

21st Triennial Meeting of the International Association of
Forensic Sciences 2017

Pre-Conference Workshop, August 21st, 2017.

Workshop W-507. Forensic Botanical Evidence and
Death Investigations

Location: Centre of Forensic Sciences, Room W1-238

Workshop Organizers/Leaders

Gerard M. Courtin, PhD

Scott I. Fairgrieve, PhD

Workshop Leaders

Gerard M. Courtin, PhD.

Professor Emeritus, Adjunct Professor in the "Department of Forensic Science and School of the Environment.

Laurentian University, Ramsey Lake Road, Sudbury, ON. P3E 2C6

Department of Biology and Department of Forensic Science, Laurentian University.

Dr. Courtin is in semi-retirement following a thirty-three year career as a faculty member in the Department of Biology. He has also specialized in the delivery of field courses for twenty-five years both at the Center for Northern Studies in Vermont and at Cornell University's Shoals Marine Laboratory at the Isles of Shoals in Maine. His training as a plant ecologist and bioclimatologist has provided him with the opportunity to gain a wide experience in a number of fields allied to his central discipline. These include: Arctic and Alpine Ecology, Plant Ecology, Forest Ecology, Winter Ecology, and over the past seventeen years has been involved in teaching and research in forensic botany. He has published two articles in the Journal of Forensic Science that stemmed from forensic work. Case work includes investigations for the OPP across the province and Dr. Courtin is recognized as an expert witness in matters of botany and ecology by the Supreme Court of Ontario.

Scott I. Fairgrieve, PhD.

Professor of Forensic Science, Department of Forensic Science

Laurentian University, Ramsey Lake Road, Sudbury, Ontario, Canada P3E 2C6

Dr. Fairgrieve is a Professor of Forensic Science at Laurentian University, in Sudbury, Ontario, Canada. He was the founding Chair of the Department in 2004 and also founded the second forensic program in Canada in 1998. He teaches courses in the Department of Forensic Science including, Forensic Biology, Forensic Anatomy of the Human Skeleton, Forensic Analysis of the Human Skeleton, and supervises student research for publication. He is the consulting forensic anthropologist to the Office of the Chief Coroner of Ontario and the Ontario Forensic Pathology Service in Northeastern Ontario and has been a consultant since 1990, and since 1991 at Laurentian University. He has consulted for both the Crown and defense on cases in both Canada and the US. He has given expert evidence in some high profile cases including the case of Steven Avery as shown in the Netflix documentary "Making a Murderer." Dr. Fairgrieve has worked with the Ontario Provincial Police (OPP) in both Northeastern and Northwestern Ontario, and a variety of other police services throughout Ontario. Dr. Fairgrieve is widely published with several articles in the Journal of Forensic Sciences, the Canadian Society of Forensic Science Journal, in forensic anthropology, trauma (cut marks, blunt and sharp force, and gunshot wounds) analysis evidence on human bones, experimental studies in the effects of burning on the interpretation of trauma on bone. Dr. Fairgrieve is the Director of the Forensic Osteology Laboratory at Laurentian University.

Workshop Outline

- 0900-0915 Welcome and Introductions
- 0915-1000 Why Botanical and Soil Evidence?
An overview of the justification using actual cases as examples
- 1000-1030 COFFEE BREAK and informal Q and A.
- 1030-1200 The Plant Environment
The spatial and temporal changes in the vegetated landscape.
Hands-on exercise to illustrate these changes.
Burials: effects on soil and vegetation.
- 1200-1300 LUNCH
- 1300-1330 Recognition of potential evidence
What should I be looking for?
- 1330-1415 Evidence collection and preservation
How should I collect and preserve it?
The botanist's basic tool kit
Specialized equipment
Making do
- 1415-1500 Documentation
Photography/Mapping
Useful views: scene, surrounding area and evidence
Evidence numbers
Info on the bag
- 1500-1530 COFFEE BREAK and informal Q and A
- 1530-1600 Examination of the crime scene through the eyes of a forensic botanist/ecologist
Is there a need for a forensic botanist at the crime scene?

Path of contamination may be pivotal

Elapsed time since discovery of the body