

# 大学院教育支援機構（DoGS）海外渡航助成金 報告書

## Outcome report

計画名 Plan	18th International Wildland Fire Safety Summit / 7th Human Dimensions of Wildland Fire Conference
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研究科・専攻・学年 Graduate school/Division/Year level	Graduate School of Agriculture, Kyoto University / Division of Forest and Biomaterial Science / 2 <sup>nd</sup> Year PhD student
渡航国 Country	Canada (Calgary – Alberta)
渡航日程 Travel schedule	18 年 10 月 2025 日 ~ 27 年 10 月 2025 日

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- 写真や図なども組み込んでいただいて結構です。You can include pictures or illustrations.
- 各項目について具体的に記述してください。Please fill in each item specifically.
- 日本語または英語で記載ください。Please use Japanese or English.

### 渡航計画の概要 Outline of the travel plan

The purpose of this trip was to present my doctoral research at the *18th International Wildland Fire Safety Summit / 7th Human Dimensions of Wildland Fire Conference*, held from October 20 to 23, 2025, in Calgary, Alberta, Canada, followed by a field trip to Banff National Park on October 24.

My poster, titled “**Acute impact of wildfire on tree communities in a seasonally dry tropical forest, northwestern Madagascar,**” summarized a major component of my PhD research at Kyoto University. The primary objective was to share findings on the short-term ecological effects of recurrent anthropogenic fires in Madagascar’s white-sand forests, gather expert feedback, and integrate field-based insights with practical fire management and conservation strategies.

This international conference also provided an opportunity to engage directly with a global community of fire scientists, forest ecologists, and managers, aligning with my broader academic objective of integrating ecological research with sustainable management approaches.

### 成果 Outcome

During the conference, I attended pre-conference workshops on wildfire risk assessment, community engagement, and multi-model hazard simulations, which enhanced my understanding of applied fire management.

I presented my poster on October 21 during the OroraTech-sponsored poster session and received valuable feedback from international experts on linking vegetation recovery patterns with soil and microclimatic data. My presentation attracted attention for highlighting the vulnerability of Madagascar’s nutrient-poor dry forests to recurrent fires and biodiversity loss.

Throughout the event, I attended plenary and technical sessions addressing key themes such as cultural fire practices, community resilience, and cross-continental fire management strategies. Discussions particularly emphasized the importance of Indigenous knowledge and participatory approaches in managing fire-adapted ecosystems.

I also visited exhibitor booths from major organizations such as **Technosylva, ESRI, AforSite Fire, FireUp,**

**SaferWood Thermex FR**, and **Wildfire Robotics**. These companies showcased technologies including real-time wildfire simulations, GIS-based risk mapping, and drone-based fire monitoring. Understanding these innovations was especially relevant to Madagascar, where fire reporting and monitoring systems remain largely manual. Such insights will help inform the design of early warning and restoration frameworks adapted to local conditions.

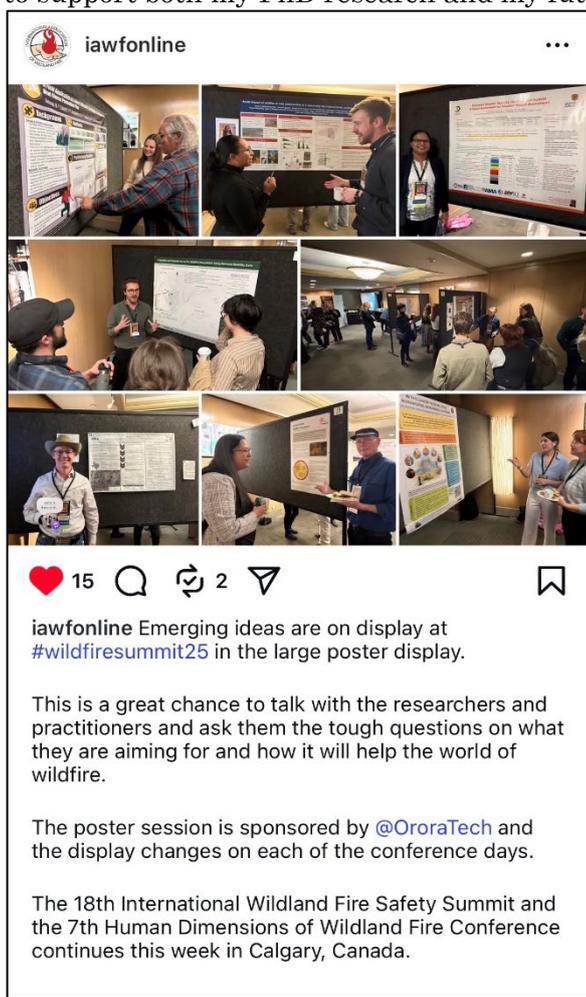
On October 24, I joined the field trip to **Banff National Park**, where participants examined wildfire-affected landscapes and discussed adaptive management and prescribed burning in Canadian conifer forests. Observing post-fire regeneration in these temperate ecosystems provided valuable comparative insights into the slower recovery processes observed in Madagascar’s dry tropical forests.

### 今後の展望 **Prospects for the future**

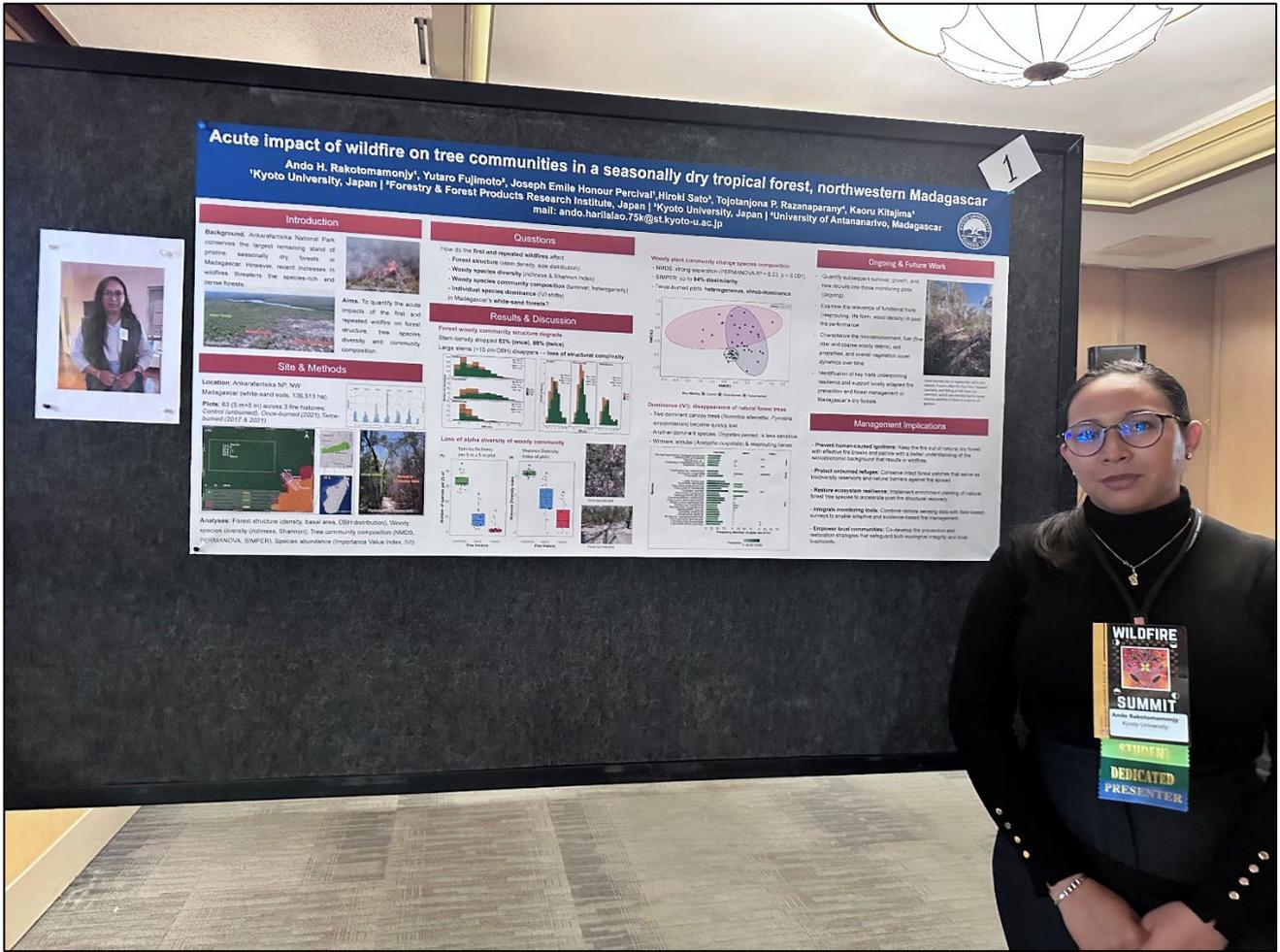
Attending this international conference significantly strengthened my scientific communication skills and expanded my professional network. The constructive feedback I received will directly guide the next phase of my doctoral analysis and manuscript preparation.

I also identified potential collaboration opportunities with researchers and companies specializing in GIS applications, fire modeling, and restoration ecology. The experience motivated me to integrate modern fire-monitoring technologies and community-based prevention strategies into Madagascar’s fire management framework.

Overall, this trip reinforced my long-term goal of contributing to sustainable forest restoration and evidence-based policy development in Madagascar. The knowledge and connections gained will continue to support both my PhD research and my future career in fire ecology and environmental conservation.



Poster session and name tag



Poster presentation



Field trip in Banff Forest