial board (1988-1992) and a contributor to the book "Trees in Canada".

Not only was Peter an author and editor of scientific literature, but he was also a voracious reader on world history (his favourite saying being "without knowledge of history you are bound to repeat the same mistakes others made") and a well known philatelist. As such, Peter amassed several collections, published many articles, and presented first class exhibits. Indeed, Peter used his research and writing skills in philately, writing, among others, a series of articles that reviewed the history and rates of Newfoundland's Inland Revenue stamp taxes and fees. His stamp exhibits also earned him numerous awards (<http://www.bnaps.org/memorials/memorials.htm>). Peter was an entertaining (we remember fondly his coining of an alternate and more appropriate "common name" for the emerald ash borer: "the green bastard") and frequently invited speaker at regional, national, and international meetings. He contributed to the organization and presentation of several meetings. He was a Member of the Local Arrangements Committee, Annual Meeting of the Canadian Institute of Forestry (1983); Symposium Chairman, Recent Advances in Pest Management, Canadian Institute of Forestry (1989-1990); Technical Committee Member of the Forest Sustainability Conference (1994-1995); Steering Committee Member for the North American Forest Insect and Disease Work Conference, San Antonio, Texas (1995-1996); Program Committee Member for the Entomological Society of Ontario (ESO) Meeting, Sault Ste. Marie (2000); and a Steering Committee Member for the North American Forest Insect and Disease Work Conference, Edmonton, Alberta (2000-2001). He also served on many committees and working groups including the Pest Control Working Group, Canadian Institute of Forestry (1985-1988); Chair, Integrated Pest Management in Seed Orchards Network (1991-1994); Chair, Cone and Seed Pest Working Group, Forest Tree Improvement Association (1985-2000); Chair (2002-2003) of the Emerald Ash Borer Research Committee, and member of the Emerald Ash Borer Science and Survey Committee (2002-2005); member, Asian Longhorned Beetle Science Sub-Committee (2003-2010); member, Pest Management Technical Advisory Committee (2005-2010); member, Brown Spruce Longhorned Beetle Science Sub-Committee; and Chair, Sirex Science Advisory Panel (2005-2010). He served as Science Reviewer for the USDA, Small Business and Innovations Group (2000) and the Canadian Innovation Centre.

Peter devoted much of his career to the mentoring and development of forest entomology students. He often volunteered his time to provide guest lectures in the Forestry Faculties at Sault College, Lakehead University, and the University of Toronto. He also was the co-instructor of the forest entomology courses at Lakehead University during 1992-1993. He was a Course Lecturer for the Advanced Forest Pest Management Courses (1994-1998) sponsored by CFS, and a Lecturer for the Alberta Environmental Training Centre (1997-1999). In 1994, he was appointed Adjunct Professor in the Faculty of Forestry of his alma mater, Lakehead University. He served as a Graduate Student Committee member beginning in 1997 and was appointed Adjunct Professor in the Faculty of Forestry, University of Toronto, in 1999, where he co-supervised 3 MSc students and 2 PhD students. At the time of his passing he had just completed his duties as an external examiner for a PhD candidate at the University of Pretoria. Several of the journal papers Peter published were with students he supervised.

Peter was an active member of the ESC, ESO, and the International Union of Forest Research Organizations, Cone and Seed Insects Working Group. He served one term (1999-2003) as a Director of the ESC, two terms (1992-1994, 1996-1999) as a Director of the ESO, and from 2000-2003 as Chair of the ESC Annual Meeting Committee.

Peter's accomplishments and contributions to science were not limited to forest pest management: they also included health sciences. About 25 years ago, Peter shared with some of us that he had a degenerative kidney disease and because of it, he did not expect to reach the age of 50. In 2002, he became ill; however, instead of sitting on the sidelines, he decided to learn and get involved by volunteering in trials for a nocturnal home dialysis program at Toronto General Hospital. He was later quoted in the Wall Street Journal as saying that patients in that program had to be their own nurse, doctor, and patient. This novel treatment freed him from fatigue, memory loss, heart problems, and long three-times-a-week dialysis treatments in a hospital. In 2004, he received a donated kidney, for which he was extremely grateful. This new organ meant two things: 1) the return of "good days", which for him were those spent in the field getting his boots dirty; and, because he believed in maintaining a balance between work and personal life, 2) more wonderful times for camping, fishing, snowshoeing, travelling, making maple syrup, and exploring the wilds of the outdoors with his family. Since his transplant, Peter saw the graduation of his daughter, the birth of two grandchildren, and the building of his son's own log house. Peter is survived by his wife Elizabeth and his children Cathleen (Alex) and Jonathan (Samantha) and his grandchildren Adalia and Deiderich.

– Barry Lyons, Jean Turgeon, Taylor Scarr Sault Ste. Marie, Ontario.