

Federal – Provincial MPB Research Forum Coast Edmonton Plaza Hotel, 10155 105th St. Edmonton, AB T5J 1E2

DRAFT AGENDA

Tuesday, October 24, 2023

Evening – 4:00PM – 8:00PM

Valley Ballroom and Foyer, Coast Edmonton Plaza Hotel

Registration, Reception, Poster setup

Day 1 – Q1: Wednesday, October 25, 2023

Time		Торіс	Speaker
7:00	7:45	Hot Breakfast	Valley Ballroom
7:45	8:00	Welcome and opening remarks Scope of the Federal-Provincial MPB Research Partnership (FPRP), Forum structure and objectives	Dr. Keith McClain, MPB Research Program Lead, fRI Research Caroline Whitehouse, Forest Health Specialist, Forest Health and Adaptation Section, Alberta Forestry and Parks, and Chair of FPRP
8:00	8:15	Welcoming remarks, and "an outlook to the future"	Dr. Barry White, Executive Director, fRI Research



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Day 1 – Q1: Wednesday, October 25, 2023

Time		Торіс	Speaker
8:15	8:45	Reflections on MPB research in Alberta and its impact on management over the past twenty years	Daniel Lux , ADM, Forestry Division, Alberta Forestry and Parks
8:45	9:30	VIDEO – Evaluating the efficacy of science: Cosmic zoom: How do we know if science is making a difference? Originally presented at the MPB Research Forum 2017.	Dr. Stanford Blade , Dean, Faculty of Agriculture, Life and Environmental Sciences, University of Alberta
9:30	9:45	Introduction and Facilitation of Research Theme 1: MPB Biology	Caroline Whitehouse , Forest Health Specialist, Forest Health and Adaptation Section, Alberta Forestry and Parks
9:45	10:00	Health Break	
10:00	10:30	Modelling eastern spread risk of mountain pine beetle using host genetic ancestry	Dr. Catherine Cullingham , Carleton University
10:30	11:00	The physiological costs and consequences of overwintering in MPB	Dr. Heath MacMillan , Carleton University
11:00	11:30	Improving monitoring tools to detect mountain pine beetle at low densities in novel habitats: incorporating host-tree stress and fungal volatiles in beetle attraction	Dr. Nadir Erbilgin , University of Alberta
11:30	12:00	Modelling long-term dynamics of MPB in Alberta under climate change	Dr. Mark Lewis, Dr. Micah Brush and Xiaoqi Xie, University of Victoria
12:00	12:15	Plenary Discussion	
12:15	1:00	Lunch	



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Day 1 – Q2: Wednesday, October 25, 2023

1:00	1:15	Introduction and Facilitation of Research Themes 2 & 3 – MPB Dispersal, spread and detection of MPB	Dr. Rory McIntosh , Provincial Forest Entomologist and Pathologist, Government of Saskatchewan
1:15	1:45	Assessment of eastern spread risk of MPB through studies on beetle dispersal	Dr. Maya Evenden , Leanne Petro, Antonia Musso, University of Alberta
1:45	2:15	Dynamic species distribution modelling to predict mountain pine beetle boreal invasion	Dr. Allan Carroll , University of British Columbia
2:15	2:45	Efficient monitoring of mountain pine beetle outbreak spots using artificial intelligence applied to drone thermal imagery	Dr. Nadir Erbilgin , University of Alberta
2:45	3:30	Effects of mountain pine beetle outbreaks on population dynamics of secondary bark and ambrosia beetles	Dr. Nadir Erbilgin , University of Alberta
3:30	3:45	Health Break	
3:45	4:15	Toward pre-emptive management of future outbreaks: predicting the distribution of post- epidemic mountain pine beetle populations in the western boreal forest – <i>a long view</i>	Dr. Allan Carroll , University of British Columbia
4:00	4:45	Plenary Discussion	
4:45	8:00	Reception and Posters	Valley Ballroom



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Day 2 – Q3: Thursday, October 26, 2023

7:00	7:45	Hot Breakfast	Valley Ballroom
7:45	8:00	Opening Remarks	Dr. Keith McClain / Caroline Whitehouse
8:00	8:15	Introduction and Facilitation of Research Theme 4: Social Impact of MPB & managing for resilience	John Stadt , Provincial Forest Ecologist, Forestry Division, Alberta Forestry and Parks
8:15	8:45	Gene conservation to mitigate impacts of mountain pine beetle on endangered Whitebark Pine at its northern limit in Alberta	Jodie Krakowski, Whitebark Pine Ecosystem Foundation of Canada
8:45	9:15	Using innovative techniques to understand how mountain pine beetle is shifting ecosystem composition and configuration in Jasper National Park.	Dr. Eric Higgs and James Tricker , University of Victoria
9:15	9:45	Using novel approaches to understand mountain pine beetle impacts on upper elevation sites in Jasper National Park	Dr. Eric Higgs and Claire Wright , University of Victoria
9:45	10:15	Health Break	
10:15	10:45	Soil carbon stocks in forests recovering from mountain pine beetle outbreak: a possible C sink?	Nicole Lau and Dr. Justine Karst, University of Alberta
10:45	11:15	Development of fine spatial resolution tree species information for MPB-impacted ecosystems for species-at-risk habitat assessment	Dr. Nicholas Coops , University of British Columbia
11:15	11:45	Wildlife responses to forest stands impacted by mountain pine beetle in western Canada	Dr. Laura Finnegan, fRI Research
11:45	12:30	Lunch	
12:30	1:00	Impacts of the Mountain Pine Beetle on the snow hydrology of the McLeod River watershed	Dr. Siraj ul Islam , University of Northern British Columbia



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Day 2 – Q3: Thursday, October 26, 2023

Valley Ballroom, Coast Edmonton Plaza Hotel

1:00	1:30	Community and First Nation Resilience to Mountain	Dr. Rob Friberg, New Forest Outlook
		Pine Beetle and Environmental Change	Ltd.

Day 2 – Q4: Thursday, October 26, 2023

1:30	1:45	Introduction: Research Theme 5: Wildfire behaviour in beetle killed forests	Dr. Chris Stockdale, Northern Forestry Centre, Canadian Forest Service, Natural Resources Canada
1:45	2:15	Generation of tree level fire fuel information across MPB Infestation mosaics	Evan Gerbrecht and Dr. Nicholas Coops , University of British Columbia
2:15	2:40	Assessment of risk factors influencing landscape level fire in MPB forests	Dr. Christopher Bone , University of Victoria
2:40	3:10	Quantifying spatio-temporal variability in post- mountain pine beetle outbreak fuels, in Jasper National Park, using terrestrial laser scanning, and bi-temporal multi-spectral airborne LIDAR	Dr. Christopher Hopkinson and Dr. Laura Chasmer , University of Lethbridge
3:10	3:35	Understanding fire behaviour in mountain pine beetle disturbed vs. managed fuel complexes using novel data sources	Dr. Laura Chasmer , University of Lethbridge
3:35	4:05	How do the spatial legacies of mountain pine beetle outbreaks affect fire severity in Canadian lodgepole pine forests?	Dr. Patrick James , University of Toronto
4:05	4:30	Influence of a widespread mountain pine beetle outbreak on fire likelihood in British Columbia 2002-2021, and implications for Alberta.	Dr. Chris Stockdale , Northern Forestry Centre, Canadian Forest Service, Natural Resources Canada
4:30	4:45	Plenary Discussion Closing remarks	Dr. Chris Stockdale Caroline Whitehouse and Dr. Keith McClain, Forum Co-Chairs



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