

Networking for Wildfire Preparedness, Recovery and Resiliency

Panel:

Lori Daniels, Centre for Wildfire Coexistence, UBC

Larry Price, First Nations Emergency Services Society

Fons Raedshelders, BC Wildfire Service

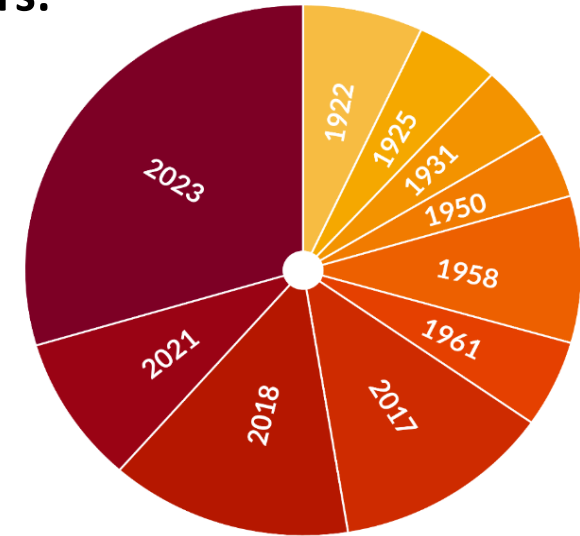
Carly Dow and Jen Gunter BC Community Forest Association

BC Community Forest Meeting, June 2024

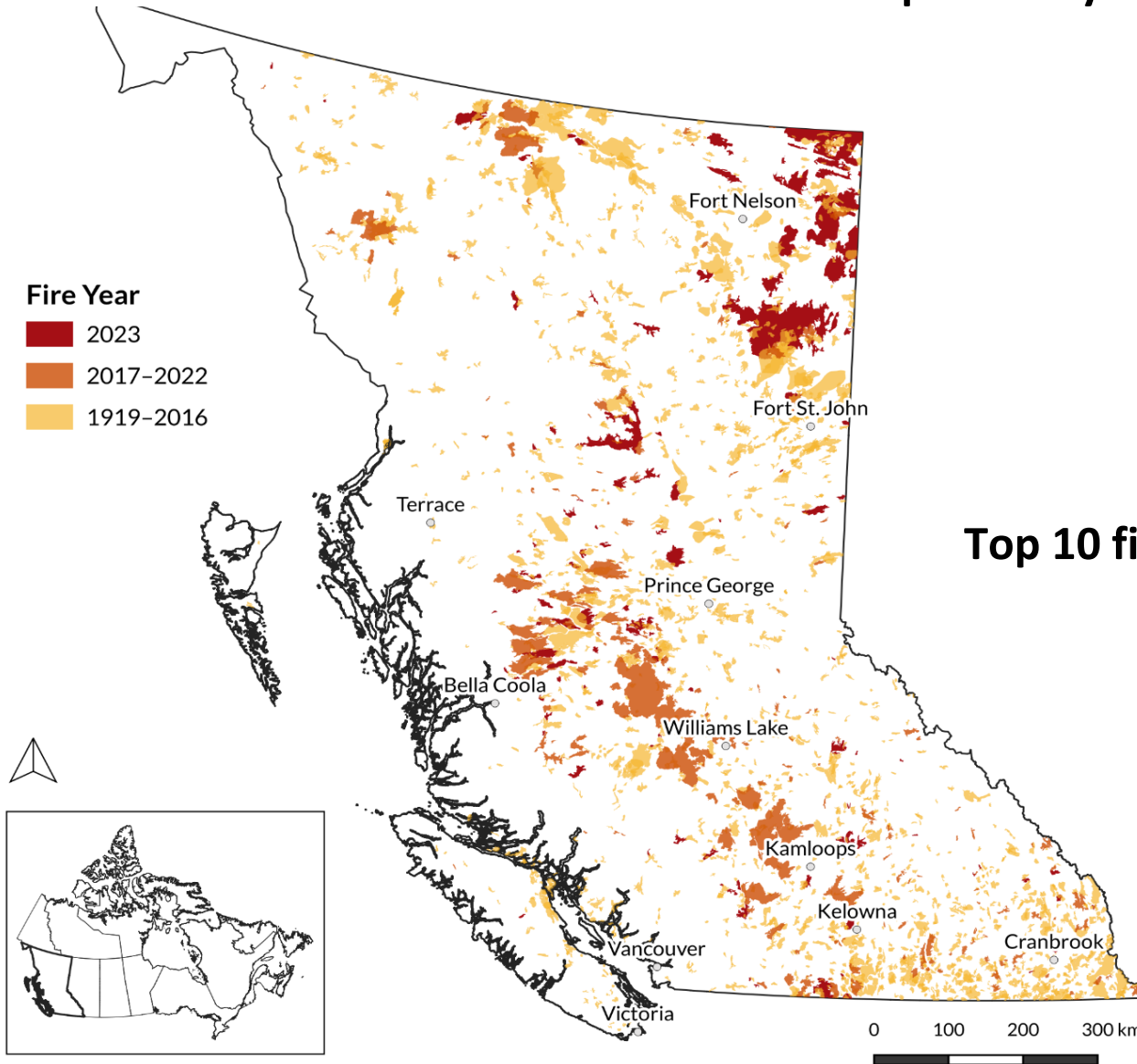
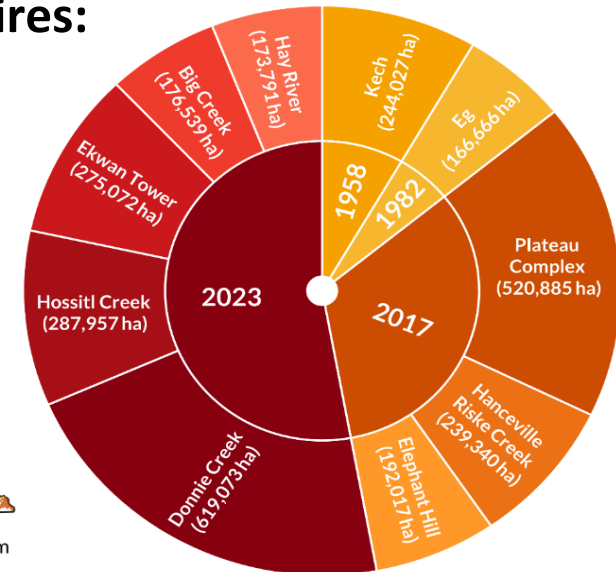
Image: Shawn Talbot / Globe and Mail

Wildfires in BC 1919 -2023

Top 10 fire years:



Top 10 fires:



Wildfires and weather in BC are setting new records

Fire Danger maps show **High** to **Extreme** conditions

Firestorm 2003
(old benchmark)
August 2003

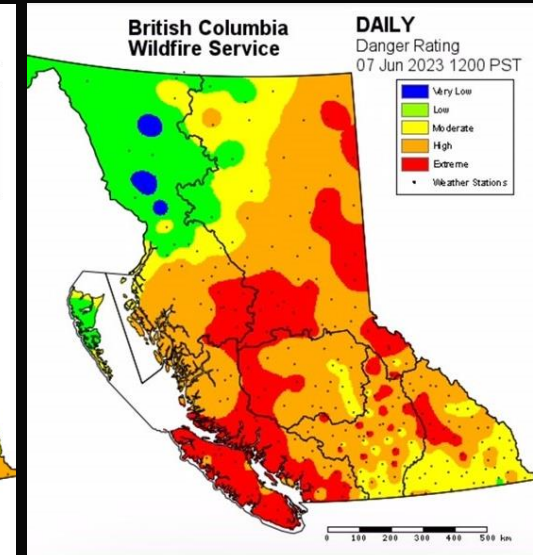
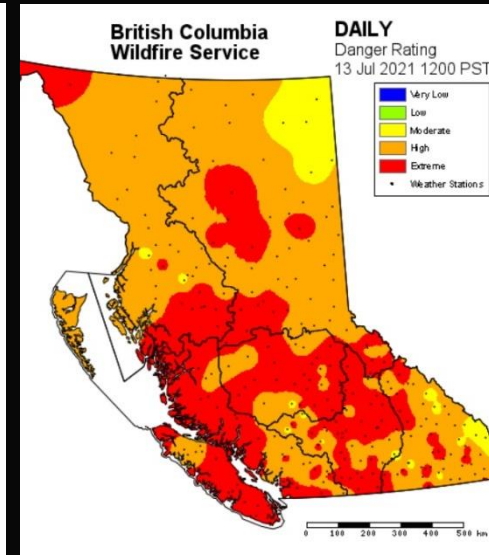
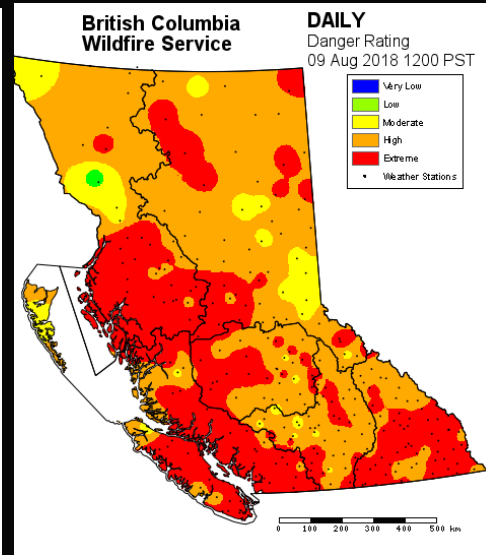
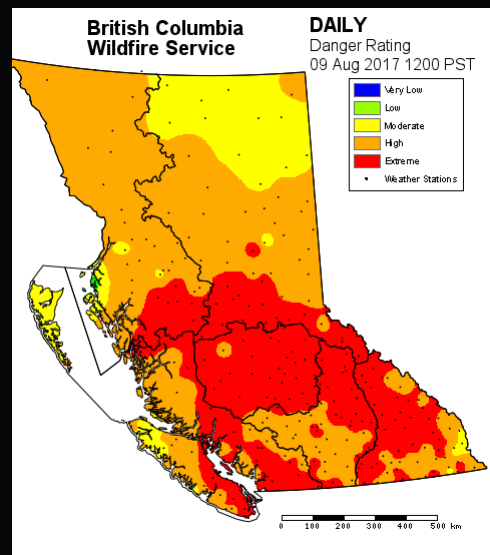
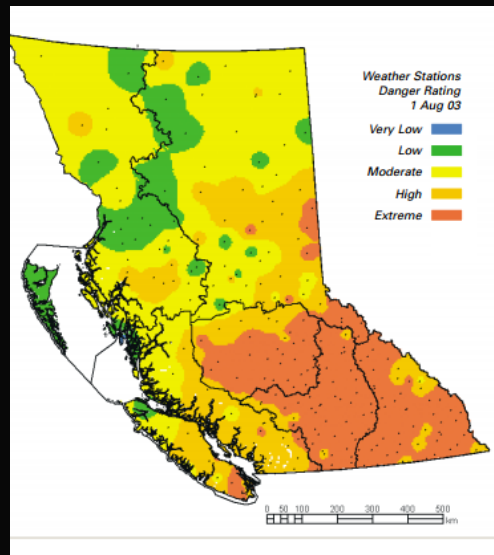
States of Emergency 2017 + 2018 + 2021 + 2023 – our new reality

August 2017

August 2018

July 2021

June 2023



2500 fires
265,000 ha burned
\$371M to suppress

1353 fires
1,216,053 ha burned
\$649M to suppress

2117 fires
1,354,284 ha burned
\$615M to suppress

1642 fires
868,203 ha burned
\$719M to suppress

2245 fires
2,840,545 ha burned
>\$1B to suppress

Not if, but when: Inevitable impacts



Darryl Dyck (The Canadian Press)



Castanet



Jim Cooperman



Lori Daniels

Proactive Fuels Mitigation: Treatment Efficacy

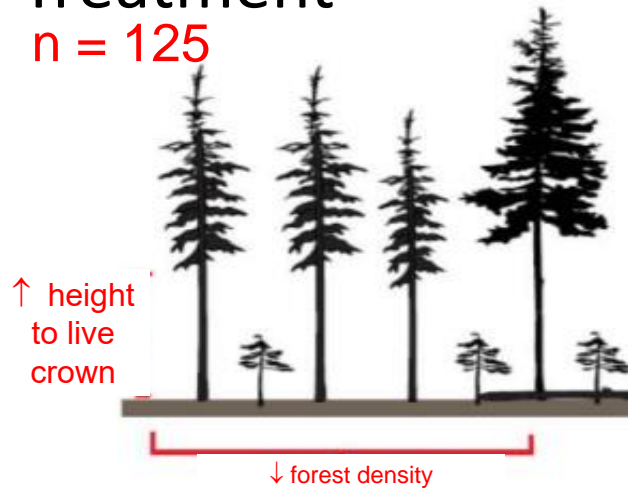
No Treatment

n = 53

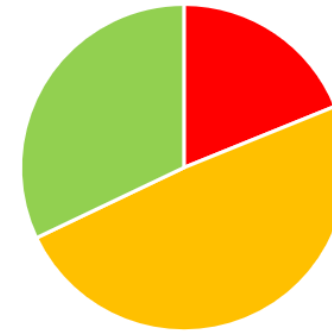


Treatment

n = 125



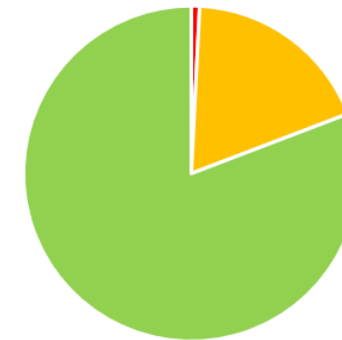
Predicted fire type:



19% Active crown

49% Passive crown

32% Surface fire



1% Active crown

18% Passive crown

81% Surface fire

Logan Lake: Treatment Effectiveness

No Treatment

n = 11



Actual > Predicted (planned ignition)

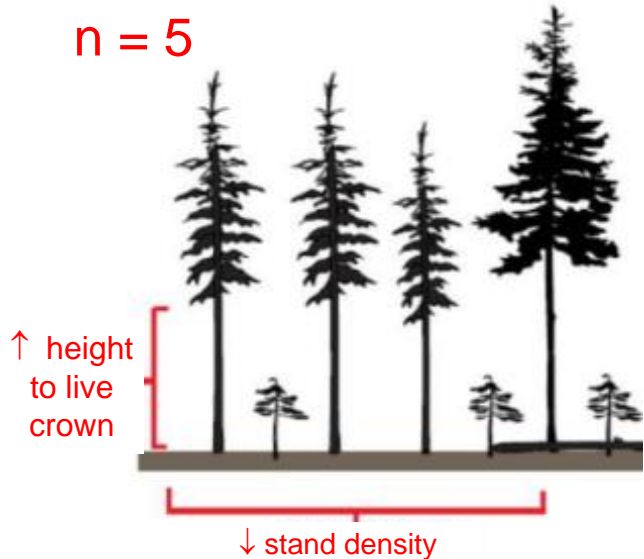
76% mortality of 286 trees

94% crown scorch

90% ground scorch to mineral soil (n = 9)

Treatment

n = 5



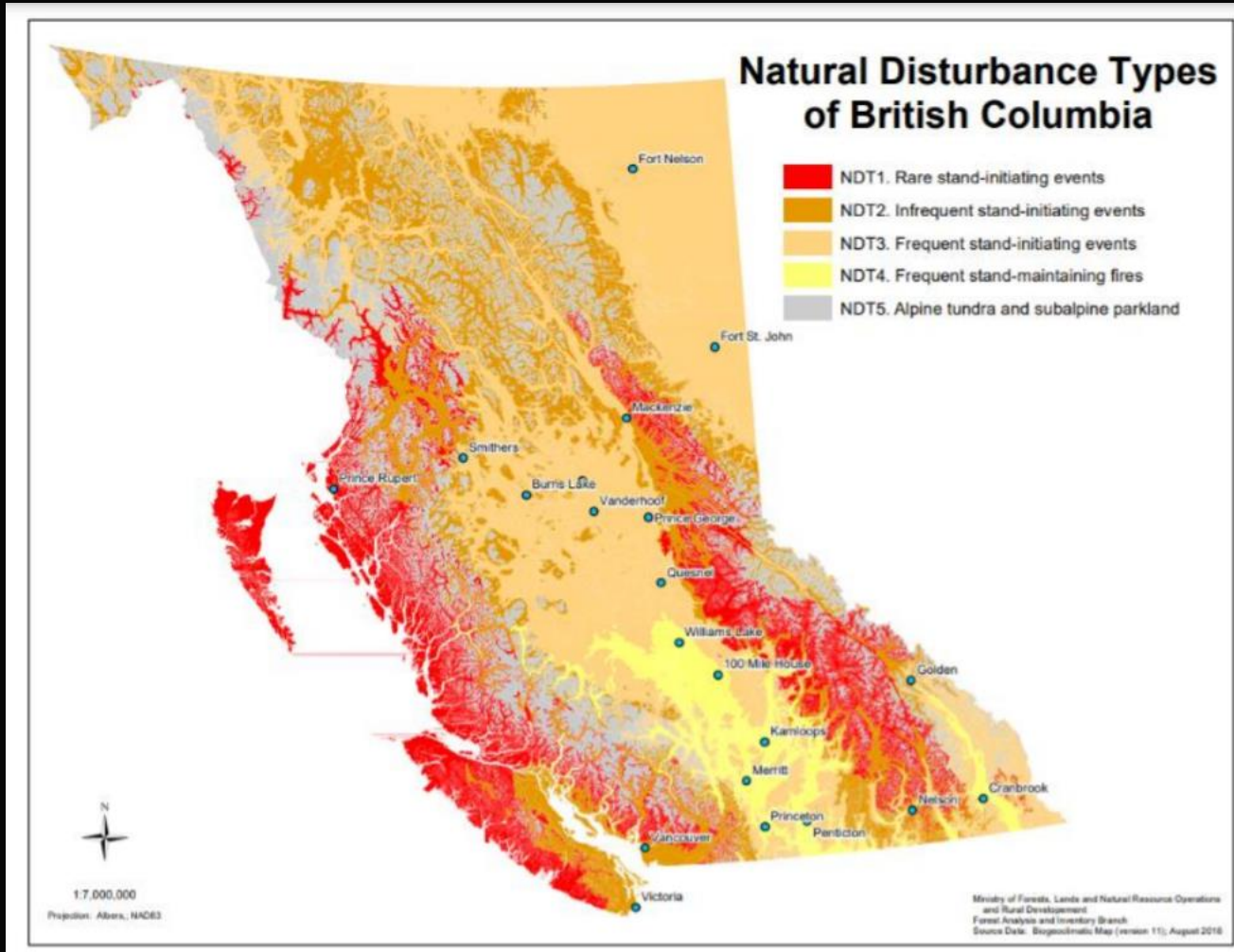
Actual < Predicted (suppression)

18% mortality of 95 trees

13% crown scorch

73% ground scorch with FF+duff intact (n = 4)

Pyrodiversity: Fire and Historical Regimes across Ecosystems of British Columbia



Research questions:

How well do treatments mitigate fuel hazards and fire risk across diverse forests?

What treatment configurations increase landscape resilience to wildfire?

Share and Shift

Form groups by Fire Centre (Coastal, Cariboo, SE + Kamloops, NW, PG)
Five discussion topics, 10 minutes each, take notes to share

Topics:

- Fons – Cultural + prescribed burning
- Erik – BCCFA networking supports
- Lori – Research priorities
- Larry - FNESS
- Steve - FESBC

Resource/facilitators:

- Mitch Sorensen - *BCWS HQ Fuels*
- Mike Gash - Cariboo FC
- Peter Nicolson - Northwest FC
- Dave Clark - Prince George FC
- Paul Eaton - *Prince George FC*



**BC
2023
Wildfire Index***

Total number of fires: 2,245

Number of fires ignited by humans: 553

Days in a provincial state of emergency: 38

Number of lightning strikes igniting 200 fires July 7-10: 33,381

Wildfires simultaneously burning on July 24: 481

People affected by 208 evacuation orders: 48,000

And 386 evacuation alerts: 137,000

Record area burned in hectares across Canada this year: 18,496,051

Megatons of carbon released, tripling the previous record: 410

Record area burned in BC, despite modern suppression technology: 2,840,545

Size of BC's largest fire in a century, the Donnie Creek fire: 619,073

Projected costs of BC fires, in Canadian dollars: 1,000,000,000

Kilometers of fire guard needing rehabilitation: 5,133

Fires still burning: 106

Out of control: 39

**Inspired by Harper's Index, compiled by Dr. Lori Daniels
Figures cited are the latest available as of January 1, 2024*