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Wildfire2024

UK Wildfire Conference



Building Wildfire Resilient Communities in Europe (FiRES): Preliminary insights from the UK

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Wildfires: an urgent social problem in Europe

Urgency: more people live at-risk from wildfire than ever before.

Root cause: disasters are social phenomena.

Trend: four-decade increase in catastrophic wildfires.

Changed parameters: increasing cost and decreasing effectiveness of fire suppression.

Timeliness: growing recognition of the need to scale-up social solutions.

Unique opportunity: empower communities *and* wildfire managers with two-way knowledge and skills.

High gain: lives, well-being, livelihoods, assets, and environments protected.

>>> There is a fundamental lack of public awareness in Europe of what makes wildfires deadly, and how to mitigate these risks.



Why focus on community coping capacity?

Mati, Greece, 23 July 2018

Europe's deadliest wildfire in recorded history:
102 lives and >1,650 homes lost

1. Height of the tourism-season.
2. High fire danger weather: drought, high heat, strong winds.
3. Multiple wildfires burning simultaneous: stretched resources.
4. No official warnings or directions were given.
5. Mati had no preparatory measures, such as planned evacuation routes or means of emergency communication.
6. Poor urban planning trapped both outgoing traffic and incoming emergency services.



Why focus on community coping capacity?

Mati, Greece, 23 July 2018

Europe's deadliest wildfire in recorded history:
102 lives and >1,650 homes lost

7. Lacking basic wildfire knowledge, many people panicked and attempted to flee on foot in poor visibility, oppressive heat, suffocating smoke, and the roar of the approaching fire front.
 - >> People exposed themselves to the deadliest aspects of a wildfire: radiant heat, flame exposure, smoke inhalation, oxygen asphyxiation, erratic fire behaviour.
 - >>> Mati demonstrates how a lack of community preparedness can have wide-ranging implications for community safety and operational effectiveness.



Building Wildfire Resilient Communities in Europe (FiRES)

A five-year research project (2023-2028) by the **Geographies of Disasters Group**

Aim: Examine factors that enable people to prepare for, adapt to, survive and recover from wildfires – physically and mentally.

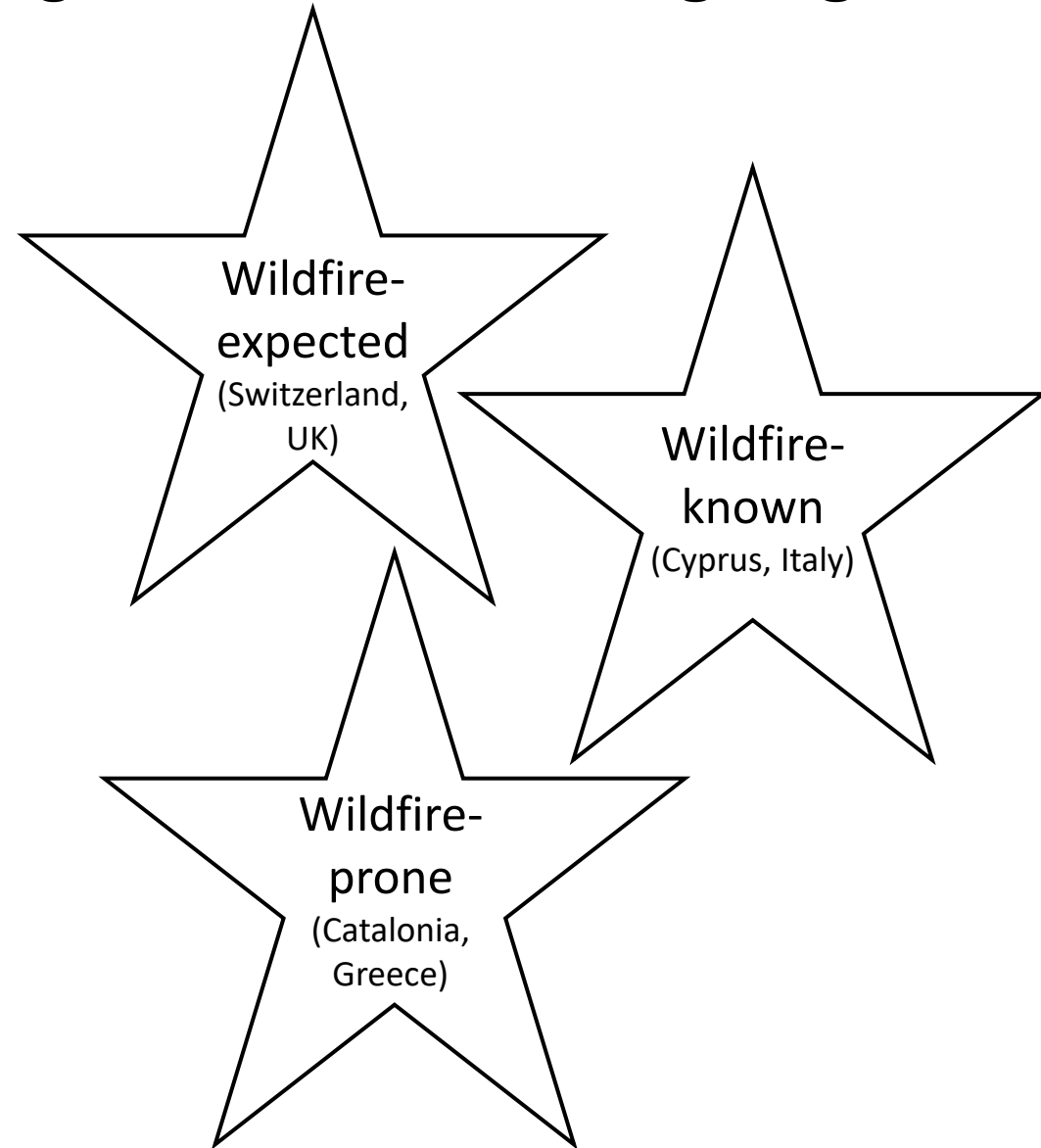
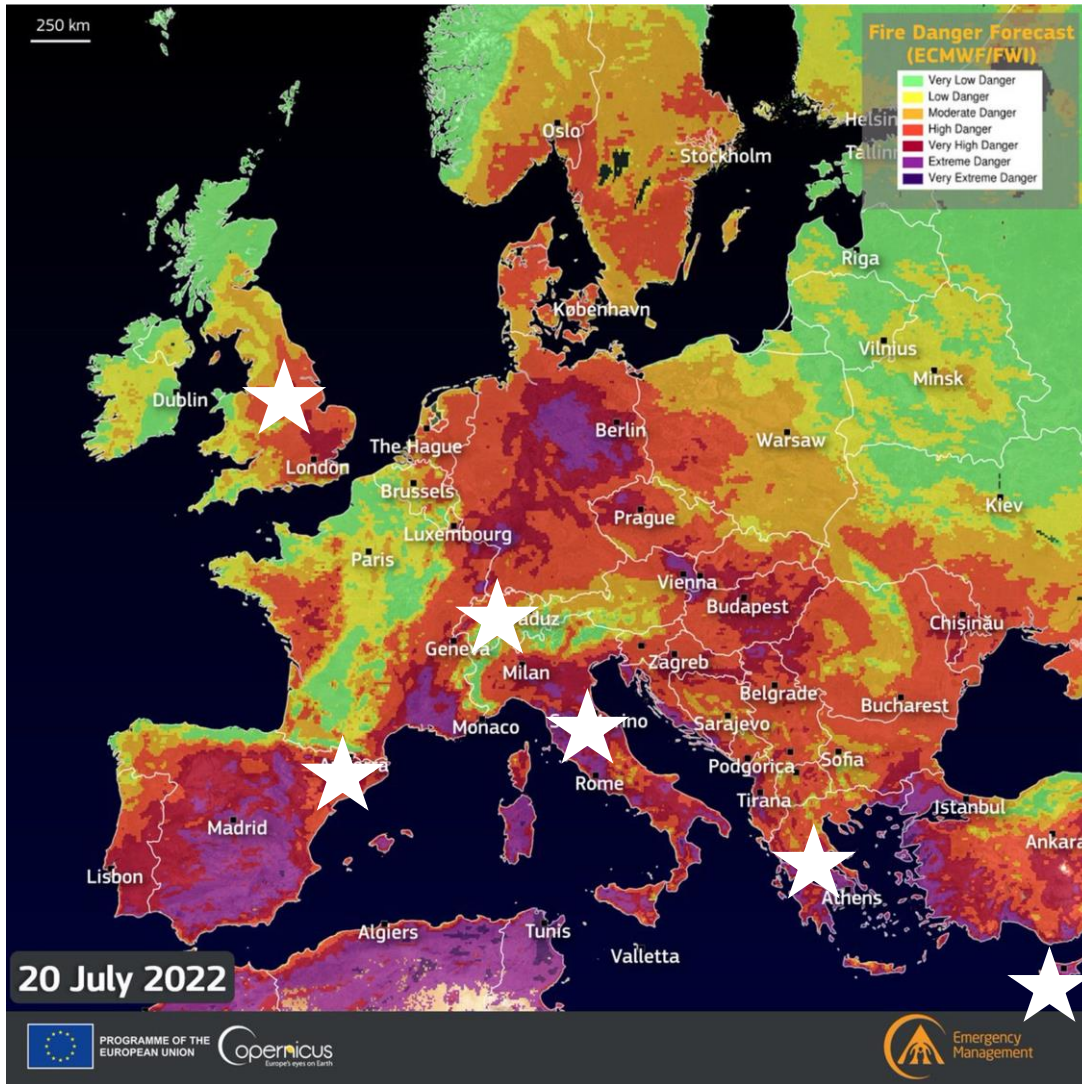
Objectives: Provide insights that can enhance informed decision-making and increase community coping capacity across culturally and climatically diverse regions in Europe.

Approach: Compare insights from multi-sited case studies to learn from residents, community groups, and wildfire managers who:

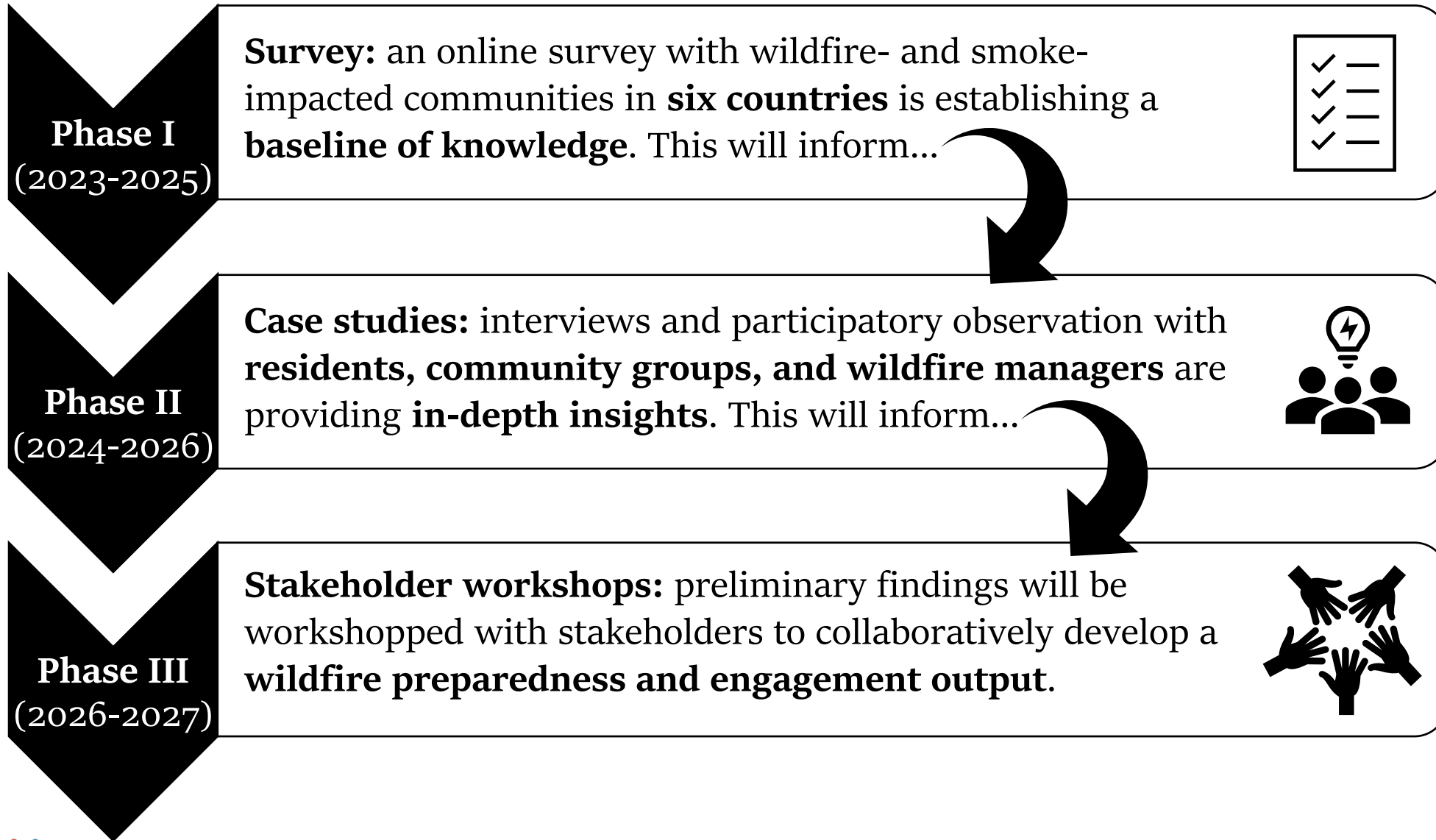
- i) live or work in at-risk areas, or
- ii) have been directly or indirectly impacted by wildfire.



Comparative multi-sited case study design across **fire-knowledge regions**

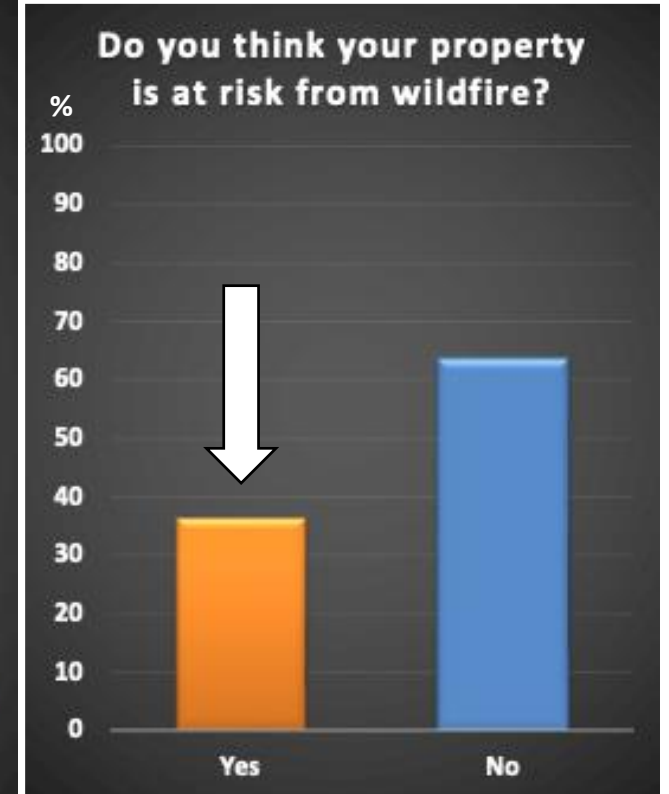
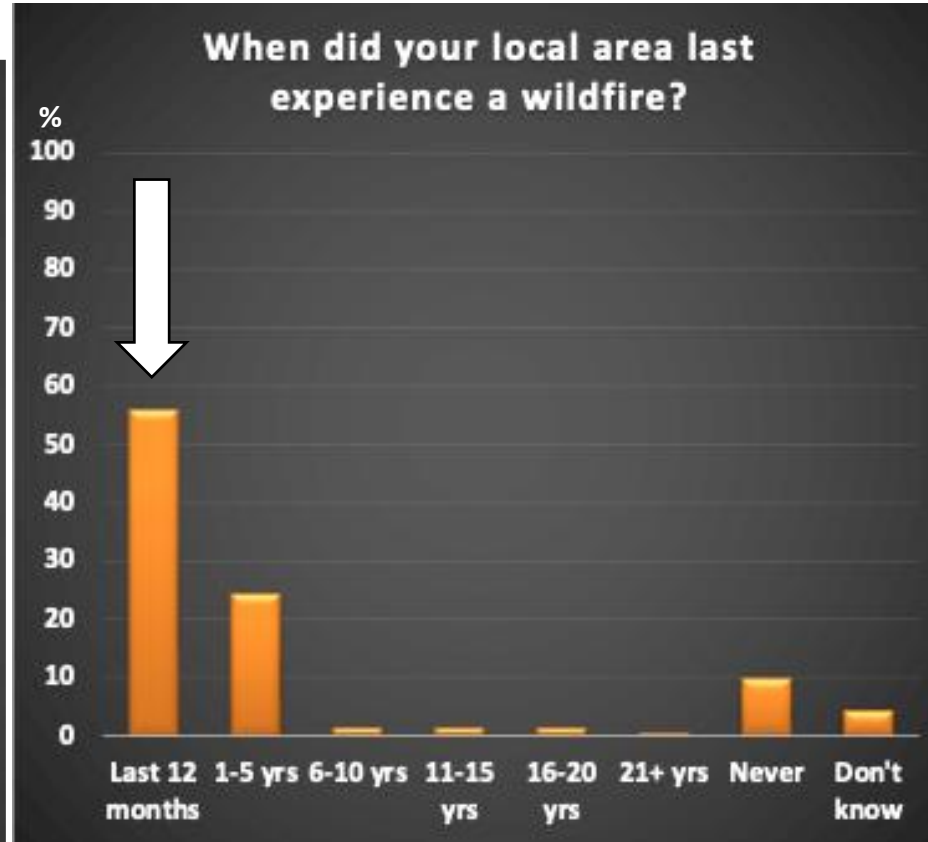
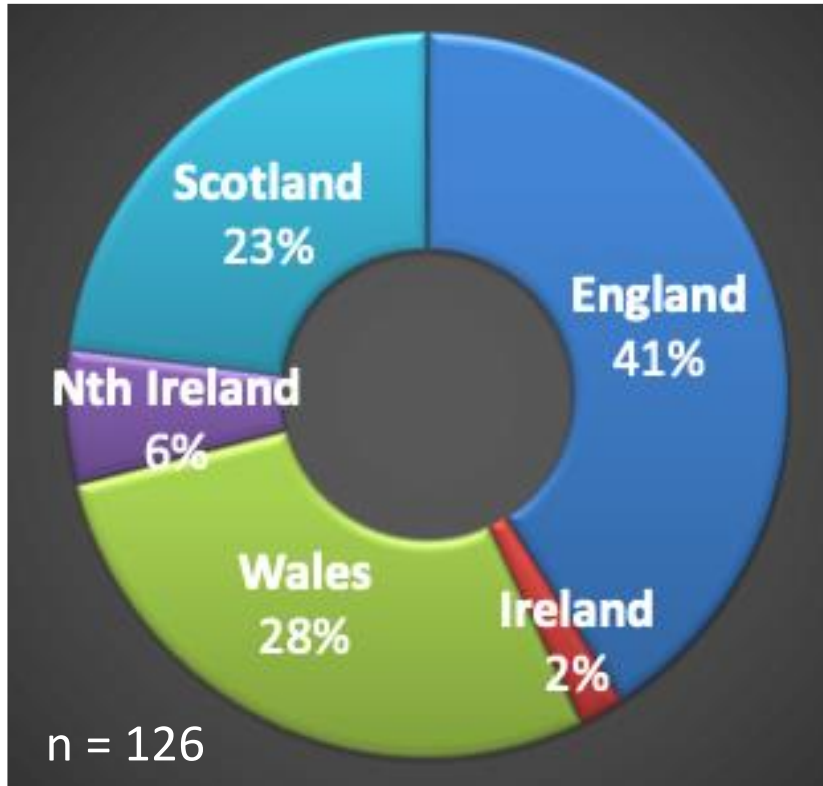


Research design



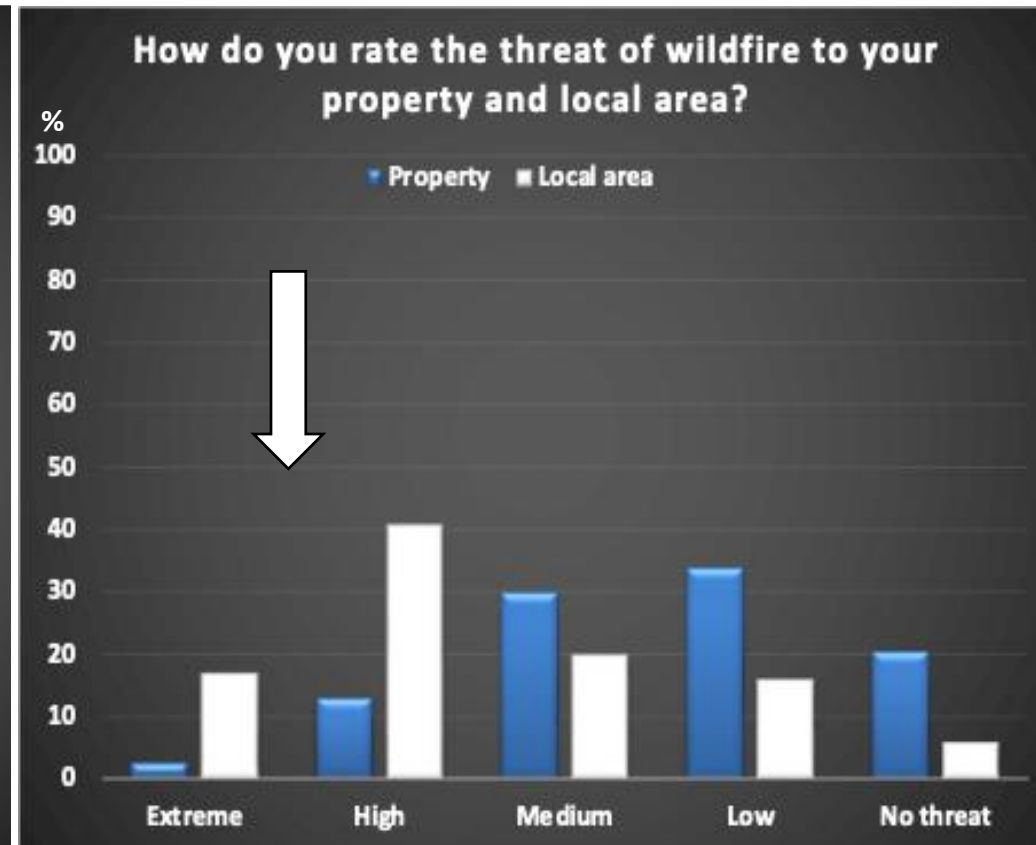
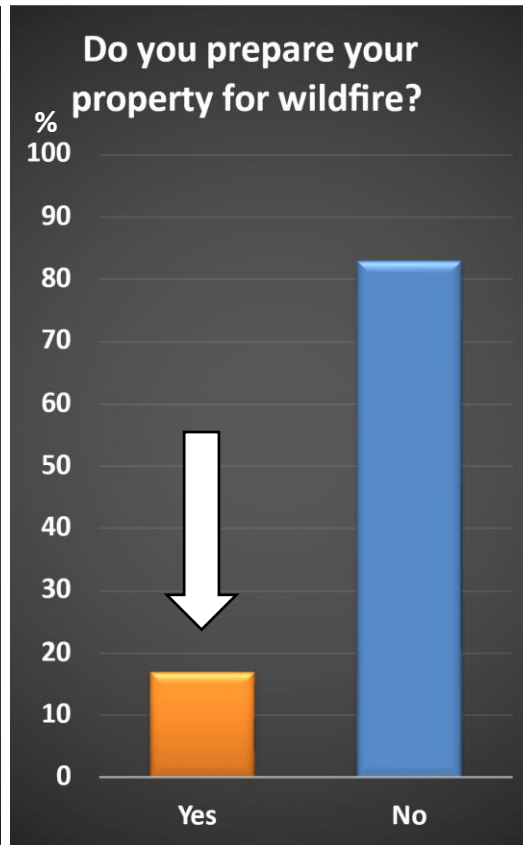
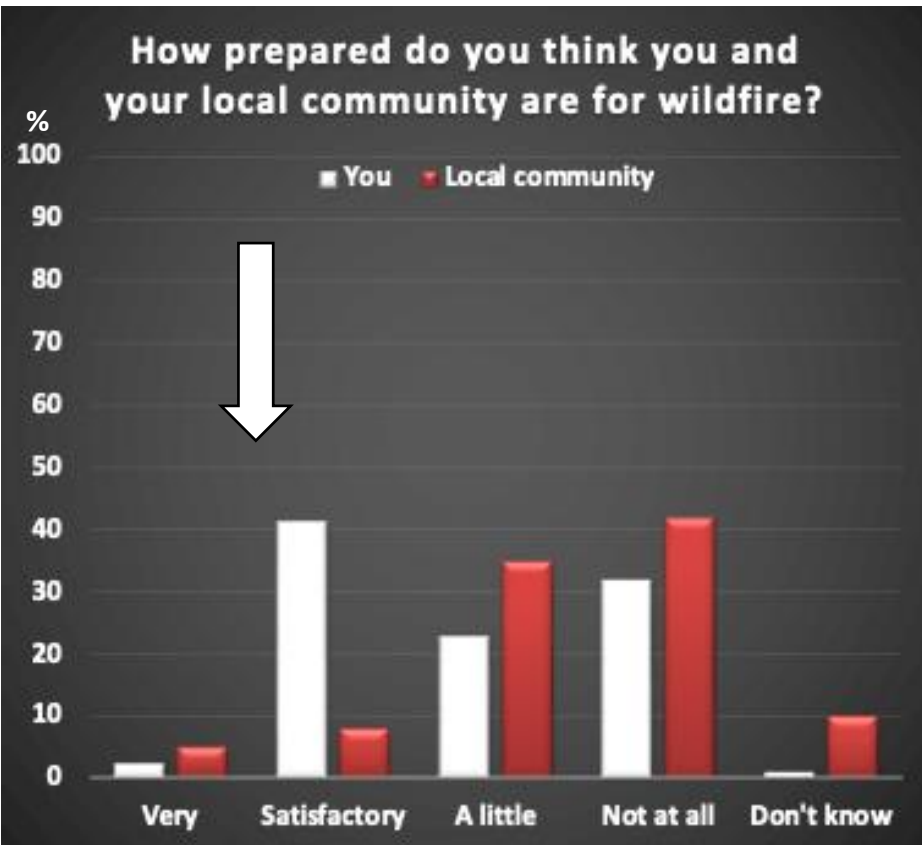
Preliminary survey results

UK



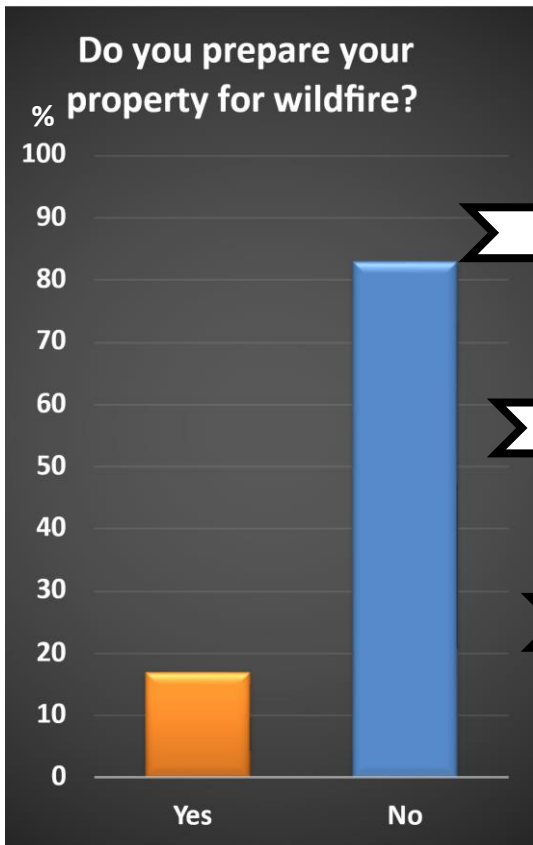
Preliminary survey results

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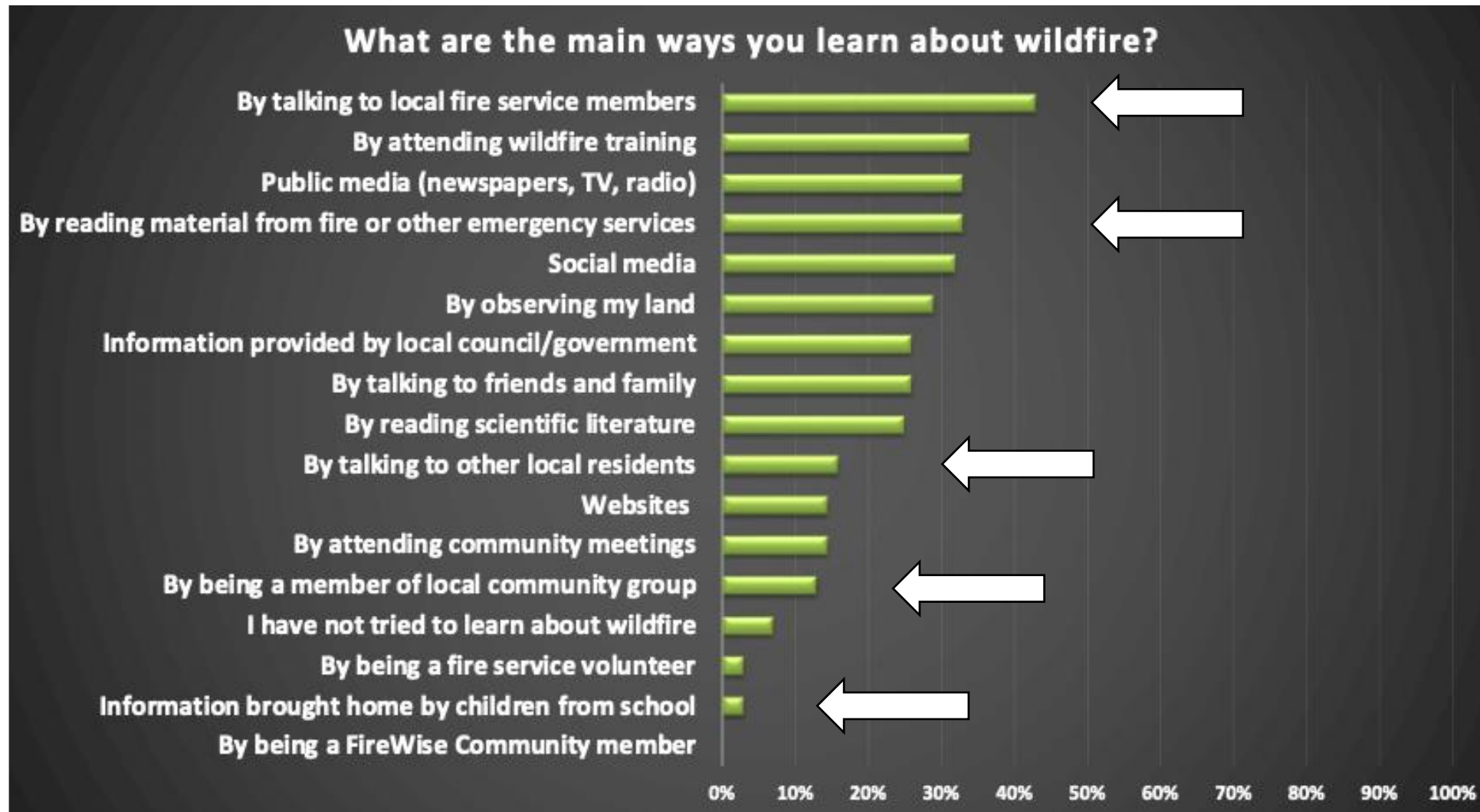
Preliminary survey results

UK



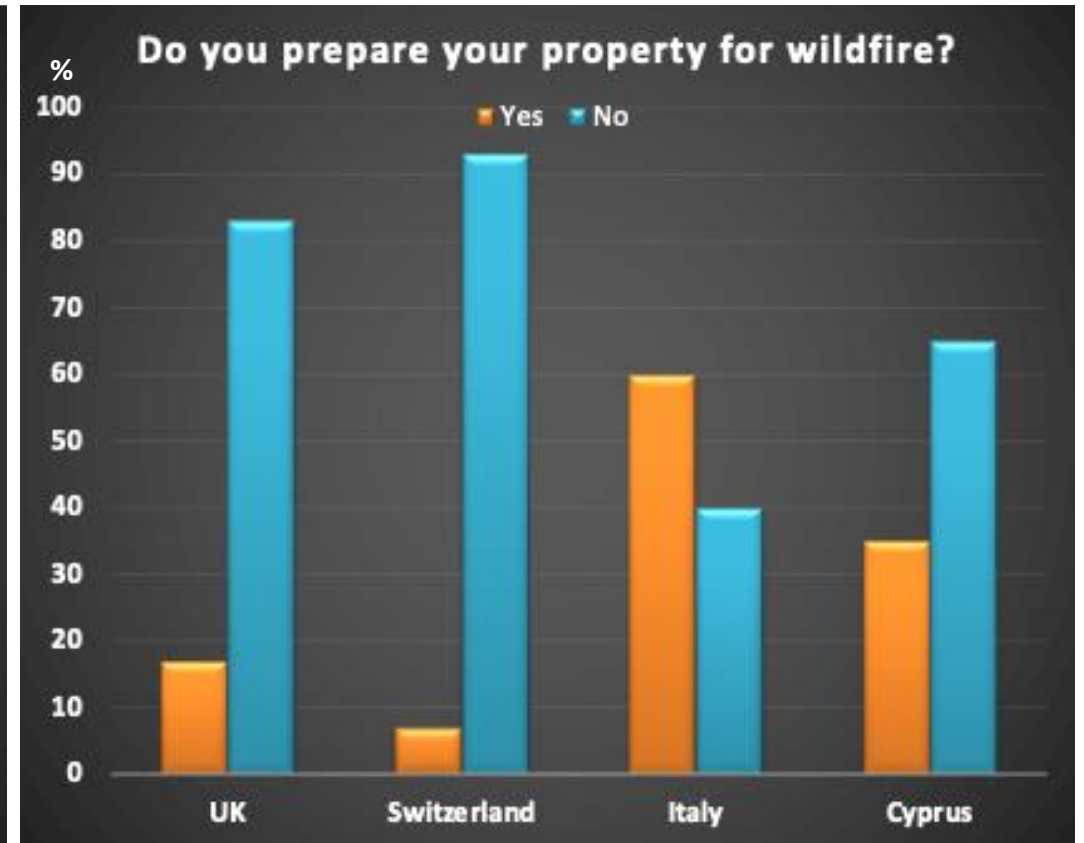
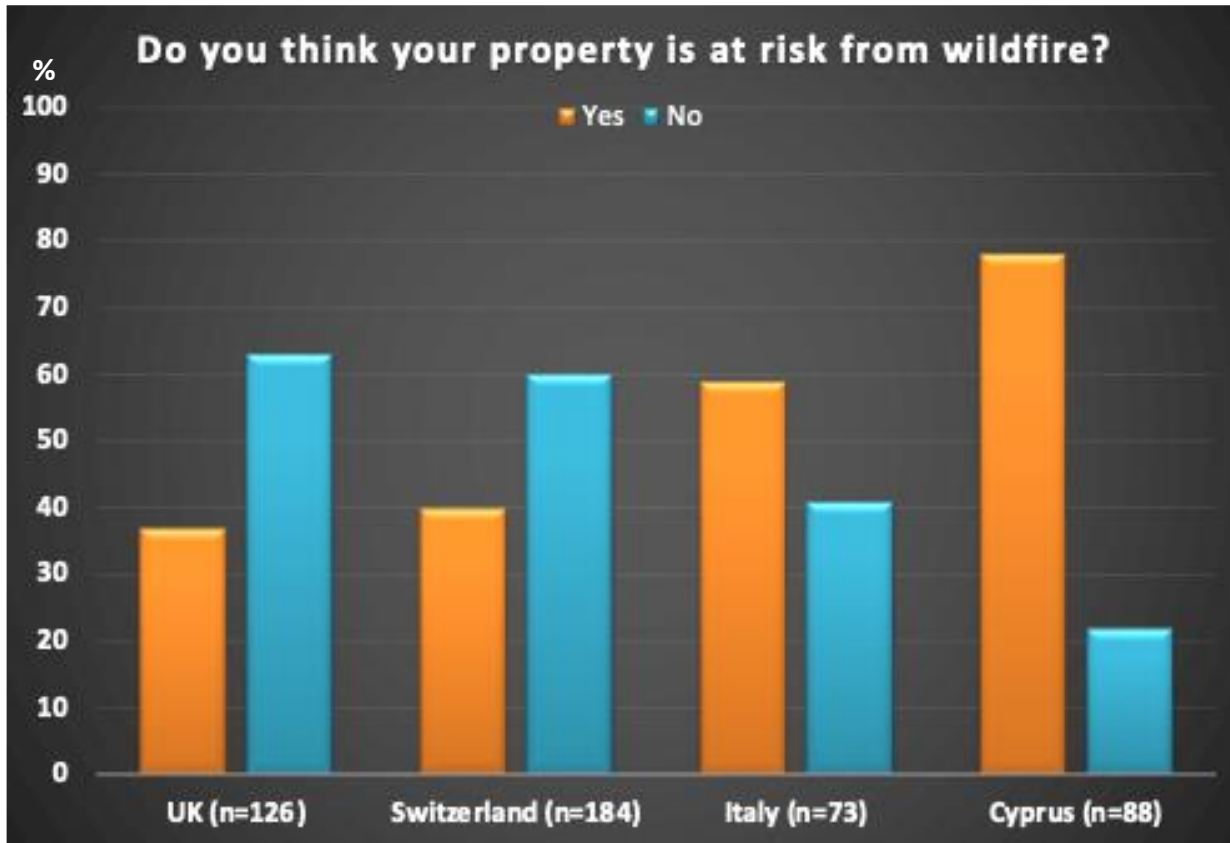
Preliminary survey results

UK



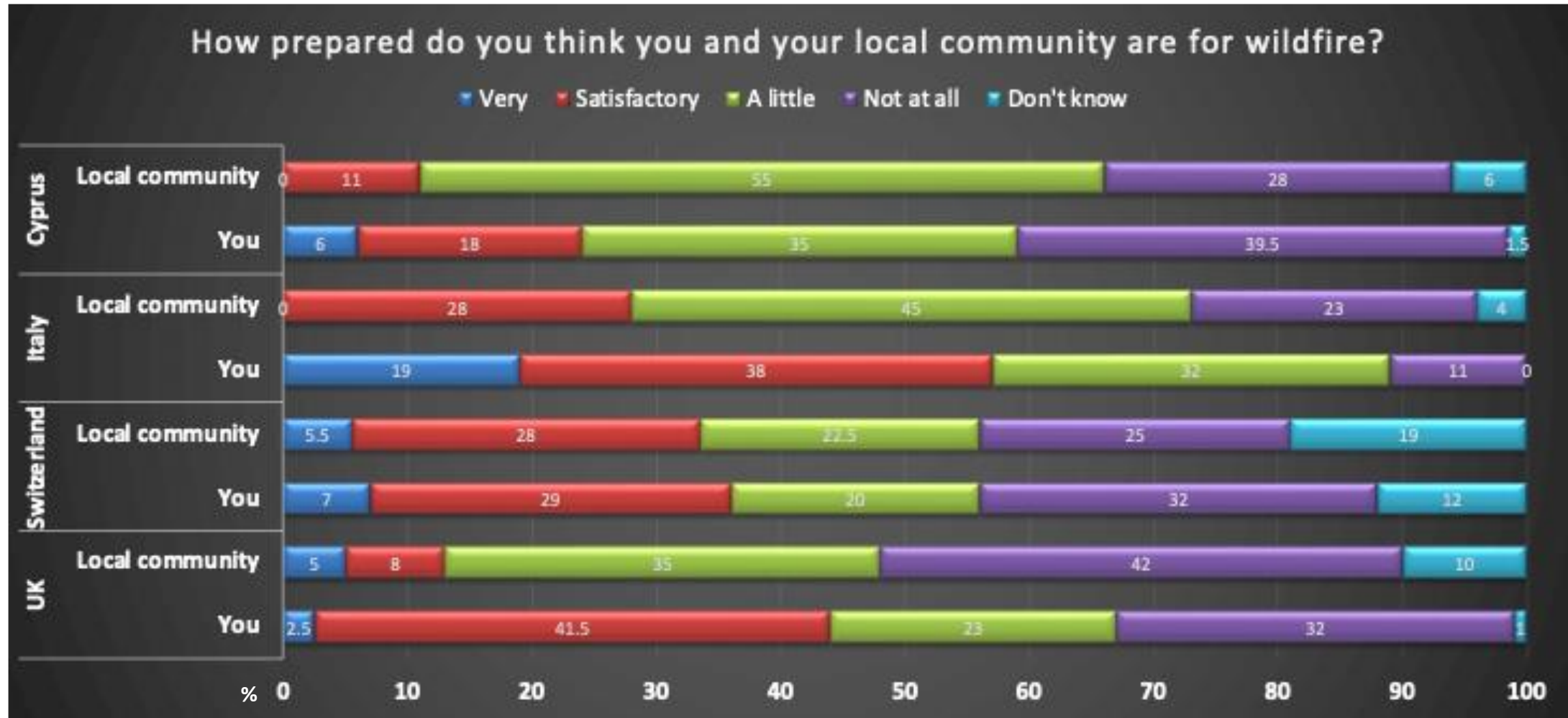
Preliminary comparison of survey results

UK, Switzerland, Italy and Cyprus



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UK, Switzerland, Italy and Cyprus



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International Journal of Wildland Fire 2016, 25, 363–377
<http://dx.doi.org/10.1071/WF14193>

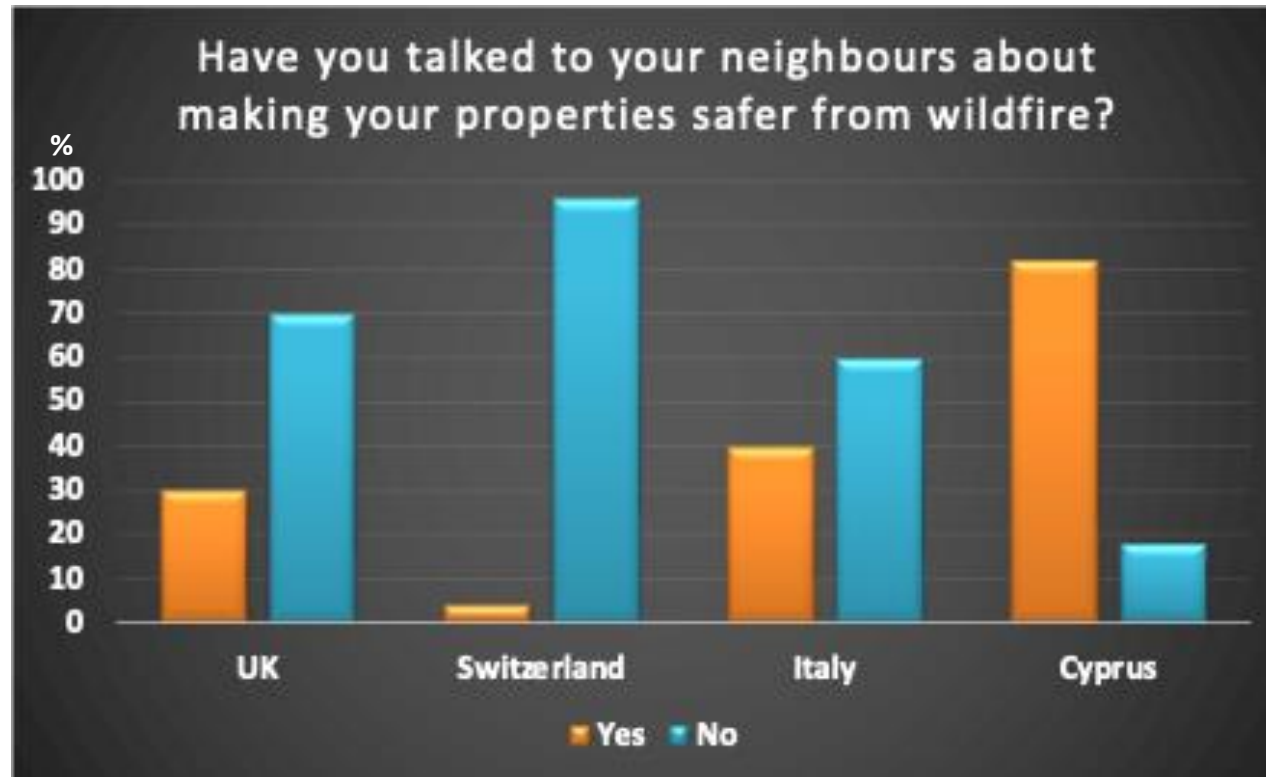
Wildfire survival plans in theory and practice

Christine Eriksen^{A,B,D}, Trent Penman^{A,C}, Bronwyn Horsey^A
and Ross Bradstock^A



Preliminary comparison of survey results

UK, Switzerland, Italy and Cyprus



Geoforum 41 (2010) 814–825

Contents lists available at ScienceDirect

Geoforum

journal homepage: www.elsevier.com/locate/geoforum

Bushfire and everyday life: Examining the awareness-action 'gap' in changing rural landscapes

Christine Eriksen ^a, Nicholas Gill

Global Environmental Change 23 (2013) 1575–1586

Contents lists available at ScienceDirect

Global Environmental Change

journal homepage: www.elsevier.com/locate/gloenvcha

Wildfire preparedness, community cohesion and social-ecological systems

Tim Prior ^{a,*}, Christine Eriksen ^b

International Journal of Disaster Risk Reduction 6 (2013) 67–77

Contents lists available at ScienceDirect

International Journal of Disaster Risk Reduction

journal homepage: www.elsevier.com/locate/ijdr

Defining adequate means of residents to prepare property for protection from wildfire

T.D. Penman ^{a,*}, C. Eriksen ^{a,b}, R. Bianchi ^c, M. Chladil ^d, A.M. Gill ^e, K. Haynes ^f, J. Leonard ^c, J. McLennan ^g, R.A. Bradstock ^a

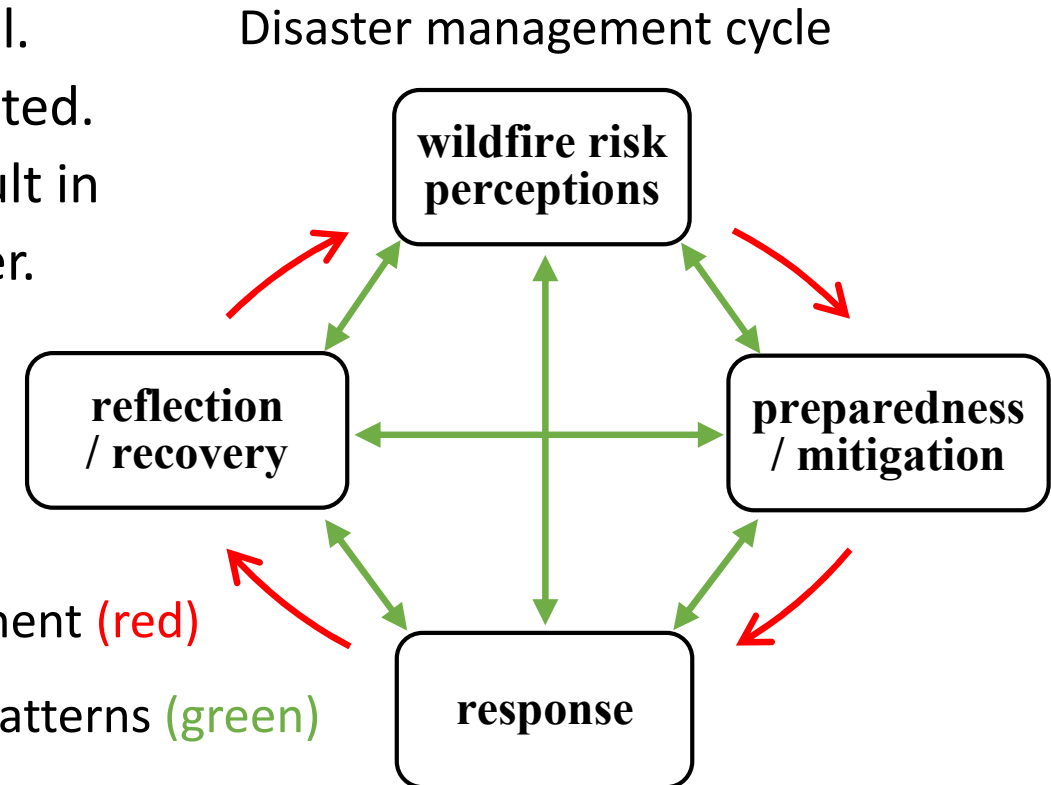
Wildfire and everyday lives

Examining the awareness-action “gap”

- It’s not that people don’t listen to advice; rather, their everyday priorities differ and are contextual.
- Communities need to be engaged not just educated.
- The capacity to make informed-decision will result in greater capacity to prepare, respond, and recover.
- To truly foster ‘integrated risk management’, communities need to be a part of the “system”.

Linear procedural thinking used in disaster management (red)

Everyday non-linear reflexive thinking patterns (green)



The value of community preparedness

How do we calculate the worth of community preparedness?

- Resources less stretched (**responsibility sharing**)
- Lives not lost (fatality statistics)
- Community resilience in the form of:
 - informed decision-making
 - personal capacity to act before, during and after wildfire

Is there an optimal community engagement strategy?

- Meet context-specific local needs
- Gender-awareness and genuine engagement with all age groups
- Benefits of hands-on experience, strong networks, and supportive learning environments
- Whole-of-community approach not just the “most vulnerable”
 - the more people who are prepared, the better they will be able to help themselves and others to the best of their abilities (**responsibility sharing**)



Preparing for community engagement



- Before engaging with communities, ask:
 - who can you prioritise in the community to help as many people as possible?
 - how can you phrase advice and communicate it so as many people as possible can relate it?
 - how can you listen to the needs and ideas of the people you are engaging with?
(try to understand their logic and priorities, don't assume they will agree with yours)
- Create common knowledge, language and behaviour for high-fire-danger weather.
- Warning systems fail if people do not understand the threat and the recommended action.
- Good community engagement initiatives already exist in many fire-prone regions; adapt them to your context, don't reinvent the wheel!



Swiss National Science Foundation

BUILDING WILDFIRE RESILIENT COMMUNITIES IN EUROPE (FiRES)

A five-year research project (2023-2028) by the GEOGRAPHIES OF DISASTERS GROUP

Aim

Examine factors that enable people to prepare for, adapt to, survive and recover from wildfires - physically and mentally.
Provide insights that can enhance informed decision-making and increase community coping capacity across culturally and climatically diverse regions.

Approach

Use mixed-methods to triangulate findings from surveys, in-depth interviews, participant observation, and workshops.

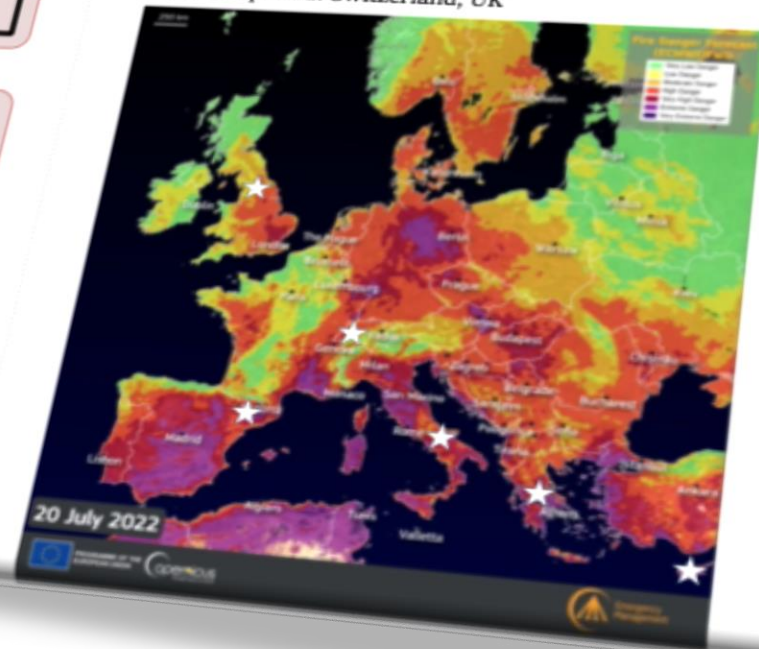


Case studies

Compare insights from case studies in six countries to learn from residents, community groups, and civil protection personnel who: a) live or work in at-risk areas, or b) have been impacted directly or indirectly (smoke, evacuation) by wildfire.

The case studies span rural, urban, and interface areas, from the Mediterranean, and the Alps, to northern Europe.

- ★ Wildfire-prone: Greece, Catalonia
- ★ Wildfire-known: Cyprus, Italy
- ★ Wildfire-expected: Switzerland, UK



The Team



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