

Supplementary Material

Questionnaire: Wildfire Social Trends in Greece

Start of Block: Introduction

Goal of survey

We're conducting research on the importance perceptions of different wildfire effects caused from wildfires in the Greek landscapes. We'd love to hear about which wildfire effects matters the most to you and what are your general approach towards the wildfire problem of our country. This will help us make improvements to the existing tool and prioritize new features.

Your feedback is important!

This questionnaire contains 22 questions. Obtaining feedback from people like you is vital to estimate the importance of each wildfire effect. We would appreciate your taking the time to complete the following survey. It should take about 10 to 15 minutes of your time. Let your voice be heard!

Confidentiality and identity protection

Your responses are voluntary and will be confidential. Responses will not be identified by individual. All responses will be compiled together and analyzed as a group.

Contact information.

If you have any questions or concerns, please contact Paleologos Paleologou, PhD Researcher and fellow with the US Forest Service J-1 International Visitor Program at the Oregon State University, at palaiologou.p@aegean.gr.

Participation consent

By clicking agree to continue, you provide consent to use your response for the purposes of this survey. In case you disagree, click on the option "**I don't want to continue**".

- I agree to proceed (1)
- I don't want to continue (2)

Skip To: End of Survey If PERCEPTIONS OF WILDFIRE EFFECTS IN GREECE Goal of survey We're conducting research on the import... = I don't want to continue

End of Block: Introduction

Start of Block: Questions about thoughts, beliefs and knowledge regarding wildfire effects

Q1.1 *In which part of Greece did you reside in the longeset?*

- Region (1)
- Prefecture (2)
- Municipality (3)
- ▼ Central Greece (0) ... North Aegean ~ Chios ~ Inousses (387)

Q2.1 *For the prefecture of Greece you selected, who do you think is responsible for most wildfire ignitions?*

(only one selection is allowed)

- A specific social group (1)
- Weather/natural phenomena (2)
- Arsonists pursuing certain interests (3)
- A specific occupational group (4)
- Arsonists due to physiologic problems (5)

- A foreign nation (6)
- The state/ the political parties (7)
- The society and its way of living (8)
- Negligence of citizens (9)
- Other (10)

Q2.2 When multiple wildfires occur across Greece, who do you think is responsible for most ignitions?

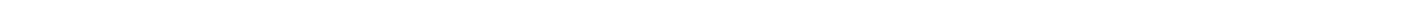
(only one selection is allowed)

- A specific social group (1)
- Weather/natural phenomena (2)
- Arsonists pursuing certain interests (3)
- A specific occupational group (4)
- Arsonists due to physiologic problems (5)
- A foreign nation (6)
- The state/ the political parties (7)
- The society and its way of living (8)
- Negligence of citizens (9)
- Other (10)

Q3.1 Based on your experience and knowledge, please rate the effect of the following negative factors on reducing the regeneration and vegetation recovery potential after a wildfire, for the prefecture of Greece where you have resided the longest.

(Please respond to all options)

	No effect (1)	Low effect (2)	Moderate effect (3)	High effect (4)	Very High effect (5)
Post-fire grazing (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Burned vegetation at non-reproductive age (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Steep burned slopes (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor quality and shallow soil type (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Illegal activities / land use changes on burned areas (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smoldering effect during the wildfire (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recent fire activity inside the affected area (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban / tourism pressures on burned areas (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Threat from insects or pathogens (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Absence of unburned enclaves (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q3.2 Based on your experience and knowledge, please rate the importance of the following wildfire effects on the environment, for the prefecture of Greece where you have resided the longest.
(Please respond to all options)

	Not at all important (1)	Slightly important (2)	Moderately important (3)	Very important (4)	Extremely important (5)
Habitat losses of endangered/rare/important insects or invertebrates' species (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Habitat losses of endangered/rare/important small sized mammal or reptile species (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Habitat losses of endangered/rare/important fish and aquatic species (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Habitat losses of endangered/rare/important bird species (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Habitat losses of endangered/rare/important large sized mammal species (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alien species invasion/ changes in fauna composition (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Losses of endangered/rare/important flora populations (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alien species invasion/ changes in flora composition (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q3.3 Please rank the following factors based on their effect on reducing the aesthetic quality and attractiveness of the affected area after a wildfire, for the prefecture of Greece where you have resided the longest.
(Please rank all options by drag and drop each option, from higher (1-up) to lower (5-down) reduction)

- ___ The wildfire burned inside WUI / urban forested parks or scenic mountainous areas or popular vantage points. (1)
- ___ The type of forest and vegetation that were burned are considered visually and aesthetically attractive. (2)
- ___ The affected area is in protected lands. (3)
- ___ Smoke reached populated places reducing visibility and affecting air quality. (4)
- ___ Post-fire soil related events caused erosion, soil losses or desertification. (5)

Q3.4 How are you personally impacted when human health and lives are affected by a wildfire?
(Please respond to all options)

	Lowest impact (1)	Low to moderate impact (2)	Moderate impact (3)	Moderate to high impact (4)	Highest impact (5)
Civilian deaths (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Firefighter deaths (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Large number of injured (3)	<input type="radio"/>				
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Q3.5 How are you personally impacted when casualties of firefighting personnel occur during a wildfire?
(Please respond to all options)

	Lowest impact (1)	Low to moderate impact (2)	Moderate impact (3)	Moderate to high impact (4)	Highest impact (5)
Destroyed firefighting aircraft(s) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Destroyed firefighting vehicle(s) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q3.6 Which type of infrastructure damage or destruction that can happen during a wildfire can have the most profound negative effect on the prefecture of Greece where you have resided the longest?
(Please respond to all options)

	No effect (1)	Low effect (2)	Moderate effect (3)	High effect (4)	Very High effect (5)
Houses / hotels (1)	<input type="radio"/>				
Household stables, warehouses, auxiliary buildings (2)	<input type="radio"/>				
Private vehicles, machinery and mechanical equipment (3)	<input type="radio"/>				
Power network (4)	<input type="radio"/>				
Telecommunications network (5)	<input type="radio"/>				
Water supply network (6)	<input type="radio"/>				
Military equipment, ammunition, facilities (7)	<input type="radio"/>				
Industrial buildings or renewable energy infrastructure (8)	<input type="radio"/>				
Roads and public transportation network (9)	<input type="radio"/>				
Agricultural or livestock infrastructure (10)	<input type="radio"/>				
Cultural heritage monuments or sites (11)	<input type="radio"/>				

Q3.7 Which economic losses that can happen after a wildfire can have the most profound negative effect on the prefecture of Greece where you have resided the longest?
(Please respond to all options)

	No effect (1)	Low effect (2)	Moderate effect (3)	High effect (4)	Very High effect (5)
Lost revenue from burnt or delayed harvest of logging and wood	<input type="radio"/>				

products. (1)					
Lost revenue from burnt or extinct non-wood forest products like: game, beekeeping, resin, edible flora products (e.g. mushrooms). (2)	<input type="radio"/>				
Post-fire restoration costs of infrastructure, public property, and industries. (3)	<input type="radio"/>				
Lost revenue from burnt or delayed harvest of agricultural production. (4)	<input type="radio"/>				
Lost revenue from tourism and recreational activities. (5)	<input type="radio"/>				
Lost revenue from burnt or reduced livestock production. (6)	<input type="radio"/>				
Post-fire restoration costs of houses and private structures. (7)	<input type="radio"/>				
Post-fire restoration costs of landscape - reforestation - flood prevention. (8)	<input type="radio"/>				

Q2.3 Please rank your understanding and perception regarding wildfire suppression effort complexity (Please rank all options by drag and drop each option, from most (1-up) to least (8-down) indicative)

- _____ High number of firefighting personnel. (1)
- _____ High number of firefighting vehicles. (2)
- _____ High number of firefighting aircrafts. (3)
- _____ Spotting with new fire ignitions. (4)
- _____ International aid that assist local firefighting forces. (5)
- _____ Area declared in a State of Emergency. (6)
- _____ Extreme fire type (crown fires). (7)
- _____ Evacuation of settlements. (8)

Q3.8 Rank the five wildfire effects questions from most (1) to least (7) important as to their contribution to describing the overall wildfire effects. (Please rank all options by drag and drop each option)

- _____ Quality of landscape and vegetation. (1)
- _____ Environmental impacts. (2)
- _____ Regeneration potential and vegetation recovery. (3)
- _____ Casualties and fatalities. (4)
- _____ Destruction and damages on infrastructure. (5)
- _____ Economic losses. (6)
- _____ Firefighting / wildfire suppression. (7)

End of Block: Questions about thoughts, beliefs, and knowledge regarding wildfire effects

Start of Block: General perceptions for wildfires.

Q2.4 What is your opinion on using controlled fire during firefighting or as prescribed fire to reduce forest fuels?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
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Fight fire with fire whenever possible (back-fires) (1)	<input type="radio"/>				
Fire is a tool that we can effectively control to protect the forests (2)	<input type="radio"/>				
It should be used with caution and only under strict supervision (3)	<input type="radio"/>				
If it is applied, there should be tolerance and protection of people involved in case of an accident (4)	<input type="radio"/>				
Some natural fires must be let burn to achieve ecological objectives (5)	<input type="radio"/>				
All fires must remain illegal (6)	<input type="radio"/>				
Controlled fires is an inexpensive method of firefighting and removal of unwanted fuels (7)	<input type="radio"/>				

Q2.5 What is your opinion on the specific wildfire-related statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
All uncontrolled fires should be extinguished as soon as possible (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a fire deficit in Greek landscapes, and we need more fire to restore ecological balance (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wildfires cause only negative impacts and effects (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate change can increase the number, intensity and area burned of wildfires (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Societies can do little to confront wildfires (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Citizens are responsible from removing vegetation and fuels from their property (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest Service should get more engaged on all stages of wildfire planning and suppression (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q1.2 How many wildfires have you personally experienced (i.e., either inside or close to the affected area)?

- None (1)
- (2)
- (3)
- 3-5 (4)
- 5-10 (5)
- More than 10 (6)

Q2.6 Which policy do you believe is most capable of reducing the wildfire-related problems?
(only one selection is allowed)

- Hiring more firefighters (1)
- Buying new aerial firefighting units (2)
- Buying new firefighting vehicles (3)
- Better patrolling/surveillance (4)
- Forest fuel reduction efforts (5)
- Define and map forests and properties (6)
- Strict penalties for arsonists (7)
- Better education and knowledge for individuals and communities (8)
- Improvement of the collaboration among the fire management / suppression agencies. (9)
- Other (10)

Q1.3 Please rate your experience with wildfires

	No experience (1)	Poor (2)	Average (3)	Good (4)	Extremely experienced (5)
Fire suppression activities (1)	<input type="radio"/>				
Fuel management activities (2)	<input type="radio"/>				
Research and study (3)	<input type="radio"/>				
Affected by wildfires (4)	<input type="radio"/>				
Post-fire rehabilitation (5)	<input type="radio"/>				

End of Block: General perceptions for wildfires

Start of Block: Personal questions

Q1.4 Employment status?

- Employed full time (1)
- Employed part time (2)
- Unemployed looking for work (3)
- Unemployed not looking for work (4)
- Retired (5)
- Student (6)
- Disabled (7)

Skip To: Q1.6 If Employment status? = Unemployed looking for work

Skip To: Q1.6 If Employment status? = Unemployed not looking for work

Skip To: Q1.6 If Employment status? = Retired

Skip To: Q1.6 If Employment status? = Student

Skip To: Q1.6 If Employment status? = Disabled

Q1.5 If you are employed, where do you work?

- Research - private (1)
- Research - government (2)
- Research - university (3)

- Forest Service (4)
- Fire Service (5)
- Local government (6)
- Central government (7)
- Private sector (8)
- Self-employed (9)
- Working abroad (10)
- Other (11)

Q1.6 Age class

- under 18 (1)
- 18 - 24 (2)
- 25 - 34 (3)
- 35 - 44 (4)
- 45 - 54 (5)
- 55 - 64 (6)
- 65 - 74 (7)
- 75 - 84 (8)
- 85 or older (9)

Q1.7 Highest degree you have received

- Less than high school (1)
- High school graduate (2)
- Some college (3)
- 2-year degree (4)
- 4-year degree (5)
- Professional degree (6)
- Doctorate (7)

Q1.8 Gender

- Male (1)
- Female (2)

End of Block: Personal questions
