The Ashen Legacy: A Comprehensive Analysis of the Sociological and Environmental Impacts of Wildfire in Greece (2015–2025)

Author: Alexios ELIZALDE XIROKOSTA
Date: November 24th 2025
Report identification: EFPRP/GR/R/00002-2025

EFPRP
European Fire Prevention & Rural Preservation Organization

EANENP
European Alliance Network for Ecosystem & Nature Protection

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1. Introduction: The Emergence of the Pyrocene in the Eastern Mediterranean

The decade spanning from 2015 to 2025 represents a pivotal and tragic epoch in the ecological history of Greece. While the Mediterranean landscape has co-evolved with fire over millennia, relying on the seasonal combustion of biomass to clear undergrowth and germinate serotinous seeds, the contemporary fire regime has fundamentally decoupled from these historical rhythms. Greece has entered what scientists and sociologists increasingly refer to as the "Pyrocene," a geological era defined by the unbridled influence of fire, catalyzed by anthropogenic climate change, rural abandonment, and systemic policy failures.

This report offers an exhaustive analysis of this transformation. It moves beyond the superficial metrics of hectares burned to excavate the deeper sociological, environmental, and economic structural shifts that have occurred. The fires of this decade from the deadly urban tragedy of Mati in 2018 to the sprawling megafires of Evia in 2021 and Evros in 2023are not merely isolated natural disasters. They are symptoms of a profound collapse in the equilibrium between the Greek state, its citizens, and the natural environment.

The analysis draws upon extensive data from the European Forest Fire Information System (EFFIS), civil protection reports, academic studies on post-fire recovery, and sociological inquiries into community resilience. It dissects the feedback loops wherein environmental degradation fuels social unrest, and economic austerity hampers ecological adaptation. As we examine the charred landscapes of Northern Evia, the depopulated villages of the Peloponnese, and the traumatized suburbs of Attica, a clear narrative emerges: the wildfire crisis is the singular existential threat facing modern Greece, reshaping its demographics, its economy, and its very physical geography.

1.1 The Climatic and Meteorological Context

To understand the sociological impact, one must first grasp the physical radicalization of the weather. The Greek summer, once characterized by the predictable *meltemi* winds and manageable heat, has morphed into a hostile season of extremes. The phenomenon of the "heat dome"prolonged periods of high pressure trapping heathas become a standard feature of July and August.

The fire seasons of 2021, 2023, and 2025 were all preceded by record-breaking heatwaves. In July 2023, for instance, temperatures exceeded 40°C for over two weeks, effectively baking the moisture out of the vegetation.[1] This created "tinderbox" conditions where the fuel moisture content dropped to historically low levels. When ignition occurred whether by lightning, negligence, or arson the fire behavior was explosive. The fires of this decade are characterized by their "eruptive" nature, generating their own weather systems (pyrocumulonimbus clouds) and spotting kilometers ahead of the main front, rendering traditional suppression tactics obsolete.

1.2 The Socio-Economic Backdrop

This environmental crisis did not occur in a vacuum. It unfolded against the backdrop of Greece's slow recovery from the debilitating financial crisis of 2010–2018. The austerity measures imposed during that period had a direct,

causal link to the wildfire crisis. Budgets for forestry management were slashed; the Forestry Service was understaffed and stripped of its ability to manage fuel loads in the winter; and the Civil Protection mechanism was left reliant on aging aerial assets.

Simultaneously, the economic crisis accelerated rural depopulation. As working-age Greeks migrated to urban centers or abroad for employment, the countryside was emptied of the people who traditionally managed the land. The abandonment of olive groves, vineyards, and pastoral lands led to the encroachment of flammable scrubland into former agricultural zones. This "rewilding" was not a return to a healthy ecosystem but an accumulation of unmanaged fuel, waiting for a spark.

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2. The Environmental Catastrophe: A Decade of Destruction

The environmental footprint of the 2015–2025 period is staggering. The fires have not only reduced vast tracts of forest to ash but have altered soil chemistry, disrupted hydrological cycles, and threatened the survival of iconic species.

2.1 The Shifting Fire Regime: Analysis of Burnt Areas

The statistical record reveals a clear trend: while the absolute number of fires fluctuates, the severity and scale of the "outlier" events are increasing. We are witnessing the era of the "Megafire"events exceeding 10,000 hectares that defy control until weather conditions change.

Table 1: Wildfire Statistics in Greece (2015–2025)

Year	Burnt Area (ha)	Number of Fires (>30ha)	Context & Key Events
2015	11,613	27	A relatively mild year. Fires were localized, primarily in the Peloponnese and Laconia.
2016	31,707	52	Significant fire on Thasos island. Increase in lightning-induced fires.
2017	20,041	57	Fires in East Attica

			(Kalamos) foreshadowed the vulnerability of the peri-urban zone.
2018	12,037	33	**The Mati Disaster.** Low acreage but catastrophic human cost (104 deaths). Fire behavior was driven by extreme downslope winds.
2019	10,736	53	High alertness following Mati prevented large spread despite numerous ignitions.
2020	14,915	88	Increasing frequency. Fires in Corinth and Mycenae threatened archaeological sites.
2021	130,000+	N/A	**The Catastrophe.** Northern Evia and Varympompi (Attica). The burned area exceeded the average by ~600%.
2022	~20,000	45+	Dadia Forest fire (first burn). Relative respite in total hectares but high ecological value loss.
2023	175,000+	80+	**Historic Peak.** The Evros fire (>93,000 ha) was the largest in EU recorded history. Major fires in Rhodes.
2024	42,088	N/A	A prolonged season (132 days of high alert). Fires in Attica entered

			the urban fabric (Varnavas).
2025	47,828	N/A	Continued severity. Major impacts in Chios, Crete, and Western Greece. 11,677 ha burned in Protected Areas.

Sources: [1]

The data indicates a terrifying "sawtooth" volatility. The years 2021 and 2023 stand out as statistical anomalies that have redefined the baseline risk. In 2023 alone, the burnt area was more than triple the long-term average. The 2025 season, while less extensive than 2023, confirmed that the "bad years" are becoming frequent rather than exceptional, with nearly 50,000 hectares burned despite heightened preparedness.[4]

2.2 Deep Dive: The Northern Evia Megafire (2021)

The destruction of Northern Evia in August 2021 is the definitive ecological tragedy of the decade. This region was covered by a dense, contiguous forest of Aleppo Pine (*Pinus halepensis*), interspersed with villages dependent on forestry.

2.2.1 Ecological Mechanics of the Collapse

The fire burned for nine days, consuming over 50,000 hectares. While Aleppo pine is fire-adapted (its cones open with heat to release seeds), the intensity of this fire was so high that it likely destroyed the canopy seed bank in many areas. Furthermore, the fire consumed the "mother trees"mature pines that had survived previous smaller fires.

The immediate aftermath revealed the total annihilation of the resin-producing ecosystem. The pine forests here were managed for resin collection, meaning the understory was cleared and the trees were tapped. This human management usually reduces fire risk, but the 2021 fire was driven by such extreme heat (the "Cleon" heatwave) that the resin itself acted as an accelerant, turning trees into torches.

2.2.2 The Soil Crisis

Post-fire, the soil in Evia faced an existential threat. The intense heat created a hydrophobic layer on the soil surface,

repelling water. When the autumn rains arrived, the water could not infiltrate the ground. This led to flash floods in villages like Rovies and Limni. Research using the RUSLE model indicated that soil erosion rates increased by 114% post-fire, transforming the hydrological character of the island from a sponge to a funnel.[7]

2.3 The Tragedy of Dadia and the Evros Fire (2023)

If Evia was an economic disaster, the 2023 Evros fire was a biodiversity holocaust. The Dadia-Lefkimi-Soufli National Park is a globally unique ecosystem, home to the only breeding colony of Cinereous Vultures (*Aegypius monachus*) in the Balkans.

2.3.1 Impact on Raptor Populations

The fire burned 58% of the National Park, including the core protection zones.[8] Unlike Evia, the dominant tree here is the Black Pine (*Pinus nigra*). Black Pine is **not** fire-adapted; it does not have serotinous cones and relies on seed dispersal from surviving trees to regenerate. The fire wiped out vast stands of mature Black Pine, effectively eliminating the nesting habitat for the vultures.

While the vulture population showed remarkable resilience in 2024, with 47 nesting pairs recorded [9], the long-term prognosis is guarded. The birds are now nesting in the few remaining unburnt "islands." If another fire strikes these remnants before the forest regenerates (a process taking decades), the population could face local extinction.

2.3.2 The "Double Burn" Phenomenon

A critical environmental insight from this decade is the danger of recurrent fires. In Attica, parts of Mount Penteli and the Geraneia Mountains burned in 2018 and again in 2021 or 2023. When a pine forest burns twice within a period shorter than the tree's maturation age (approx. 15-20 years), the natural regeneration mechanism fails completely.

Data from 2025 indicates that over 13,000 hectares burned in that year were areas that had burned less than 20 years prior.[4] In these zones, the forest does not return. Instead, the land degrades into *phrygana* (thorny scrub) or desertifies completely. This "arrested succession" represents a permanent loss of carbon sequestration capacity and a degradation of the microclimate, making Athens hotter and drier.

2.4 Atmospheric Pollution and Urban Health

The environmental impact extends into the air itself. The combustion of biomass releases massive quantities of particulate matter (PM2.5), nitrogen oxides, and volatile organic compounds.

2.4.1 The Athens "Smoke Dome"

During the 2021 Varympompi fire, the Athens basin was trapped under a dense plume of smoke. Solar radiation reaching the ground was reduced by up to 53%, creating a dystopian orange twilight.[10] Air quality monitoring stations in suburbs like Lykovrisi recorded PM10 levels exceeding 1000 µg/m³levels that are acutely toxic.[11]

2.4.2 Long-term Health Implications

Epidemiological studies conducted during and after these events have linked the wildfire smoke to immediate health crises. There was a statistically significant spike in hospital admissions for respiratory distress and cardiovascular issues. Research indicates that exposure to the specific chemical composition of wildfire smoke (which includes compounds from burning buildings and cars in the WUI) is more toxic than standard urban pollution. Chronic exposure to these events is likely shortening life expectancy in the Attica region, although the full longitudinal data will take years to mature.[12]

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3. Sociological Impacts: Trauma, Displacement, and Division

The fires have seared the collective consciousness of Greek society. The sociological impact is bifurcated: there is the acute trauma of the event itself, and the chronic, grinding stress of the aftermath.

3.1 The Trauma of Mati: A National Wound

The fire at Mati on July 23, 2018, is the defining sociological event of the decade. It was not a forest fire in the traditional sense; it was a Wildland-Urban Interface (WUI) disaster. The fire moved with hurricane-force speed down the slopes of Mount Penteli, trapping hundreds of people in a maze of narrow streets and burning 104 to death.

3.1.1 The Psychology of the "112" Era

The trauma of Mati fundamentally altered the relationship between the state and the citizens. The state's failure to

evacuate Mati led to a radical policy shift: the implementation of the "112" emergency SMS system and a doctrine of "total evacuation."

In subsequent fires (2021, 2023, 2025), the police and civil protection authority enforced evacuations aggressively. While this saved lives, most notably in the evacuation of 20,000 people from Rhodes in 2023it created a new sociological conflict. Residents in Evia and Evros, traumatized by the prospect of losing their property, often refused to leave. They viewed the "112" message not as a safety tool, but as an abdication of state responsibility, a signal that "we are leaving you to burn, so get out."

This has led to the militarization of evacuation, with police forcibly removing elderly residents, scenes that were broadcast nightly on Greek television, reinforcing a narrative of a state that can police its citizens but cannot protect their livelihoods.

3.2 Rural Depopulation: The End of Traditional Livelihoods

The fires are acting as a powerful accelerant for rural depopulation. In the delicate economy of the Greek countryside, the forest is the factory. When the forest burns, the factory closes for 30 years.

3.2.1 The Case of the Resin Collectors (*Retinokalliergites*)

In Northern Evia, the economy revolved around the extraction of resin from Aleppo pines. This was a hereditary profession, with deep cultural roots. The 2021 fire destroyed the trees, wiping out the income of thousands of families.

While the government introduced the "Reforestation Surrogate" (a program paying resin collectors to work on forest cleanup), this is a temporary welfare measure, not a career. Younger generations, seeing no future in a blackened landscape, have migrated to Athens or Germany. The demographic data from the region is expected to show a sharp decline in the 20-40 age bracket, leaving behind a geriatric population in "ghost villages" that are even more vulnerable to future fires due to land abandonment.[14]

3.2.2 The Collapse of Apiculture (*Melissokomia*)

Greece has the highest density of beehives in the EU. The pine forests of Evia and Thasos produced the famous "Pevkothymaro" (pine-thyme) honey. The fires destroyed not just the hives, but the foraging ecosystem. Bees cannot feed on ash. Beekeepers have been forced to become nomadic, trucking their hives to unburnt areas in other prefectures, increasing costs and spreading disease. Many older beekeepers simply quit, severing a link to the land that had existed for centuries.[16]

3.3 Xenophobia and Scapegoating in Evros

The 2023 fire in Evros revealed a darker sociological trend: the intersection of climate disaster and nativist paranoia. Evros is a border region, a primary entry point for irregular migration from Turkey.

As the massive fire consumed the region, a narrative took hold propagated by social media and fringe political elements that the fires were started by migrants as part of a "hybrid war." This conspiracy theory led to the formation of civilian militias. In a notorious incident, three locals arrested 13 migrants, locking them in a trailer and filming them while accusing them of arson. The video went viral, with the perpetrators referring to the migrants as "pieces" to be collected.

Forensic analysis later proved the fire started from lightning, and the migrants were cleared of all charges. However, the incident exposed the fragility of social cohesion. In times of extreme environmental stress, the community fractured, turning on the most vulnerable "other." This scapegoating served as a psychological defense mechanism, allowing the local population to direct their anger at a tangible enemy rather than the abstract and uncontrollable forces of climate change and state incompetence.[18]

3.4 Mental Health and Solastalgia

The psychological impact extends beyond those who lost homes. The concept of *solastalgia*the distress caused by environmental change in one's home environment is pervasive in Greece.

Studies on adolescents in the Mati and Kineta areas show elevated rates of PTSD, depression, and sleep disorders years after the events.[20] For the broader population, the recurring summer fires create a seasonal anxiety. The smell of smoke in August triggers a collective nervous response in Athens. This chronic stress is a hidden public health burden, eroding the quality of life and contributing to a sense of pessimism about the future.[21]

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4. Economic Consequences: The Cost of the Pyrocene

The economic implications of the wildfire crisis are profound, threatening the fiscal stability of the state and the viability of key economic sectors.

4.1 Macroeconomic Impact and GDP

The direct costs of wildfires/firefighting operations, compensation, and infrastructure repair are ballooning. In 2023,

the damages from wildfires were estimated at €1.66 billion, roughly 0.8% of the national GDP.[22]

The Bank of Greece has issued stark warnings. In its report on the economics of climate change, it estimates that the cumulative cost of climate change for Greece could reach €701 billion by 2100 under a "business as usual" scenario. This is equivalent to losing several years of total economic output. Even with mitigation, the costs are substantial. The "climate tax" on the Greek economy is no longer theoretical; it is being paid annually in emergency budget supplements.[23]

Table 2: Estimated Economic Losses (Selected Years)

Year	Direct Damage Est. (€)	Key Cost Drivers
2018	>€100 Million	Compensation for Mati victims; Infrastructure repair.
2021	€1.2 Billion	Loss of agricultural capital (Evia); Housing reconstruction.
2023	€1.66 Billion	Evros forestry loss; Rhodes tourism disruption; Compensation.
2025	TBD (Est. >€500M)	Ongoing compensations; Impact on olive oil futures.

Sources: [6]

4.2 The Agricultural Crisis

Agriculture is the backbone of the Greek provincial economy. The fires strike at the heart of this sector.

4.2.1 The Olive Oil Shock

Olive trees are an investment of time. A tree planted today will not reach full productivity for 15–20 years. The burning of ancient olive groves in Ancient Olympia and Evia represents a destruction of capital stock that cannot be quickly replaced.
In 2023/2024, Greece saw a massive fluctuation in olive oil production. While partly due to the biological cycle of the trees, the loss of groves in key regions contributed to supply shortages. This drove the price of olive oil to record highs (>€10 per liter), fueling inflation and hurting domestic consumers.26

4.2.2 Livestock and Feed

The fires destroy grazing lands. Shepherds in the Peloponnese and Thessaly lost thousands of animals in the fires of 2021 and 2023. More critically, they lost the pasture. They are now forced to purchase expensive imported feed, rendering their businesses unviable. This economic pressure is forcing a consolidation of the industry, wiping out the small-scale, traditional shepherd in favor of industrial farming, which has its own environmental downsides.[28]

4.3 Tourism: A Model Under Threat

Tourism accounts for approximately 25% of Greece's GDP. The industry is predicated on the image of the "Greek Summer"blue skies, safe beaches, and relaxation. The wildfires are shattering this brand.

4.3.1 The Rhodes Evacuation (2023)

The evacuation of 20,000 tourists from Rhodes in July 2023 was a pivotal moment. While the evacuation was safe, the images of tourists sleeping in gyms and on airport floors went viral.

- **Immediate Cost:** TUI and other operators cancelled flights for weeks. Hotels in the south of the island faced a wave of cancellations.
- **Reputational Damage:** The event highlighted that Greece is a "climate hotspot." Travel agents reported a shift in booking patterns for 2024 and 2025, with tourists expressing hesitation about booking in July/August.
- **The "Free Holiday" Scheme:** In a desperate bid to restore trust, the Greek government offered a free week's holiday in 2024 to tourists who had been evacuated. While a clever PR move, it underscores the severity of the reputational crisis.[29]

4.3.2 The Shift to the Shoulder Season

The economic necessity is driving a shift toward the "shoulder season" (May-June and September-October). While theoretically beneficial for reducing overtourism, the Greek tourism infrastructure is rigid. Hotels are often not staffed or designed for a season that stretches into the cooler months. The fires are forcing a structural adjustment that the industry is struggling to manage.

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5. Policy, Governance, and Civil Protection

The failure to contain these fires has sparked a fierce debate about the structure and philosophy of the Greek state.

5.1 The Prevention Deficit

For decades, the Greek political system has favored suppression over prevention. It is politically more expedient to be seen buying a new Canadair water bomber than to fund the invisible work of clearing brush in a remote forest. Reports indicate that the ratio of spending has historically been 80% for suppression and 20% for prevention.30 This imbalance left the forests loaded with fuel. When the climate-driven heatwaves arrived, no amount of aerial power could stop the fires.

5.2 The Goldammer Report and Institutional Inertia

After the Mati tragedy, the government commissioned Professor Johann Goldammer to produce a report on fire management. Published in 2019, it recommended:

1. **Reunification:** Bringing the Forestry Service back into the fire management command structure (it had been separated in 1998, a move widely blamed for the current mess).
2. **Prevention Focus:** Shifting budget priorities to fuel management.
3. **Local Engagement:** Empowering municipalities to manage their own fire risks.

Implementation has been sluggish. While the government established a new "Ministry of Climate Crisis and Civil Protection," the reintegration of the Forestry Service has been bureaucratic and incomplete. The "silo effect" persists, with firefighters and foresters often operating with different maps and different priorities.[31]

5.3 The AEGIS and Anti-Nero Programs

Recognizing the failure of the status quo, the government launched two major initiatives:

5.3.1 Anti-Nero (Anti-Water)

Funded by the EU Recovery and Resilience Facility, this program (approx. €400 million) represents the first massive investment in prevention in decades. It funds the creation of firebreaks, the cleaning of forest roads, and the removal of dry biomass near settlements. In 2022-2024, contractors were visible in forests across Attica and Thessaloniki, finally doing the work of prevention. While effective, critics argue it is "too little, too late" for the accumulated fuel

loads of 30 years.[33]

5.3.2 AEGIS

The AEGIS program is a €2.1 billion procurement plan to modernize civil protection. It includes the purchase of:

- 7 new DHC-515 (Canadair) aircraft (delivery expected late 2020s).
- Amphibious aircraft for island hopping.
- Drones and surveillance radars.
  While necessary, the reliance on high-tech procurement reinforces the "technological fix" mentality. There is a risk that the state believes it can "buy" its way out of the climate crisis without addressing the fundamental land-use issues.34

5.4 The Rise of Civil Society and Volunteerism

Where the state has retreated, civil society has stepped in. The number of volunteer firefighters has surged. Law 4662/2020 formalized the status of volunteers, creating a national registry and standardizing training.[35]

Corporate Social Responsibility (CSR) has also played a role. Companies like Papastratos have "adopted" burnt forests in Attica, funding not just the planting but the critical 3-year watering and maintenance required to keep saplings alive. This model of public-private partnership is becoming the standard for reforestation, acknowledging that the state lacks the capacity to manage these projects alone.[36]

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6. Reconstruction and Future Outlook

The reconstruction of the burnt areas provides a glimpse into the future of Greece.

6.1 The Northern Evia Experiment

The "Evia Meta" committee, led by Stavros Benos, serves as the laboratory for post-fire recovery. The plan rejects the simple "replant trees" approach. Instead, it utilizes **Integrated Territorial Investments (ITI)** to rebuild the region's economy from the ground up.

Key initiatives include:

- **The New Road Axis:** A highway connecting Northern Evia to the mainland, ending decades of isolation.

- **The "Forest Technopark":** A research center focused on resilient forestry and resin innovation.
- **Cultural Tourism:** Creating hiking trails and cultural routes to attract tourists who are not just looking for beaches.

While the plan is visionary, implementation is dogged by Greek bureaucracy. Locals complain of delays. However, it represents the first time the state has attempted a *holistic* reconstruction rather than just handing out compensation checks.[37]

6.2 The Reforestation Debate

A fierce scientific debate governs the physical restoration of the land. In Northern Evia, scientists argued successfully for **natural regeneration**. The Aleppo pine is resilient; if left alone (and protected from goats), the forest will return. Artificial planting in these areas is often wasteful and can disturb the soil.

However, in Dadia (Black Pine) and parts of Attica (twice-burnt areas), natural regeneration is impossible. Here, artificial reforestation is the only option. The survival rates of these plantings are the critical metric. Early data from corporate-sponsored projects shows success rates of over 75%, but this requires intensive, expensive care.[36]

6.3 Conclusion: Adaptation or Collapse

The decade of 2015–2025 has been a painful lesson in the limits of human control over nature. The fires have revealed that the Greek state's traditional mechanisms, clientelist politics, suppression-heavy tactics, and reactive planning are obsolete in the face of the climate crisis.

The data is unequivocal: the fires will get worse. The "extreme" fire weather days will increase. The only viable path forward is adaptation.
This means:

- **Accepting Loss:** Some forests in the south will not return; they will transition to scrubland. Planning must reflect this new reality.
- **Hard Choices:** Enforcing bans on building in the forest, even if unpopular.
- **Social Resilience:** Rebuilding the trust between citizen and state, so that when the next "112" alert sounds, it is met with cooperation rather than cynicism.

Greece is the canary in the coal mine for the European south. Its struggle with the Pyrocene is not just a national tragedy; it is a warning of the future that awaits the entire Mediterranean basin.

References:

Works cited

1. Overview 2023: Greece - Lessons Not Learned - International Association of Wildland Fire, accessed November 24, 2025, https://www.iawfonline.org/article/overview-2023-greece/
2. 2023 Greece wildfires - Wikipedia, accessed November 24, 2025, https://en.wikipedia.org/wiki/2023_Greece_wildfires
3. EFFIS Annual Statistics for Greece, accessed November 24, 2025, https://forest-fire.emergency.copernicus.eu/apps/effis.statistics/estimates/GRC
4. Review of the 2025 Fire Season by WWF Greece and the FLAME ..., accessed November 24, 2025, https://www.wwf.gr/en/?20142366/Review-of-the-2025-Fire-Season-by-WWF-Greece-and-the-FLAME-Group-of-the-National-Observatory-of-Athens
5. Lessons learned from the 2024 fire season in Greece | UCP Knowledge Network, accessed November 24, 2025, https://civil-protection-knowledge-network.europa.eu/news/lessons-learned-2024-fire-season-greece
6. Forest Fires in Europe, Middle East and North Africa 2023 - Copernicus, accessed November 24, 2025, https://data.effis.emergency.copernicus.eu/effis/reports-and-publications/annual-fire-reports/Annual_Report_2023.pdf
7. Soil Loss Potential Assessment for Natural and Post-Fire Conditions in Evia Island, Greece, accessed November 24, 2025, https://www.mdpi.com/2076-3263/12/10/367
8. LEARNING FROM EVROS FIRE Evaluation report on the forest fire-fighting mechanism and proposals for its improvement, accessed November 24, 2025, https://wwfeu.awsassets.panda.org/downloads/evroslessonslearned_exsummary.pdf
9. Dadia National Park celebrates record fledging numbers - Vulture Conservation Foundation, accessed November 24, 2025, https://4vultures.org/blog/record-cinereous-vultures-fledgling-in-dadia-national-park/
10. Investigation of the effects of the Greek extreme wildfires of August 2021 on air quality and spectral solar irradiance - ACP, accessed November 24, 2025, https://acp.copernicus.org/articles/23/8487/2023/
11. Effects of the wildfires in August 2021 on the air quality of Athens through a numerical simulation | International Journal of Wildland Fire - CSIRO Publishing, accessed November 24, 2025, https://www.publish.csiro.au/wf/WF22148
12. Air Pollution and Home Blood Pressure: The 2021 Athens Wildfires - PubMed, accessed November 24, 2025, https://pubmed.ncbi.nlm.nih.gov/36306104/?utm_source=gquery
13. Long-term health effects of wildfire exposure: A scoping review - the NOAA Institutional Repository, accessed November 24, 2025, https://repository.library.noaa.gov/view/noaa/49025
14. HERACLES Group supports the sustainable recovery of the critical beekeeping sector in Northern Evia, accessed November 24, 2025, https://www.lafarge.gr/en/heracles-group-supports-sustainable-recovery-critical-beekeeping-sector-northern-evia
15. Social capital and adaptation to wildfire in southern Greece - Ecology & Society, accessed November 24, 2025, https://ecologyandsociety.org/vol30/iss3/art19/
16. Adapting to Cyclones and Wildfires in Greece: Resilient Bee Populations for Food Security, accessed November 24, 2025, https://llahub.gca.org/stories/45bb83ae-d0a4-452f-970d-0be3ea57d6b5
17. Heat Waves in Greece Endanger Bees and a Time-Honored Family Tradition | UNICEF USA, accessed November 24, 2025, https://www.unicefusa.org/stories/heat-waves-greece-endanger-bees-and-time-honored-family-tradition
18. Fires in Greece: if migrants become scapegoats - Osservatorio Balcani Caucaso Transeuropa, accessed November 24, 2025, https://www.balcanicaucaso.org/en/cp_article/fires-in-greece-if-migrants-become-scapegoats/
19. 'Fire on fire': how migrants got blamed for Greece's devastating blazes | Heinrich Böll Stiftung | Brussels office, accessed November 24, 2025, https://eu.boell.org/en/2023/11/24/fire-fire-how-migrants-got-blamed-greeces-devastating-blazes
20. The Deadly Mati Wildfire in Greece: Long-Term Psychosocial Impact on Adolescents, accessed November 24, 2025,

https://www.researchgate.net/publication/397505041_The_Deadly_Mati_Wildfire_in_Greece_Long-Term_Psychosocial_Impact_on_Adolescents
21. The Impact of Wildfires on Mental Health: A Scoping Review - PMC - NIH, accessed November 24, 2025, https://pmc.ncbi.nlm.nih.gov/articles/PMC8466569/
22. Wildfires: Greece case study shows potential for more frequent, damaging outbreaks - Scope Group, accessed November 24, 2025, https://www.scopegroup.com/dam/jcr:a3c101e0-5c39-45ae-9f62-5d98e77e7e5a/Scope%20ESG_Wildfire%20Greece_case%20study_Oct23_051023.pdf
23. THE ENVIRONMENTAL, ECONOMIC AND SOCIAL IMPACTS OF CLIMATE CHANGE IN GREECE - Τράπεζα της Ελλάδος, accessed November 24, 2025, https://www.bankofgreece.gr/publications/ClimateChange_FullReport_bm.pdf
24. Findings and strategy for addressing climate change in Greece - www . bankofgreece. gr, accessed November 24, 2025, https://www.bankofgreece.gr/RelatedDocuments/chapter_V.PDF
25. Insurance Compensations for Damages in Summer 2023 Wildfires at 49 mln, Says Report, accessed November 24, 2025, https://www.thenationalherald.com/insurance-compensations-for-damages-in-summer-2023-wildfires-at-49-mln-says-report/
26. The Olive Oil Crisis | Pulitzer Center, accessed November 24, 2025, https://pulitzercenter.org/stories/olive-oil-crisis
27. Greece's Olive Oil Yield Exceeds Projections, accessed November 24, 2025, https://www.oliveoiltimes.com/production/greeces-olive-oil-yield-exceeds-projections/138150
28. 'All my fortune was there': Fires devastate Greek livelihoods and wildlife - Al Jazeera, accessed November 24, 2025, https://www.aljazeera.com/news/2023/8/25/all-my-fortune-was-there-fires-devastate-greek-livelihoods-and-wildlife
29. Greece launches 'free' holidays for tourists who fled 2023 Rhodes wildfires - The Guardian, accessed November 24, 2025, https://www.theguardian.com/world/2024/apr/11/greece-launches-free-holidays-for-tourists-who-fled-2023-rhodes-wildfires
30. TRANSPARENCY AGAINST WILDFIRES | WWF, accessed November 24, 2025, https://www.wwf.gr/en/our_work/nature/terrestrial/programmes/transparency_against_wildfires/
31. Expert report highlights systemic failings in aftermath of deadly Mati wildfire - MacroPolis, accessed November 24, 2025, https://www.macropolis.gr/?i=portal.en.society.8061
32. Conclusions and proposals of the Independent Committee tasked to Investigate the Underlying Causes and Explore the Perspectives, accessed November 24, 2025, https://www.unisdr.org/conference/2019/globalplatform/programme/ignite-stage/assets/pdf/5cd72b8c7d88bFLFM-DG_ECHO-Presentation-08-March-2019.pdf
33. Wildfire risk management in Greece: Strengths and Recommendations, accessed November 24, 2025, https://civilprotection-program.gr/wp-content/uploads/2024/12/06-Wildfire-Risk-Management-in-Greece-DG-ECHO-1.pdf
34. Greece to enhance civil protection equipment through a €2.1 billion Aegis program, accessed November 24, 2025, https://internationalfireandsafetyjournal.com/greece-to-enhance-civil-protection-equipment-through-a-e2-1-billion-aegis-program/
35. Civil Protection Volunteering System | Υπουργείο Κλιματικής Κρίσης και Πολιτικής Προστασίας, accessed November 24, 2025, https://civilprotection.gov.gr/en/ethelontismos/systima-ethelontismoy
36. Rising from the ashes replanting Greece's fire-ravaged forests - Philip Morris International, accessed November 24, 2025, https://www.pmi.com/sustainability/case-studies-and-market-stories/rising-from-the-ashes-replanting-greece-s-fire-ravaged-forests
37. Reconstruction Plan for Northern Evia | ΔΙΑΖΩΜΑ, accessed November 24, 2025, https://diazoma.gr/en/cultural-routes/reconstruction-plan-for-northern-evia/
38. Finalized Masterplan Paves Way for Regeneration of Fire-hit Evia | GTP Headlines, accessed November 24,

2025, https://news.gtp.gr/2023/01/18/finalized-masterplan-paves-way-for-regeneration-of-fire-hit-evia/
39. North Evia: New restoration model but without any sufficient support | Heinrich Böll Stiftung - Thessaloniki Office, accessed November 24, 2025, https://gr.boell.org/en/2025/04/30/north-evia-new-restoration-model-without-any-sufficient-support
40. State of Wildfires 2023–2024 - ESSD Copernicus, accessed November 24, 2025, https://essd.copernicus.org/articles/16/3601/2024/
41. 2025 European and Mediterranean wildfires - Wikipedia, accessed November 24, 2025, https://en.wikipedia.org/wiki/2025_European_and_Mediterranean_wildfires
42. Emergency - GRC: Fire - 06-2025 - Wildfires in Greece, June-July 2025 Report - IFRC GO, accessed November 24, 2025, https://go.ifrc.org/emergencies/7557/details
43. Wildfires: Burnt area of Europe more than double a two-decade average, accessed November 24, 2025, https://www.climatecentre.org/15738/wildfires-burnt-area-of-europe-more-than-double-a-two-decade-average/
44. (PDF) Wildfire Effects on Soil Erosion Dynamics: The Case of 2021 Megafires in Greece, accessed November 24, 2025, https://www.researchgate.net/publication/361638662_Wildfire_Effects_on_Soil_Erosion_Dynamics_The_Case_of_2021_Megafires_in_Greece
45. Greece, collective trauma in the wake of endless fires, accessed November 24, 2025, https://www.balcanicaucaso.org/en/cp_article/greece-collective-trauma-in-the-wake-of-endless-fires/
46. Assessing the Impact of the 2021 Evia Wildfires through Social Media Analysis, accessed November 24, 2025, https://www.researchgate.net/publication/377078677_Assessing_the_Impact_of_the_2021_Evia_Wildfires_through_Social_Media_Analysis
47. Greece vis-a-vis climate change: tourism and agriculture affected - Blue Europe, accessed November 24, 2025, https://www.blue-europe.eu/analysis-en/short-analysis/greece-vis-a-vis-climate-change-tourism-and-agriculture-affected/
48. Weather conditions leading to deadly wildfires in Türkiye, Cyprus and Greece made 10 times more likely due to climate change - PreventionWeb.net, accessed November 24, 2025, https://www.preventionweb.net/news/weather-conditions-leading-deadly-wildfires-turkiye-cyprus-and-greece-made-10-times-more
49. Report reveals influence of climate change on wildfires during 2023-24 - Swansea University, accessed November 24, 2025, https://www.swansea.ac.uk/press-office/news-events/news/2024/08/report-reveals-influence-of-climate-change-on-wildfires-during-2023-24.php
50. Analytics and Trends over Time of Wildfires in Protected Areas in Greece and Other Mediterranean Countries - MDPI, accessed November 24, 2025, https://www.mdpi.com/2571-6255/8/8/324
51. EXECUTIVE SUMMARY Management Guidelines for the Restoration of Forest Ecosystems after the Evros Fire, 2023 - assets.panda.org, accessed November 24, 2025, https://wwfeu.awsassets.panda.org/downloads/meletirestorevros_exsummary.pdf
52. Fire severity and soil erosion susceptibility mapping using multi-temporal Earth Observation data: The case of Mati fatal wildfire in Eastern Attica, Greece - ESDAC - European Commission, accessed November 24, 2025, https://esdac.jrc.ec.europa.eu/node/66982
53. Air Pollution and Home Blood Pressure: The 2021 Athens Wildfires, accessed November 24, 2025, https://www.iatriko.gr/sites/default/files/Air%20Pollution%20and%20HBP%202022.pdf
54. Health impacts of air pollution | Greece | Europe's environment 2025 (EEA), accessed November 24, 2025, https://www.eea.europa.eu/en/europe-environment-2025/countries/greece/health-impacts-of-air-pollution
55. Assessing and Forecasting Natural Regeneration in Mediterranean Landscapes After Wildfires - MDPI, accessed November 24, 2025, https://www.mdpi.com/2072-4292/17/5/897
56. Long-term exposure to wildfire smoke associated with higher risk of death, accessed November 24, 2025, https://ysph.yale.edu/news-article/long-term-exposure-to-wildfire-smoke-associated-with-higher-risk-of-death/
57. Technical Report: Mediterranean wildfires - Interconnected Disaster Risks 2021/2022 - Amazon S3,

accessed November 24, 2025, https://s3.eu-central-1.amazonaws.com/interconnectedrisks/reports/2022/Case-studies/TR_220808_MediterraneanWildfires.pdf
58. Olive Oil Producers on Fire-Struck Evia Grumble Over Lagging Aid - The National Herald, accessed November 24, 2025, https://www.thenationalherald.com/olive-oil-producers-on-fire-struck-evia-grumble-over-lagging-aid/
59. Wildfires and tourism in the Mediterranean: Balancing conservation and economic interests, accessed November 24, 2025, https://bioresources.cnr.ncsu.edu/resources/wildfires-and-tourism-in-the-mediterranean-balancing-conservation-and-economic-interests/
60. Revenue from Summer Tourism in Greece Diminished Due to Wildfires - GreekReporter.com, accessed November 24, 2025, https://greekreporter.com/2023/08/08/the-impact-of-wildfires-on-tourism-to-greece-and-the-mediterranean/
61. Wildfires, heat waves deliver blow to southern Europe's vital tourism industry | PBS News, accessed November 24, 2025, https://www.pbs.org/newshour/world/wildfires-heat-waves-deliver-blow-to-southern-europes-vital-tourism-industry
62. Greece Bears Highest Climate-Related Economic Costs in EU due to Wildfires and Floods, accessed November 24, 2025, https://www.thenationalherald.com/greece-hardest-hit-eu-country-for-wildfires-flooding-losses/
63. Wildfires in the European Union Situation in the 2023 wildfire season up to August 30th, 2023, accessed November 24, 2025, https://www.europarl.europa.eu/meetdocs/2014_2019/plmrep/COMMITTEES/AGRI/DV/2023/08-30/EFFIS_analysis_fire_damages_2023v1_EN.pdf
64. The Role of the Hellenic Police in the Management of Natural Disasters: Legislative Framework - MDPI, accessed November 24, 2025, https://www.mdpi.com/3042-5743/35/1/52
65. Greece to bolster civil protection with new EIB loan of €220 million, accessed November 24, 2025, https://www.eib.org/en/press/all/2024-144-greece-to-bolster-civil-protection-with-new-eib-loan-of-eur220-million
66. Wildfire Risk Assessment Using the Fire Weather Index (FWI) in Greece - MDPI, accessed November 24, 2025, https://www.mdpi.com/2225-1154/13/6/109
67. The economic impact of the recent devastating floods in Greece - China-CEE Institute, accessed November 24, 2025, https://china-cee.eu/wp-content/uploads/2023/10/2023e09_Greece.pdf
68. GREECE - PILOT PROJECT AIMS TO CHANGE POLICY - International Association of Wildland Fire, accessed November 24, 2025, https://www.iawfonline.org/article/greece-pilot-project-aims-to-change-policy/
69. Report on the large wildfires of 2022 in Europe - UCP Knowledge Network - European Union, accessed November 24, 2025, https://civil-protection-knowledge-network.europa.eu/system/files/2024-12/report-on-the-large-wildfires-of-2022-in-europe-kjna32034enn.pdf
70. Mitsotakis Leads Meeting on Evia Reconstruction Plan - The National Herald, accessed November 24, 2025, https://www.thenationalherald.com/mitsotakis-visits-the-port-of-edipsos/
71. SUPPRESSION VERSUS PREVENTION-THE DISASTROUS FOREST FIRE SEASON OF 2021 IN GREECE, accessed November 24, 2025, https://www.iawfonline.org/article/suppression-versus-prevention-the-disastrous-forest-fire-season-of-2021-in-greece/