

INVESTIGATION METHODS

Wildfire Origin and Cause Investigations Panel Discussion – perspectives from Canada, United States, Australia

Theo Bailey¹, Jeff Henricks², Richard Woods³, Shawn Zimmermaker⁴, Ken Ness⁵

¹ Government of the Province of Alberta, Ministry of Forestry and Parks, NWCG WFISC Member, Edmonton, Alberta, Canada, theo.bailey@gov.ab.ca

² Henricks and Associates, NWCG WFISC Member, Edmonton, Alberta, Canada, henrickswildfire@gmail.com

³ Charles Sturt University (Australia), Wildfire Investigation & Analysis Pty Ltd (Australia), NWCG WFISC Member, Canberra, Australia, richard.woods@wildfirecause.com

⁴ California Department of Forestry and Fire Protection (CALFIRE), NWCG WFISC Chair, California, United States of America, shawn.zimmermaker@fire.ca.gov

⁵ Ken B. Ness Consulting, NWCG WFISC Member, Saskatchewan, Canada, kenness02@gmail.com

SHORT BIO(S)

Theo Bailey – Mr. Bailey is the Director of Wildfire Prevention and Investigations for the Province of Alberta, Canada. He oversees Alberta's wildfire investigation, compliance, and enforcement programs, which includes serial arson investigations, civil cost recovery files, and all other high complexity wildfire investigations in the province. He has worked as a wildfire investigator since 2012, leading hundreds of wildfire investigations in that time. He is a lead wildfire investigation instructor in Alberta, delivering training to public agencies across Canada. Mr. Bailey attended Macewan University and Athabasca University and majored in Criminal Justice. He is an IAAI-ECT, and INVFI/INVL.

Jeff Henricks – Mr. Henricks began his forestry career in 1979 and retired in 2021 after 36 years with the Alberta Government, including 27 in wildfire management. He served as Alberta's Senior Wildfire Investigator for nine years, leading investigations of major provincial wildfires. Mr. Henricks contributes to the NWCG Wildfire Investigation Subcommittee, supporting training and program development. Passionate about fire pattern indicators and causal research, he is also a wildfire safety officer and historian of Canadian fireline fatalities. Now a wildfire investigation consultant based in Edmonton, Mr. Henricks holds a Forestry diploma from Fleming College.

Richard Woods AFISM – Mr. Woods has over 45 years of experience in Australian wildfire management, specializing in wildfire investigation for 31 years. He established the NSW Rural Fire Service's investigation program and authored Australia's 'National Strategy to Reduce Bushfire Arson.' Mr. Woods lectures at Charles Sturt University and has delivered wildfire investigation training internationally. He was retained by the NSW Coroner as an expert during the 2019/20 Black Summer Bushfire inquest. He directs Wildfire Investigations and Analysis, providing expert opinion and international training. He holds multiple credentials, including a Graduate Diploma in Fire Investigation and a Graduate Certificate in Applied Management.

Shawn Zimmermaker – Mr. Zimmermaker is the northern region deputy chief of law enforcement and fire prevention for CAL FIRE, overseeing major fire investigations, arson cases, and civil cost recovery. He chairs the NWCG Wildland Fire Investigation Subcommittee and contributed to revising NFPA 921's wildland fire investigation chapter. Mr. Zimmermaker holds a Bachelor of Science from Humboldt State University, with a major in forestry and minors in watershed management and environmental ethics. He is an IAAI-CFI, NAFI-CFEI, NWCG INVFI/INVL, and a Registered Professional Forester.

Ken Ness - Ness is President of Ken B Ness Consulting Inc., specializing in wildfire investigation, training, and investigative interviewing. He served 38 years with Saskatchewan's Ministry of Environment, retiring as Detective Sergeant in 2018. Since 2001, he has contributed to the NWCG Wildland Fire Investigation Subcommittee, helping develop FI-110, FI-210, FI-310, and the PMS 412 guide. He chaired CIFFC's Wildfire Investigation Working Team from 2012–2018 and has instructed across Canada, the U.S., Guam, and Australia. Since 1994, he has led or assisted in approximately 640 wildfire investigations, including major civil and criminal cases.

WORKSHOP DESCRIPTION

This workshop will be a question-and-answer format panel session. Over the course of the three-hour workshop, panellists, who are experienced investigators from the United States, Canada, and Australia, will discuss a variety of topics surrounding wildfire investigations, and share with the audience their perspectives and experiences. This will be an interactive session, with the audience having the opportunity to ask questions of and participate with the panellists throughout the facilitated discussion.

Topics to be discussed include, but are not limited to:

- Fire Pattern Indicators
Discussion on the veracity of fire pattern indicators in PMS-412, taught in the NWCG FI-210 course, and the need for further research on topic.
- Jurisdictional challenges
 - Particularly with arson cases. Borders/boundaries leading to linkage blindness
 - Information sharing – during investigations but also for trend and pattern analysis
 - Cooperation between public agencies
- Role of private investigators in public agency investigations (consultants, insurance investigators, etc.)
 - Legislative requirements of regulators may dictate roles or involvement
 - Cost to maintain staffing, training, equipment, etc. as opposed to call as need contractors
- Funding investigations
Challenges with convincing leadership/financiers/elected officials to appropriately fund/resource investigations
 - Investigations units – training, equipment, staffing – very often under funded
 - In some cases, wildfire investigations may cost more than suppression costs on individual fires (serial arson events with small fires) – financial plans/justifications are required
- Wildfire investigation responsibility
 - Who is responsible for investigating wildfires? Fire suppression agencies? Forestry officials? Law enforcement? Private investigators (contractors, insurance representatives)? A shared responsibility?
This topic will invite the audience to share their home organization format
- Training standards
 - Overview of training offered to wildfire investigators in different jurisdictions
 - Highlighting potential different systematic methodologies,
 - standardized training from governing bodies (i.e. NWCG FI Courses),
 - additional training requirements in different jurisdictions (law enforcement, fire behaviour etc.)
 - How NFPA 1033 impacts training requirements worldwide
 - How various judiciaries (courts) have viewed standardized vs non-standard training worldwide
- Global collaboration
 - Sharing and growing our working knowledge of fire pattern indicators and the methodology to use them in wildfire investigations
 - How do we share the information and make it accessible to investigators worldwide?
 - How do we improve and test what we know in a global effort to expediate this effort?
 - Sharing of training materials and guides to build off our own isolated processes

Keywords: Arson investigation; Jurisdictional challenges; Interagency and Global Collaboration; Training standards (NFPA 1033, NWCG FI-210, PMS-412); Investigation Funding and Resources

More information

Length of the workshop:	3 hours
Number of participants*:	N/A
Special facility needs:	LCD Projector

* Workshops with fewer attendees than the minimum number may be canceled at the discretion of the conference organizers.