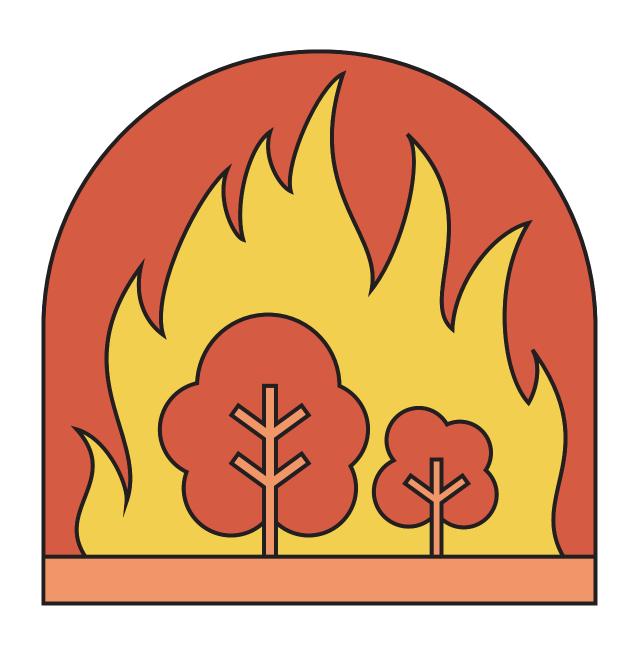




Perceptions of Wildfire Science, Policy, and Management: A Pilot Study

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Agenda

- Partners & Funders
- Project Charter
- Methodology
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- Identified Gaps
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Acknowledgements

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Please note the findings and conclusions of this presentation do not necessarily represent the views of our funders.

































Project Introduction

The North American Wildland Fire Science Blueprint was initially proposed at the North American Forest Commission- Fire Management Working Group (NAFC-FMWG) meeting in 2018.

Current project was created based on an observed need in the literature, conversations with practitioners, and as requested by the funders.



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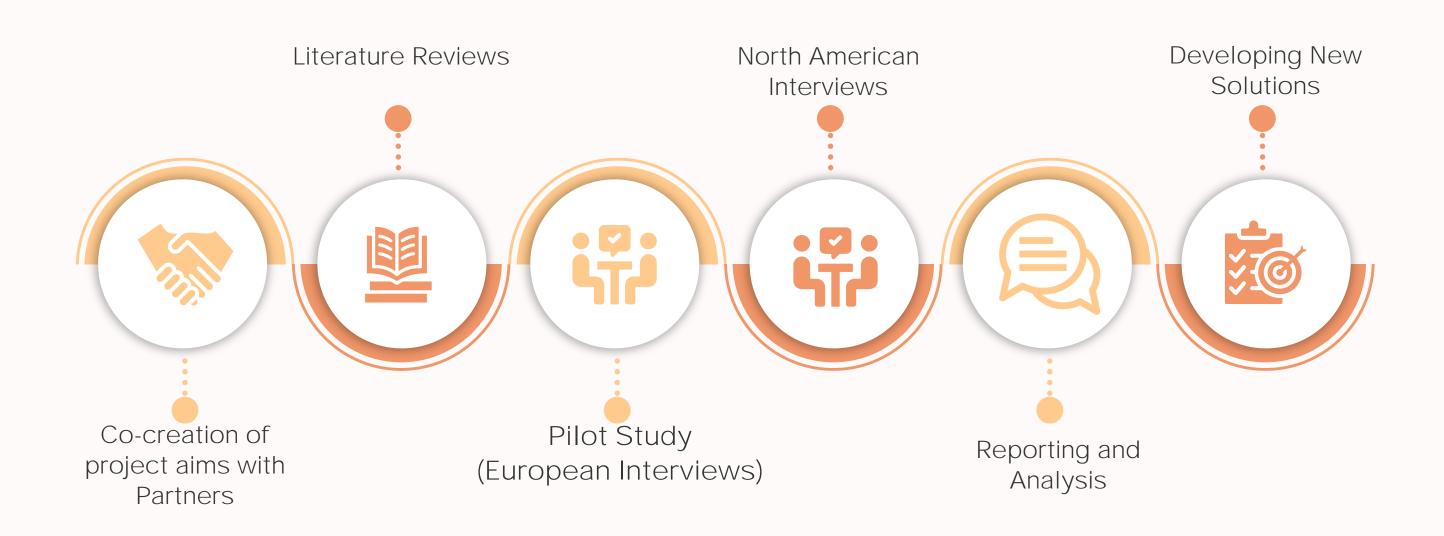
By Diego Pérez Salicrup, Stacy Sankey, Matt Jolly, Jonathan Boucher, Eric Toman, Christy Arseneau, Michael Norton

We need a comprehensive strategy to improve collaboration and capacity for wildland fire science in North America. Every year, wildfires burn across large areas of Continental North those fires recognize no political boundaries; some cross borders directly and countries for their suppression while resulting fire effects that are felt far from the location of countries in September

What knoweldge gaps exist, and how can we better address these gaps?

Methodology

To meet our goals and objectives, this project includes two distinct methodological approaches: Literature Reviews and Interviews. Each method spans Canada, Mexico, and the United States. As possible, information is collected in English, French, and Spanish.



PyroLife

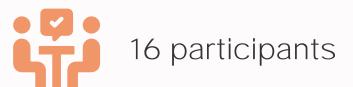
Barcelona, Spain | March 14-16, 2023

The case study site was selected purposively for its international network of European students, mentors, funders, staff, and practitioners affiliated with the PyroLife project. It also provided the opportunity to speak with people involved in a wide range of areas within wildland fire science, such as fire behaviour, ecology, communication, and social science.



Data Collection

Semi-structured interviews conducted in-person and virtually.



Sample Interview Protocol

- What do you think of when you hear the term "fire science"?
- How do you use fire science in your role?
 - Probe: How do you engage with fire science in terms of choosing research topics, selecting methods, designing research approaches, conducting the work, etc.
- How do you contribute to fire science in your role?
 - Probe: What type of scientific data do you produce?
 - Probe: What type of scientific data do you use?
- Where does wildfire science need to go in the next year? What about the next five years? The next ten years?
 - Probe: What's the biggest challenge facing fire science right now?
 - Probe: What knowledge needs to be generated?
 - Probe: What policies need to change, and how?
- If you had complete control to change one thing, what would you change about how we handle wildfire?
 - Probe: What system-wide change would be most transformative?
 - Probe: What science would you need to meet the challenges facing wildfire science in the next ten years?
 - Probe: What research is no longer needed?
- We are interested in knowing more about who you receive and communicate information to. In this diagram, where you are the center figure, please draw lines to people who you receive inputs (of information, products, etc.) from, and lines to people you communicate outputs to (information, products, etc.).

Identified Gaps in Wildland Fire Science



Living with Fire

"The wildland urban interface and understanding how fire moves through that environment. And [understanding] how we can protect structures within the environment, and how we can communicate risk within for those communities living in those areas."

Participant, United Kingdom



Data for Policy & Decision-Making

"There's lots of scientists
working on [wildfire
behaviour] around the world,
but still very little science
nowadays that can be useful
for practitioners to make
decisions."

Participant, Spain



Fire in a Changing Environment

"[...] we need to know, what's the climate gonna be like in 10 years time? I'm sure if we went back ten years and said what it was gonna be like now, it's probably nothing like it, but it's not getting any slower. Whatever you're predicting, I would say it's gonna be the best case scenario to what it will really be like."

Participant, Northern Ireland



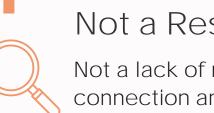
Social Impacts

" [...] this idea of a database of not just hectors burn, but also the social and economic impacts, which are really difficult to actually, empirically, understand."

Participant, Netherlands

Pushing Back on the Project

Perhaps more interesting than the identified wildland fire science knowledge gaps is how participants pushed back on the framing of this project.



Not a Research Problem

Not a lack of research but a lack of connection and collaboration



Skeptic on Strategic Planning

Is another plan "on the shelf" an appropriate tool?



Fire Science in Isolation

Fire science should not and cannot be effectively conducted in isolation.

Suggestions for the Future

Research Structures

"The person who approves
the funding of projects,
does really need to
measure the impact of the
projects, but they also
need to engage with all
the stakeholders in order
to know if this will be
useful for them"

Participant, South America

Mobilisation & Translation

"[...] Creating spaces of knowledge sharing, of 'ok, let's try to understand each other,' I think that communication is key."

Participant, Spain

Collaboration

"We have to dedicate this
time to engaging with
communities and listen to
them and let them also lead at
least part of the process
because otherwise whatever
solution we're coming up with
will never fit within the local
context and the needs, and
interests, and knowledge."

Participant, Spain

Inclusion & Diversification

"We've been to quite a few conferences in the last few months of last year. I think we knew all keynote speakers, we had heard them before. [...] We need to get out of the comfort zone."

Participant, Spain



"In a UK context, we don't have fire research. Fire research is the disparate individuals are working, within individual universities; and we network together and it's a really strong, great community. But it's an incredibly limited community. If you compare that to the traditionally fire prone landscapes, the countries, the scale of fire groups and fire research that's actually taking place, it's just in orders of magnitude bigger in size. We need to move towards that."

Participant, United Kingdom





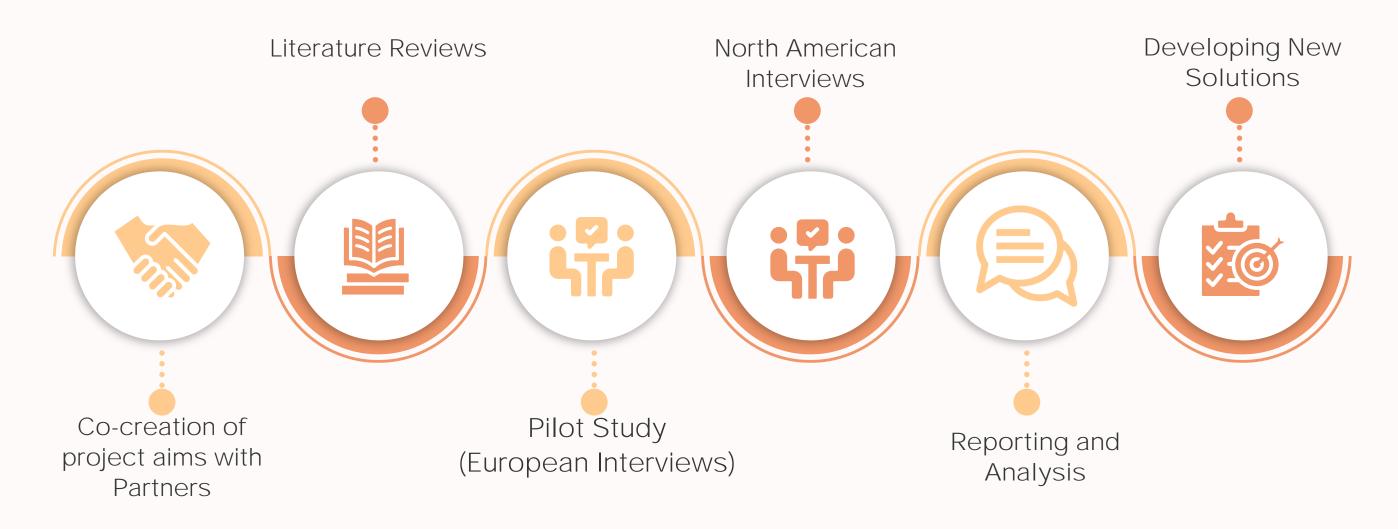
"In the UK context we don't have social scientists that kind of call themselves fire researchers. There's no one driving the discipline to say, actually, this is where we need to go, these are the questions, these are the challenges. We have lots of scientists saying this is what we need to do, but we don't know how to do it. We have social scientists who dabble and kind of lean in and do a little bit - but we don't have the person, or people, who actually say no, this is what you do—I'm a fire researcher—from a social science perspective."

Participant, United Kingdom



Next Steps

- PyroLife study used to refine the interview protocol
- Completed 135 interviews across Canada, Mexico, and the U.S.
- Completed a number of environmental scans and literature reviews to inform data analysis, reporting, and suggested solutions



Come chat with us, we want to hear from you.

How do we build ongoing knowledge exchanges?

How do we create and deliver accessible & useful science?

What wildland fire science strategies are you aware of?









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