
Journalist Fellowship Paper

# Extinguishing wildfire misinformation: case-studies & avenues for improvement

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# Contents

# Preface

This report was prepared by journalist and author Niko Efstathiou. It is the product of a six-month industry-sponsored fellowship at the Reuters Institute for the Study of Journalism, funded by ECF and the Laudes Foundation.

The project draws from 20 interviews with journalists, fact-checkers, climate and forest experts, earth observation & satellite data scientists and media analysts. It is also informed by thorough literature review, multidisciplinary research and a field trip in the region of Dadia in Greece - where the biggest wildfire in European soil, which inspired this project, took place.

# Introduction

In August 2023, I was managing an awfully quiet newsroom in Athens when a reporter and I caught wind of a new wildfire. The blaze had begun in Dadia forest, a dense and lush national park near the Turkish border. It was spreading fast in the Evros region in the northeast of the country.

Within hours, it became clear this would not be just another summer fire. For the next 16 days, a mega-wildfire scorched through Dadia and the surrounding region. Aided by a prolonged heat-wave, strong gales, and a forest area left largely unattended, the wildfire torched almost 100,000 hectares of forest (roughly one and a half times the size of Greater London). Homes, animals, and centuries-old trees turned to ash. It became the largest recorded wildfire on EU soil.[1]

Despite the scale of the disaster, national media attention was surprisingly faint. Extensive wildfire coverage with on-site reporting began as late as two days after the initial blaze, by which time a large swath of the forest was already burned and the wildfire had already reached the outskirts of Alexandroupoli.[2] Outside of civil protection announcements and rather sensationalist coverage of the catastrophe, few news outlets looked into the conditions that allowed such destruction to unfold.

Even fewer tackled the disturbing rumours that were rapidly fanning out in parallel to the blaze. Misinformation spread in the form of viral and inflammatory messages on Viber and WhatsApp before spilling over to platforms like Instagram or X. Messages and posts falsely accused migrants for intentionally lighting the blaze. Within hours, the flames of misinformation had real-life consequences.

Before newsrooms could react, vigilante groups stormed through still-burning forests looking to seek revenge.[3] Some captured asylum seekers and stuffed them into trailers, filming the arrests and uploading them on social media platforms, drawing applause and calls to more violence from commenters. “Don’t just show them,” one Facebook user wrote at the time. “Throw them in the flames.”

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[1] Hélène Colliopoulou, *Desolation in Greece's Dadia park after Europe's biggest fire*, AFP, November 2023.
[2] Niko Efstathiou, *The Worst Night in the History of Alexandroupolis*, LiFO, August 2023.
[3] Katherine Hearst, Greece: *Vigilantes attack refugees after blaming them for wildfires*, Middle East Eye, August 2023.

To this day, Dadia is often remembered in Greece as a "zero-death" fire – a journalist even celebrated that fact on national television during coverage. The reality was far more sinister: those scapegoated for intentionally starting the largest fire in Europe's history were also its invisible victims. At least 20 undocumented migrants were found dead in the forest, some still holding hands.[4] Their stories were erased by the wildfire as well as the misinformation and bad coverage that followed it.

Months later, when discussing the Dadia fire with Costas Synolakis, a professor at USC Viterbi and renowned expert who studies the impact of natural hazards, he lamented the fact that the fire failed to leave any imprint on national memory and public discourse.

> *Had there been deaths of people from Alexandroupoli, perhaps people would have taken it differently. At the time, there was a little bit of attention paid to the statistic that it was the largest wildfire in the EU, and then, unfortunately, it was completely, totally forgotten.* [5]

My own experience echoed Syolakis' statements. When discussing Dadia with friends or colleagues just months later, some couldn't recall it at all. "Which fire was that?" they would ask – referring to the largest wildfire in the modern history of our continent.

Dadia has been etched in my conscience as a collective failure, not only of Greece's wildfire preparedness and response mechanism, but of its information ecosystem.

From sluggish and surface-level reporting to a near-total silence on structural causes, and from letting hate-fuelled rumours run unchecked to allowing the disaster to quietly vanish from public discourse, journalism failed to cover the wildfire at every stage. The consequences of that failure were not simply reputational, but deeply human.

The ashes of Dadia left me with a burning question: what is the true purpose of journalism in the context of megafires? Can it build the capabilities to stop viral misinformation in an agile and effective way, and meet the challenge of covering wildfires in a way that truly serves the public?

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[4] *Greece wildfire kills 18 suspected asylum seekers in Dadia region*, Al Jazeera, 22 Aug 2023.
[5] Hellenic American Leadership Council, *The Greek Current Cafe: The Threat of Wildfires*, June 2025.

## The age of fire

If wildfires once felt like unpredictable disasters, they are now an annual certainty. The World Resources Institute reports that wildfires today burn twice as much tree cover annually as they did two decades ago.[6] 2024 was recorded as the most extreme year for forest fires on record, with at least 13.5 million hectares of forest burned worldwide, corresponding to roughly the size of the entire country of Greece.[7] The same year was confirmed by the Copernicus Climate Change Service (C3S) to be the warmest year on record globally, and the first calendar year that the average global temperature exceeded 1.5°C above its pre-industrial level.[8]

Today no day passes without a fire burning somewhere. In some ecosystems like the Arctic tundra, fires are now documented routinely where they were once virtually non-existent.[9] And in the Mediterranean, which is warming 20% faster than the global average, extended heat waves are drying out forest land faster than before and summer winds are intensifying risk, leaving regions like Greece, Italy, Spain, and Turkey to routinely face fire conditions of "extreme severity."

We are now well within the age of fire. The information ecosystems we build today will shape how we survive it. Journalism must evolve from chasing flames, and the falsehoods that follow, to anticipating and meeting them with readiness.

## The public interest and the journalistic imperative

"The public interest" is a phrase so ubiquitous in journalism that it may often lose meaning or cause eye-rolls. But in regulatory and ethical codes, it is clearly defined as a core component of the purpose of journalism. The UK's Press Complaints Commission, a standard for the press worldwide, describes the public interest as encompassing three key functions:

a) detecting or exposing crime or serious misconduct;

b) protecting public health and safety;

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[6] James MacCarthy, Jessica Richter, Sasha Tyukavina and Nancy Harris, *The Latest Data Confirms: Forest Fires Are Getting Worse*, World Resources Institute, July 2025.
[7] *Ibid*.
[8] European Civil Protection and Humanitarian Aid Operations, Wildfires, July 2025.
[9] Feurdean, A., Fulweber, R., Diaconu, A.-C., Swindels, G. T., and Gałka, M.: *Fire activity in the northern Arctic tundra now exceeds late Holocene levels, driven by increasing dryness and shrub expansion*, EGUsphere [preprint].

c) preventing the public from being misled by false statements or actions.[10]

Wildfires directly touch all three components of the journalistic imperative. Investigative coverage can expose both arson, unintentional blazes or negligence that leaves forest areas unprotected and ready to burn. Life-saving information about evacuations, fire movements or weather patterns must reach communities quickly and clearly. And when falsehoods spread about causes, culprits, or climate, journalism has a duty to set the record straight.

Reporting on wildfires, therefore, is not just another beat, but an essential exercise at the core of the purpose of journalism. When that exercise fails, the consequences ripple far beyond headlines. If communities are misled about what causes wildfires, they won't support or press for the policies needed to prevent them. If people don't trust official sources, they may not heed evacuation orders at a safe pace. And if misguided hate or attribution is allowed to fester unchecked, it can escalate into violence as the flames are still burning, as it tragically did in Dadia.

Journalistic institutions survive only if they remain relevant and trusted by the public. [11] At moments of crisis and extreme weather events, this trust is most urgently tested. If newsrooms remain editorially and structurally unprepared, they miss the opportunity to provide value at a time of high public demand for information and answers and to capture this public interest. The result is a void, often readily filled by misinformation.

## Project scope: mapping the information wildfire

This project was born from the ashes of Dadia, and shaped by a sense of journalistic failure, and a desire to understand how that failure might be prevented. The goal here is to explore how journalism can better cover wildfires in the 21st century, as it relates to both the climate reality and our information habits, and how it can more effectively extinguish the misinformation that so often follows them.

To do so, this project unfolds in three parts.

First, it begins with a necessary zoom-out. Drawing from climate science, psychology, and media theory, it investigates why wildfires are particularly prone to

[10] Danny Crichton, Ben Christel, Aaditya Shidham, Alex Valderrama, Jeremy Karmel, *Journalism in the Digital Age – a project for CS181*, Stanford University.
[11] *Ibid.*

misinformation, and what makes this misinformation stand out. It examines wildfires in the context of extreme weather events, but also looks at what sets them apart: from their complex attribution when human and climate elements both play a part, to the prolonged fears and anxieties they generate.

Second, the paper zooms in, traveling across four wildfire case studies, each situated in a different geographical and informational context. From the forests of Dadia to the hills of Los Angeles, and from the mountains of southwestern Turkey to the coasts of Chile, the paper dissects not only the falsehoods that emerged but also the media gaps that let them grow. It looks at information deserts and suppression, editorial blind spots and systemic inequalities.

Finally, this paper aims to offer a path forward. Drawing from expert interviews, newsroom best practices, and lessons from other disciplines, it attempts to sketch a blueprint for wildfire information resilience by suggesting four avenues for improvement for wildfire coverage and misinformation debunking.

These include reframing fact-checking and wildfire coverage, creating explainers and accessible evergreen wildfire content, using satellite data and remote sensing to pre-emptively highlight fire risk, and establishing reporter training programmes in wildfire literacy – building season-ready networks of local experts, and rethinking wildfire coverage with new angles and human-centred storytelling.

The overarching thesis behind all four avenues suggested is that when it comes to covering wildfires, journalism requires a mindset shift: wildfire coverage and debunking must become proactive, not reactive. Just as emergency responders must routinely prepare for fire season, so too must journalists and newsrooms, by building and maintaining a storage of wildfire content and by mapping out newsroom practices long before the ignition of the fire.

The crisis, after all, is already here.

# Anatomy of a firestorm: what makes wildfires prone to misinformation?

As the U.S. Department of Homeland Security's disaster framework explains: wildfires are prone to rampant misinformation by their very nature.[12] Like all extreme weather events, they unfold rapidly, stir intense emotions – fear, anger, confusion – and evoke an element of uncertainty. The complex scientific realities explaining them aren't always intuitive or easily communicable. It's little wonder that this situationally induced threat or anxiety leads to an increased propensity for conspiracy thinking.[13]

Marco Silva, a senior journalist for BBC News specialising in climate disinformation, has worked on several stories covering extreme weather events, from blazes to floods, debunking bad information. He argues that extreme weather events share a common thread, a number of core characteristics that make them vulnerable to recurring patterns of misinformation, especially in today's information ecosystem.

> *"By definition, these are all fast-paced events that generate a lot of uncertainty. In a digital era where we are accustomed to having all answers and information available, our lack of ability to give people immediate answers about the causes, what's going on, or how we can respond creates a vacuum."*

That vacuum, Silva argues, is quickly filled by speculation – sometimes rooted in fragments of fact, often completely invented. He notes that false claims follow familiar paths: "blaming the cause of the disaster, questioning emergency responders or political actors, invoking shadowy globalist agendas, or scapegoating marginalised communities", among others.

The expectation of real-time answers in today's media environment only amplifies the spread, making misinformation feel faster, stickier, and harder to counter.

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[12] US Department of Homeland Security, Social Media Working Group for Emergency Services and Disaster Management, *Countering False Information on Social Media in Disasters and Emergencies*, March 2018.

[13] Grzesiak-Feldman, Monika. *The effect of high-anxiety situations on conspiracy thinking*, Current Psychology 32 (2013): pp100-118.

Research also suggests another pattern shared by most extreme weather events, due to their link with the climate change: misinformation that not only disrupts short-term emergency responses, but also aims to shape long-term public perception of climate change, denying its existence or its role in the disaster.[14]

In short, like most extreme weather phenomena, wildfires carry a high degree of uncertainty, generate heightened emotions, create an information void in an era of expectation for immediate answers, and are subject to anti-climate change narratives and sentiments.

But while the disaster framework helps us understand the conditions for wildfire misinformation, it also risks obscuring what makes reporting on wildfires uniquely challenging. In fact, there are four elusive variables that distinguish wildfires from most disasters and other extreme weather phenomena, making their coverage more challenging, fact-checking far more tricky, and misinformation more distinctive.

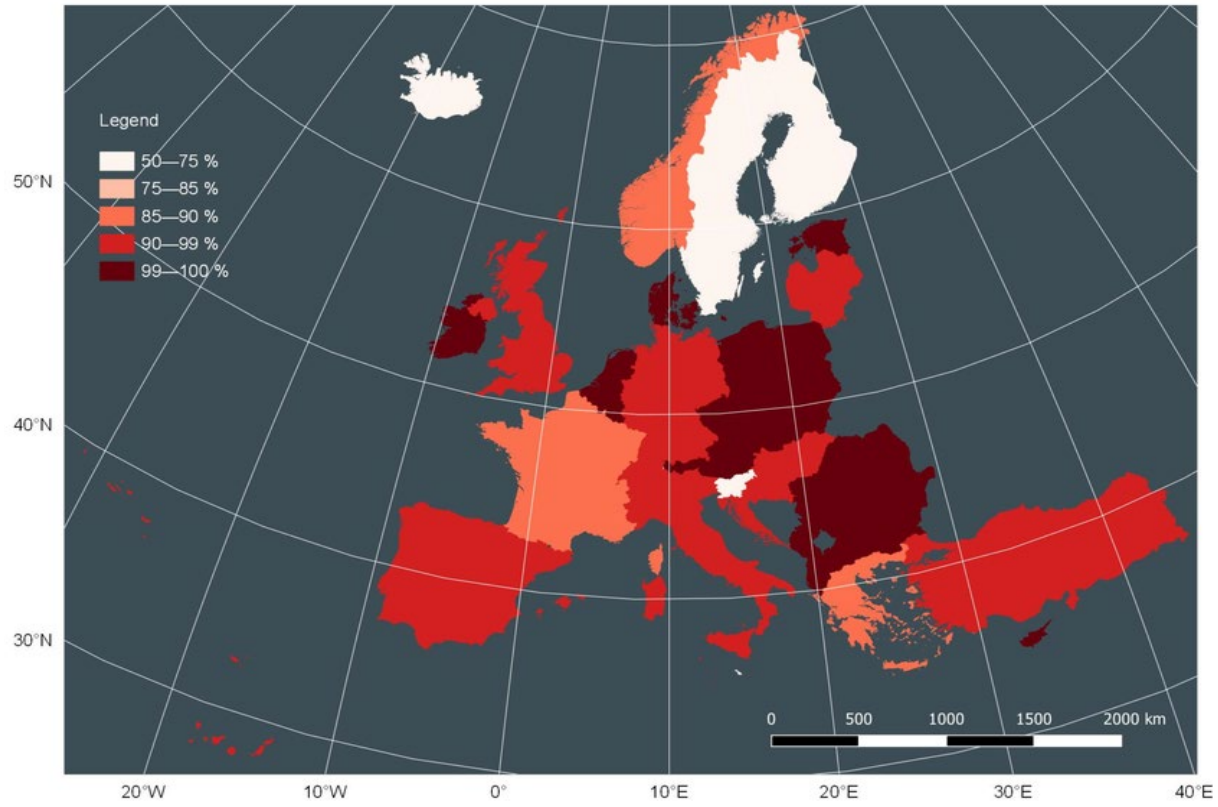
### 1. The attribution challenge

Earthquakes happen when there is sudden movement along fault lines in tectonic plates, it floods when heavy rainfall exceeds the ability of the ground to absorb it, and hurricanes form when warm and moist air over the ocean rises and condenses, releasing heat and fuelling the storm.

Wildfires, on the other hand, often start because of humans. The numbers are quite blunt: researchers estimate that around 90% of wildfires globally are anthropogenic, meaning they are directly caused by human activity.[15]

Anthropogenic wildfires could be unintentional – a discarded cigarette, unattended campfires, burning debris, bad maintenance of electrical grids or equipment malfunctions. They can also be intentional, as is the case with arson or controlled burning. Just 10% of wildfires occur due to natural causes, the most common of which is lightning, and the second most common, volcanic activity.

[14] Daume, Stefan. *Online misinformation during extreme weather emergencies: short-term information hazard or long-term influence on climate change perceptions?*, Environmental Research Communications (2024).
[15] Tech briefs, *Where the wild fires are*




*Percentage of burned area from anthropogenic wildfire per country in Europe*[16]

The exact percentages of human ignitions of wildfires vary around the globe: in the U.S., research suggests 84% of fires that occurred last decade were due to humans, while in some parts of the Mediterranean, scientists suggest it could be as high as 95%.[17,18] Local variations aside, human activity remains the dominant ignition source globally.

That does not mean there is no link between wildfires and climate change. Human-induced climate change creates the perfect conditions for wildfires to spread, regardless of the cause of ignition: it dries out forests and land, enhances their likelihood and frequency, and heavily challenges suppression efforts.[19]

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[16] Map retrieved from: Dijkstra, J. Anthropogenic and Lightning Fire Incidence and Burned Area in Europe. Land 2022, 11, 651.
[17] Balch, Jennifer K., et al. *Human-started wildfires expand the fire niche across the United States*, Proceedings of the National Academy of Sciences 114.11 (2017): 2946-2951.
[18] Jones, Matthew W., et al. *Global and regional trends and drivers of fire under climate change*, Reviews of Geophysics 60.3 (2022): e2020RG000726.
[19] Jones, M. W., Smith, A., Betts, R., Canadell, J. G., Prentice, I. C., & Le Quéré, C. (2020). *Climate change increases the risk of wildfires*.

Scientists agree that climate change has led to a noticeable increase in the frequency and severity of fire weather, increasing the risks of wildfires and extending wildfire seasons across the globe.

Sam Fraser-Baxter is the communications manager at World Weather Attribution (WWA), an international scientific project that publishes rapid studies investigating the influence of climate change on individual extreme weather events. He and his team study all kinds of extreme phenomena, including extreme heat waves, droughts, floods, but also wildfires, documenting links to climate change. Fraser-Baxter told me the challenging, multivariable nature of blazes make them stand out from the rest – even for scientists.

> *"Wildfires are definitely the most complex type of extreme weather events, and they're also the hardest to do an attribution study on."*

Wildfire attribution studies, like the ones conducted by WWA, typically examine how global warming worsened hot, dry, and windy conditions, drying out vegetation and increasing both ignition and spread risk. Metrics like the Hot-Dry-Windy Index (HDWI), which incorporates temperature, wind speed, and atmospheric moisture, help capture these climate signals.

Their relevance varies depending on local vegetation and geography, but the one common element for fires around the world, Fraser-Baxter explained, is that climate change is increasing air temperatures and causing longer periods of heat. "This is drying out vegetation, making forests and trees more flammable. I think that's something that can be said for every wildfire in the world," he said.

Still, this confluence of human and climate variables in the way wildfires start and spread creates a challenging attribution reality – one that newsrooms often gloss over or audiences fail to grasp. "Wildfires are complex events influenced by a range of factors, and I think there's a risk of oversimplifying how you communicate the climate change link," Fraser-Baxter noted. He noted that sceptics often seize on the fact that most wildfires are human-caused, through arson or accidents, to deny any link to climate change altogether.

As important as it is for newsrooms to explain climate links, Silva added, it is also crucial not to "jump the gun" and immediately link a particular extreme weather event to climate change.

> *"When there is uncertainty, we need to reflect that uncertainty. If the audience perceives us as blaming everything on climate change, even when scientists don't have the evidence yet, then we risk losing their trust."*

Undermining the credibility of scientific explanations creates fertile ground for alternative narratives to spread.

There is an additional challenge for information due to the prevalence of human ignition: the dominance of a perpetrator or "*whodunit*" narrative. Investigations into the ignition cause of wildfires tends to take a long time or can be inconclusive. In several countries, including Greece and Turkey, little to no official authority reports are published following wildfires. Wven in cases where anthropogenic wildfires may have been caused unintentionally, arsonist theories are far more prevalent, emboldened by public anger and desire to seek justice and a culprit for the damage of the wildfires.[20]

Elias Tziritis, Greece's WWF coordinator for forest fires, has an additional and fascinating insight for wildfires, which complicates things even further. Both empirical evidence and forensic psychology suggests that arsonists may "get aroused or triggered after a wildfire has been ignited, often while watching their coverage on television", and may sometimes venture out to start second ignitions of their own to add to the spread of the raging wildfire. This further clouds attribution, introducing even more uncertainty around ignition sources.

In short, the audience's expectation of a perpetrator behind the ignition of wildfires as well as the complexity, uncertainty and information void often left behind create the perfect conditions for blame narratives – sometimes misconstruing intentionality, and other times entirely inventing scapegoats.

[20] Dubinko, Nikolai, et al. "Analysing Emotional and Topical Patterns in Conspiracy Theory Narratives: a Discourse Comparative Study on the 2023 Hawaii Wildfires." *2024 14th International Conference on Pattern Recognition Systems (ICPRS)*. IEEE, 2024.

The centuries-old attribution challenge of wildfires doesn't only obscure climate coverage or create perpetrator narratives. As Karen Rebelo, a seasoned fact-checker for Boom Live, explained: it also leads to scapegoating, which specifically targets the most marginalised communities to explain the uncertainty.

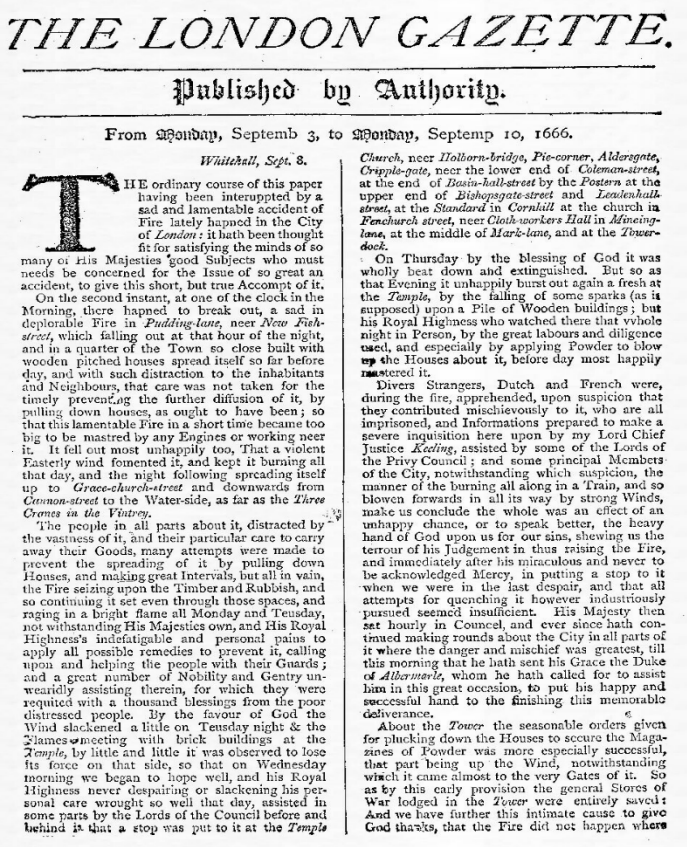
"Those who are the most marginalised in society will always be the first ones to be attacked," Rebelo said. "Whether it's women, the poor, a minority community or migrants who are economically disempowered, these are always first in the line of firing for anybody who wants to spread misinformation. These are all familiar targets, and it's understandable why: there is nobody on their side to make that rebuttal or to put their voice out."

**A centuries-old challenge: The Great Fire of London**

Travel back half a millennium to look at the earliest documentation of a wildfire in the Western world, and you will find the exact same patterns of blame-based misinformation at play.

The Great Fire of London started shortly after midnight on Sunday 2 September 1666 when a blazing fire broke out at the bakery of Thomas Farriner on Pudding Lane after he failed to properly extinguish his oven. As the summer of 1666 had been warmer and dryer than usual, the wooden buildings in London were tinder dry, allowing the fire to spread across the City with unprecedented speed, facilitated by the presence of strong winds.

The official account of the wildfire in the *London Gazette* concluded that the fire was an accident. It stressed the "role of God in starting the flames and of the king in helping to stem them", while royal proclamations were issued to forbid people to "disquiet themselves with rumours of tumults". [21]



THE LONDON GAZETTE.

Published by Authority.

From Monday, Septemb 3, to Monday, Septemp 10, 1666.

*Whitehall, Sept.* 8.

THE ordinary course of this paper having been interupted by a sad and lamentable accident of Fire lately hapned in the City of *London*: it hath been thought fit for satisfying the minds of so many of His Majesties good Subjects who must needs be concerned for the Issue of so great an accident, to give this short, but true Accompt of it.

On the second instant, at one of the clock in the Morning, there hapned to break out, a sad in deplorable Fire in *Pudding-lane*, neer *New Fish-street*, which falling out at that hour of the night, and in a quarter of the Town so close built with wooden pitched houses spread itself so far before day, and with such distraction to the inhabitants and Neighbours, that care was not taken for the timely prevent,ng the further diffusion of it, by pulling down houses, as ought to have been; so that this lamentable Fire in a short time became too big to be mastred by any Engines or working neer it. It fell out most unhappily too, That a violent Easterly wind fomented it, and kept it burning all that day, and the night following spreading itself up to *Grace-church-street* and downwards from *Cannon-street* to the Water-side, as far as the *Three Cranes in the Vintrey*.

The people in all parts about it, distracted by the vastness of it, and their particular care to carry away their Goods, many attempts were made to prevent the spreading of it by pulling down Houses, and making great Intervals, but all in vain, the Fire seizing upon the Timber and Rubbish, and so continuing it set even through those spaces, and raging in a bright flame all Monday and Teusday, not withstanding His Majesties own, and His Royal Highness's indefatigable and personal pains to apply all possible remedies to prevent it, calling upon and helping the people with their Guards; and a great number of Nobility and Gentry unweariedly assisting therein, for which they were requited with a thousand blessings from the poor distressed people. By the favour of God the Wind slackened a little on Teusday night & the Flames meeting with brick buildings at the *Temple*, by little and little it was observed to lose its force on that side, so that on Wednesday morning we began to hope well, and his Royal Highness never despairing or slackening his personal care wrought so well that day, assisted in some parts by the Lords of the Council before and behind it that a stop was put to it at the *Temple Church*, neer *Holborn-bridge*, *Pie-corner*, *Aldersgate*, *Cripple-gate*, neer the lower end of *Coleman-street*, at the end of *Basin-hall-street* by the *Postern* at the upper end of *Bishopsgate-street* and *Leadenhall-street*, at the *Standard* in *Cornhill* at the church in *Fenchurch street*, neer *Cloth-workers Hall* in *Mincing-lane*, at the middle of *Mark-lane*, and at the *Tower-dock*.

On Thursday by the blessing of God it was wholly beat down and extinguished. But so as that Evening it unhappily burst out again a fresh at the *Temple*, by the falling of some sparks (as is supposed) upon a Pile of Wooden buildings; but his Royal Highness who watched there that whole night in Person, by the great labours and diligence used, and especially by applying Powder to blow up the Houses about it, before day most happily mastered it.

Divers Strangers, Dutch and French were, during the fire, apprehended, upon suspicion that they contributed mischievously to it, who are all imprisoned, and Informations prepared to make a severe inquisition here upon by my Lord Chief Justice *Keeling*, assisted by some of the Lords of the Privy Council; and some principal Members of the City, notwithstanding which suspicion, the manner of the burning all along in a Train, and so blowen forwards in all its way by strong Winds, make us conclude the whole was an effect of an unhappy chance, or to speak better, the heavy hand of God upon us for our sins, shewing us the terrour of his Judgement in thus raising the Fire, and immediately after his miraculous and never to be acknowledged Mercy, in putting a stop to it when we were in the last despair, and that all attempts for quenching it however industriously pursued seemed insufficient. His Majesty then sat hourly in Councel, and ever since hath continued making rounds about the City in all parts of it where the danger and mischief was greatest, till this morning that he hath sent his Grace the Duke of *Albemarle*, whom he hath called for to assist him in this great occasion, to put his happy and successful hand to the finishing this memorable deliverance.

About the *Tower* the seasonable orders given for plucking down the Houses to secure the Magazines of Powder was more especially successful, that part being up the Wind, notwithstanding which it came almost to the very Gates of it. So as by this early provision the general Stores of War lodged in the *Tower* were entirely saved: And we have further this intimate cause to give God thanks, that the Fire did not happen where

However, many angry residents of the City were inclined to put the blame for the fire on foreigners – particularly Catholics, the French, and the Dutch – leading to violence and the arrest of foreigners across England.

[21] Cover retrieved from Gazette's online archive.

## 2. The timing challenge

When faced with the flames of a wildfire, humans often note the feeling that time suspends. Katerina Papoutsi, a resident of Alexandroupoli, remembers seeing the wildfire of Dadia climb the hill behind her house, approaching the city from the north, and feeling totally paralysed.

> *"We knew we had to evacuate, but it was impossible not to stand still. When we first saw the flames, it felt like time froze'.*

When it comes to wildfires and information, time also becomes a challenge. In fact, there are three distinct challenges with timing that set wildfires apart from other extreme weather phenomena, amplifying information voids and conspiracies, and leading to incomplete coverage and various kinds of misinformation.

The first has to do with the prolonged nature of the disaster itself. Unlike earthquakes or floods, which tend to be more concentrated in time, wildfires can burn for weeks or even months. Before 1986, wildfires in the U.S. lasted an average of 8 days; in the past decade, that has risen to 37.[22] Climate conditions mean that not only are regions at a higher risk of wildfires for a greater number of months, but that individual fires are burning for longer periods of time, and are far more difficult to control.

Naturally, the longer duration of wildfires amplifies the psychological variables that make misinformation and conspiracies so resonant. As research suggests, humans have a cognitive desire to embrace conspiracies to reduce uncertainty about the cause of unexplained, threatening events.[23] They provide simple answers for unanswered questions, point to an enemy that can be blamed for the problem, and help explain negative events, allowing people to retain a sense of safety and predictability.[24]

The appeal of conspiracies increases with time, as the prolonged nature of wildfires leaves audiences with lingering anxieties and uncertainties. We saw a similar dynamic during the COVID-19 pandemic: early uncertainty was accepted, but as the pandemic

[22] Westerling, Anthony L., et al. "Warming and earlier spring increase western US forest wildfire activity." *science* 313.5789 (2006): 940-943.
[23] Kossowska, Małgorzata, and Marcin Bukowski. "Motivated roots of conspiracies: The role of certainty and control motives in conspiracy thinking." *The psychology of conspiracy*. Routledge, 2015. 145-161.
[24] *Ibid*.

and lockdowns dragged on, public patience wore thin and conspiracy theories flourished.[25]

It is difficult to communicate uncertainty on day one a wildfire, let alone in the process of weeks of flames raging. As Silva pointed out, though science has made leaps when it comes to linking specific extreme weather events to climate change, "science is still very complex and science takes time. It's not always possible if a wildfire or a flood were to hit us right now, to have all the answers about the causes tomorrow."

The lingering disaster and the prolonged nature of fears, anxieties and uncertainty don't just make people more prone to wildfire misinformation: they also attract actors who want to intentionally spread misinformation, exploiting the psychology of disaster for various gains or motives. These actors and practices can range from disaster-baiting and AI-generated images for clicks and virality (as was the case with the famous Hollywood sign on fire), to weaponised disinformation campaigns by politicians or even foreign countries, as was the case with China's involvement in AI-powered disinformation following the Maui wildfires.


*An AI-generated image depicting a fake Hollywood sign on fire. @WTP_REPORT/Annotation by NPR*

The second timing challenge has to do with wildfire seasonality, and how they may find newsrooms in a particularly vulnerable place. Though climate change is extending wildfire seasons globally, there is still a far higher probability they will occur during the hottest periods of the year: summer in the Northern hemisphere, and winter in the South. In many parts of the world, this tends to coincide with holiday season, leaving newsrooms understaffed and under-resourced.

[25] Stein, Richard A., et al. "Conspiracy theories in the era of COVID-19: A tale of two pandemics." *International journal of clinical practice* 75.2 (2021): e13778.

Apostolos Staikos, a Greek journalist for Euronews who also visited the Evros region after the 2023 Dadia wildfire for an audio documentary, said:

> *"Most wildfires in Greece happen in late summer when many colleagues are on leave. This means that very few of us are behind to share the shifts, so the channel has to judge that something is really important to dispatch us and not get the story from a news agency."*

The issue of understaffed newsrooms affects misinformation in multiple ways. It leads to less content produced by newsrooms, allowing conspiracies or falsehoods to flood the zone in response to information demand. It means journalists are often overstretched and lack the time to fact-check or debunk emerging conspiracies. And it sometimes leads to misinformation published by the media itself, due to timing pressures, inexperienced reporters and lack of editorial oversight.

The third timing challenge is a familiar one across disasters: the extreme speed at which wildfires vanish from the news cycle after the disaster hits. Even deadly, large-scale fires can be eclipsed overnight, and public attention quickly shifts away – before time-intensive work like investigations about the causes of the wildfire or debunking conspiracies can run their course and be published.

Chilean journalist Muriel Alarcón has been covering the deadly 2024 Valparaíso fires, one of the most devastating in the country's recent history. The deadly blaze monopolised media coverage and public discourse for 48 hours, she said, after which it disappeared from the news. Coincidentally, just days after the flames broke out, Chile's former president Sebastián Piñera died in a helicopter crash — an unrelated event that completely overtook the national news agenda.

> *"It kind of capped the catastrophe. The Valparaiso story was completely erased from media outlets. Everyone was talking about the fires for two days, but then after the President's accident, everybody talked about that instead – and nobody talked about the fires again, at all".*

When journalism moves on before the truth can catch up, unchecked misinformation is often what's left behind. What's more, areas and communities affected by wildfires are left with a lingering feeling of abandonment or media exploitation – a sentiment

described both by Staikos and Alarcón, but also reporters in Altadena, Los Angeles and the Turkish coast of Marmaris. The alienation felt by communities affected by the blaze pushes them further away from traditional or legacy media, making conspiracies about the "true causes" of wildfires more appealing and stickier.

### 3. Preparedness and the "boring journalism" challenge

Wildfires – with their dramatic flames, unpredictable pace and toll on human lives and property – undeniably make for sensational storytelling, and often sensationalist journalism.

Coverage mirrors the language of disaster thrillers, with "infernos engulfing villages", "races against time", or "firestorms of destruction". News segments feature footage of helicopters battling flames mid-air, scorched earth from drone shots, and residents fleeing with minutes to spare. And when the cause of a wildfire is unclear, the story takes on the tone of a crime investigation, speculating on arsonists, saboteurs, or shadowy actors. These narratives are gripping, urgent, and easy to frame.

By contrast, the stories that explain why forests were vulnerable to wildfires in the first place often lack the immediacy and visual drama that breaking news demands. Coverage of forest policy, neglected firebreaks, accumulation of flammable biomass, underfunding of prevention services or budgetary gaps are rarely part of coverage, let alone front-page material.[26] But, as wildfire seasons grow longer and fires more severe, these quieter stories are the ones that may hold the real key to prevention.

Journalism too often arrives at the fireline just as the blaze starts. But it is in the months and years beforehand – in administrative failures and accumulated dry biomass – where the conditions for catastrophe take root. [27] Unfortunately, both due to editorial and audience pressures, these stories fall in the dumpster of "boring journalism" for newsrooms. The lack of coverage of long-term preparedness practices, thus, leads to misinformation and low information on prevention, ultimately creating a lack of interest and accountability.

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[26] Nilsson, Sofia, and Ann Enander. *"Damned if you do, damned if you don't": Media frames of responsibility and accountability in handling a wildfire.* Journal of Contingencies and Crisis Management 28.1 (2020): 69-82.

[27] Jazebi, Saeed, Francisco De Leon, and Albert Nelson. *Review of wildfire management techniques—Part I: Causes, prevention, detection, suppression, and data analytics*. IEEE Transactions on Power Delivery 35.1 (2019): 430-439.

This challenge becomes more crucial when accounting for the fact that long-term forest management can dramatically reduce wildfire reach, intensity, and cost. Lack of preparedness or abandoned forest lands could transform a spark into a mega wildfire, regardless of the cause of ignition. Though all extreme weather phenomena should include a level of preparedness or mitigation, wildfires stand out in how important this pre-emptive policy can be in minimising the impact and spread. But this slow, preventative work seldom makes the news.

An additional and frequent challenge is that official data or reports on forest management are often lacking, because states don't even authorise them. Despite its recurrent blazes, Greece lacks a "systematic documentation of forest-fire behaviour or an official record" and the key data that could be used to compile it are often missing or inaccessible.[28] Without that baseline knowledge, policy-makers struggle to design effective fuel-reduction or early-warning strategies, and the fire brigade has little evidence to refine suppression tactics.

The result is a glaring information gap that we can see echoed in wildfires around the world: media coverage fixates on flames and aftermath, while the most pivotal piece of the story (whether prevention efforts were funded, monitored, and enforced) goes unexplored.

A recent WWF Greece report on the Dadia wildfire, the first of its kind, lists some of the unglamorous fixes that rarely earn headlines. They include policies such as sustained thinning of overgrown pine, year-round maintenance of firebreaks, incentives for small-scale grazing and timber removal to keep fuel loads low, and on-the-ground training so firefighters know where these breaks exist and how to use them. Such administrative details may sound prosaic, but they explain why Greece's burned area has increased even as aircraft fleets, budgets, and personnel have sometimes grown.

In other words, more helicopters cannot compensate for forests left unmanaged, vulnerable, and ready to burn. But translating policy jargon into compelling journalism is hard. Without it, editors and audiences alike are blind to the root causes of repeat catastrophe, contributing to the perpetuation of misinformation.

[28] WWF Greece, *Learning from Evros Fire: Evaluation report on the forest fire-fighting mechanism and proposals for its improvement*, May 2024.

Sensational narratives often step into that vacuum, facilitated not just by conspiracists but also by media coverage and often the state itself. "People love conspiracy theories — but so does the state administration," said Tziritis, a former volunteer firefighter himself who has watched the discourse around Greek wildfires for over two decades. Blaming foreign spies or shadowy arsonists shifts the debate to hide real problems like lack of planning and prevention, and gaps in the mechanism behind a veil of mystery. By fuelling intrigue, officials deflect scrutiny and citizens feel absolved. Tziritis has watched this pattern for years and sees complicity on both sides:

> *"Conspiracies cover the state's weaknesses – and people accept it because it is easier than demanding accountability for forest management that never happened."*

## 4. Fire paradoxes and the challenge of counter-intuitiveness

The complexities of preparedness and attribution, as well as the lack of attractive stories about them, aren't the only reasons wildfire coverage is susceptible to bad information. As is the case with most extreme weather events, their nature is also rooted in contradiction or counter-intuitiveness, which can trip up even the most careful newsroom. And while all extreme weather events carry a layer of scientific nuance, wildfires have features that particularly invert common sense.

When coverage misses these counterintuitive truths, it leaves behind gaps that conspiracy theories or scapegoating are quick to fill. Below are five examples of wildfire paradoxes, identified from interviews and literature review, that may explain why journalism about wildfires often falls short, and why misinformation thrives in the gaps and failures it leaves behind.

### a) The fire paradox

Perhaps the most misunderstood reality of wildfire management is that putting out every fire could potentially lead to worse ones down the line, when there is no preparedness policy. Known as the "fire paradox", this concept refers to the way aggressive suppression of fires, developed throughout the 20th century in places like the U.S., allowed dangerous levels of flammable material to accumulate in forest surfaces. By extinguishing small, low-intensity fires that naturally thinned out dry brush, U.S. authorities unintentionally paved the way

for larger, more destructive megafires.[29] Tziritis draws on the U.S. experience to explain this paradox and how it guides policy around the world:

> *"The Americans built the most sophisticated suppression system in the world, and it worked – for a while. But a decade later, when a fire broke out it burned more intensely than ever before, due to a high accumulation of fuel and flammable dry vegetation."*

The lesson, as he put it, is that successful repression of fires, without prevention and preparedness, will lead to worse outcomes. Thinning, prescribed burns, community involvement, must be at least as strong as the suppression effort, or the entire system risks collapsing under the weight of its own success.

Because of the lack of interest and media coverage on preparedness initiatives, the public often pushes for more firefighters, more planes and more suppression capabilities with no emphasis on prevention, unintentionally perpetuating the fire paradox.

### b) The human activity paradox

It seems intuitive that if humans cause most wildfires, fewer people in a forest should mean fewer fires. But the relationship between people and fire risk isn't so simple. Stella Girtsou, a forest fire prediction researcher at the National Observatory of Athens, highlights a strange contradiction: "Where there are no people, there is no forest management, and no management means weeds grow, biomass builds up, and fires can spread uncontrollably." In regions of rural abandonment that she has monitored, like parts of Greece or Spain, this has become a recurring reality: once-cultivated land has turned to unmanaged forest due to years of abandonment, creating perfect conditions for fire to spread.

But where people are present, the risks increase in a different way. Accidental ignitions from agriculture, vehicles, or powerlines are far more likely. "It's a paradox," Girtsou said. "Humans clear land and manage vegetation, but also start fires. In their absence, forests become dangerous, but their presence brings

[29] Ingalsbee, Timothy. *"Whither the paradigm shift? Large wildland fires and the wildfire paradox offer opportunities for a new paradigm of ecological fire management."* International Journal of Wildland Fire 26.7 (2017): pp557-561.

new dangers too." The double-bind frustrates simple narratives. Journalism that fails to acknowledge both the risks of neglect and bad interference often ends up misrepresenting the true drivers of fire danger.

### c) The arsonist mirage

The familiar accusation of arson arises with most wildfires, often led by footage showing multiple hotspots of fires springing up several yards away from the front line. Audiences see flames igniting simultaneously and conclude that this must be irrefutable evidence of multiple coordinated arsonists. However, these so-called "spot fires" are frequently natural. When vegetation is extremely dry, embers can travel distances even up to a kilometre ahead of the main blaze, igniting new fires through a scientifically documented process called spotting.

"People think they're seeing criminals lighting fires," said Tziritis, "but they're seeing how fire behaves in extreme weather and wind conditions. It's actually physics, not conspiracy" he added, recalling that in the Dadia fire, a 200-meter firebreak was overtaken by spot fires. But video or footage of the phenomenon released on social media often creates an arsonist mirage that takes off given the appetite for a blame narrative.

### d) Controlled fires

Another complexity rarely explained in media coverage is that not all fires are bad. In fact, ecologists have long relied on low-intensity surface fires to clear out fuel, rejuvenate soil, and reduce future fire risk. In parts of Spain and Canada, authorities now adopt and monitor these blazes under a policy known as controlled or prescribed burning.[30]

But when such a fire occurred in Greece's Pieria region in spring 2023, burning 1,011 hectares (roughly 1,000 football fields), public understanding lagged behind. An expert forester went on air to explain the fire was "low intensity" and "ecologically neutral", introducing the concept of a controlled fire, but the journalist interviewing him dramatically refused to accept this framing. "They started cursing [him] out," said Tziritis. "Accusing him of making excuses to fool the audience and cover up for authorities, when in fact he was trying to explain

[30] Rego, Francisco C., et al. *Solving the Fire Paradox–Regulating the wildfire problem by the wise use of fire.* Towards Integrated Fire Management Outcomes of the European Project Fire Paradox (2010): p219.

the practice of controlled wildfires." The incident revealed a tension: journalism often chases urgency, sensationalism and damage, while fire science urges context and calm. When the two clash, even well-intentioned science communication can be drowned out by sensationalism or performative anger.

### e) Bizarre origins

Occasionally a blaze begins in ways so outlandish and improbable that even seasoned reporters hesitate to print the explanation for fear it would sound conspiratorial. In Utah's fire-scarred summer of 2012, for instance, state geologists confirmed that a handful of grass fires were actually sparked by falling rocks. When boulders tumble at speed and scrape against each other, the friction can reach ignition temperatures without producing a visible spark; if they land in tinder-dry brush, flame follows.[31] Such rockfall-ignited fires are vanishingly rare, but they are real enough to occupy a footnote in fire-science journals.

Farmers would know that, paradoxically, wet hay is actually more prone to spontaneous combustion than dry hay, as microbial activity inside a tightly packed, high-moisture stack generates heat faster than it can escape. Once the core temperature tops roughly 150 °C, the bale can ignite from within, producing fires that may look, at first glance, like deliberate acts.

Lastly there are the pure oddities, caused by humans or animals. Tziritis recalls a 2020 blaze on the island of Andros that forced two villages to evacuate after torching 2,000 hectares. The culprits turned out to be well-meaning French hikers who, recalling a "leave-no-trace" lesson from a mountaineering course, wrapped their toilet paper around their own waste, set it alight so as not to litter, and watched, horrified, as the wind made the flames race uphill. And in the summer of 2025, a wildfire in Ashcroft, Canada was actually sparked by a fish coincidentally dropped by an exhausted osprey onto a power line.[32]

Cases like these remind us that wildfire origins can be so strange they masquerade as urban legend, or a bar joke.

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[31] Earls Stehanie, *Can Rockfalls Cause Wildfires?*, Utah Geological Survey, Survey Notes, v. 45 no. 2, May 2013.

[32] *Bird blamed for dropping fish on power line, sparking "heavy fire" in Canada*, CBS News, July 2025

These five paradoxes demonstrate why wildfire coverage often stumbles not because the facts aren't there, but because truth is complex, layered, and sometimes counter to what seems intuitive to reporters and audiences.

For journalism to match the moment, it must understand wildfire complexity and develop quicker reflexes, or it risks leaving the public vulnerable to falsehoods or unintentionally perpetuating misinformation and misinterpretations.

In brief, wildfires are particularly prone to bad information. Their ignition and attribution is glaringly complex and leads to blame narratives. Their timing challenges newsrooms and amplifies information gaps. And their possible mitigation through preparedness and prevention remains largely unexplored, leading to the perpetuation of wildfires and the misinformation that follows.

# Beyond conspiracies: redefining misinformation

## The appeal and patterns of wildfire conspiracies

Conspiracies are so cinematic, they don't just dominate in the information ecosystem; they soak up most of the oxygen in debates about wildfire misinformation. Because they can be found globally and are admittedly fascinating, they tend to be all we consider when we think about bad information around wildfires.

The table below lists the four most common themes of conspiracy theories around wildfires, along with the countries where they were observed in the past five years, as collected from interviews, literature and media review. The table is by no means exhaustive, but it is indicative of the familiar patterns of conspiratorial narratives and the ways they may manifest locally due to contextual differences.

### Examples of four common wildfire conspiracies

| Theme | Examples | Countries observed |
|---|---|---|
| Scapegoating of minorities | Ignition or bad suppression blamed on migrants and refugees, religious, ethnic or sexual minorities, Indigenous populations. | Chile, Bolivia, Greece, Israel, South Africa, Turkey, United States. |
| Land-grab plot | Wildfires assumed to be deliberately set to free up land for construction of roads, hotels, mines, properties, or "smart cities". | Australia, Canada, Greece, Spain, United States. |
| Technological weapon | Directed-energy weapons, space lasers, secret weather machines, blue paint as a defence from energy weapons. | Australia, Canada, Chile, Turkey, United States. |
| Foreign or globalist threat | Ignition blamed on foreign country, foreign agents, NGOs or takeover attempts by states or international institutions | Brazil, Canada, Greece, Israel, Turkey, United States. |

When interviewing journalists around the world about local manifestations of wildfire misinformation, I was stunned by how similar in nature conspiracies were. Each offers a single villain, a simple motive, and a comforting clarity at precisely the moment real-world complexity feels either mundane or unbearable.[33]

Often they even include identical footage, replicated from older wildfires and followed by similar conspiratorial claims.[34] The information gaps outlined in the previous chapter weave even more familiar patterns in the way these conspiratorial narratives are formed, packaged and disseminated in today's information ecosystem.

## The media's own blind spots

As tempting as it is to focus solely on conspiracies, it would be largely misleading. If wildfire misinformation remains confined to spectacular falsehoods, we risk obscuring the quieter, systemic failures that damage public understanding just as deeply.

To put it more plainly: wildfire misinformation cannot be addressed unless journalism looks beyond catchy conspiracies and confronts its own blind spots around attribution, prevention, accountability and complexity.

Part of the challenge lies in the fundamental mismatch between the pace of science and the demands of journalism, which may set newsrooms up for failure if not for the necessary distancing. Vasilis Sitokonstantinou, a postdoctoral researcher specialising in machine learning for Earth Observation, notes that while science thrives on delay, on the careful accumulation and validation of evidence, journalism must often deliver answers in real time.

> *"The metabolism of science and journalism is completely different. In extreme events, the urgency means we have to make compromises that go against science. We start from the science we already have, but what follows are best guesses, not scientific conclusions."*

In those moments, journalism becomes a kind of provisional authority, what Sitokonstantinou calls "evidence-based journalism", but one that must be honest about

[33] West, Mick. *Environmental Conspiracies: Why do conspiracy theorists believe natural events are intentionally manipulated?*. Skeptic (Altadena, CA) 26.4 (2021): pp7-10.
[34] Laura Doan, Erielle Delzer, *Wildfire conspiracy theories are going viral again. Why?*, CBS News, January 16 2025

its limits. Without clear disclaimers, early reporting risks presenting preliminary assumptions as settled facts. This, too, can become a subtle form of misinformation – not through malice or invention, but through the distortion that urgency demands, by not communicating properly what is still unknown and why.[35]

Another similar layer of distortion amplified by the media comes from politicisation. In highly polarised media environments, even well-intentioned coverage can be shaped more by partisan alignment than by evidence.

Sofia Cherici, an investigative journalist who has covered wildfires in both Turkey and Italy, notes how political agendas often overshadow journalistic rigour. "In Turkey, everything is about politics; you don't know who to trust" she said. "You have to talk to 15 people to cut through bias, and still, you're not 100% sure. This bias causes more misinformation, disinformation, and conspiracies, and we saw this flare up with wildfires too," she added, noting that this led to biases in coverage and audiences alike, on all sides of the political spectrum.

In Chile, the problem of politicisation in the media is just as acute. María Julia Arana Sema, a journalist and sustainability communications expert, noticed how politicisation often overlaps with a lack of coverage on preparedness and prevention, as we outlined in the previous chapter.

> *In Chile, the media only approach wildfires as emergencies. They are always reactive, and there is little information to prevent or prepare for wildfires. Coverage is only about emergency, humanitarian, and social perspectives. Mass media tend to be the worst, they have a political agenda and want to point at [suppression] faults, but never get to the point of prevention.*

As already alluded, misinformation thrives not just in false claims but also in the space left by what goes unreported. It lives in the invisible years of underfunded forest thinning, in neglected firebreaks choked with brush, and in budget lines that prioritise post-disaster spectacle over prevention.

Additionally, misinformation can also show up in other forms that look nothing like conspiracies or media failures – in things such as hazy evacuation alerts that reach

[35] Van Der Bles, Anne Marthe, et al. *Communicating uncertainty about facts, numbers and science*. Royal Society open science 6.5 (2019): 181870.

affluent suburbs but not poorer districts, scam relief funds that spring up after the flames, or even gag orders that muzzle scrutiny under the guise of national security.

## A new framework

To better understand – and hopefully better counter – wildfire misinformation, we need a broader definition and a wider spectrum: one that doesn't reduce misinformation only to false or outlandish conspiratorial claims. We need a framework that goes beyond simply looking at misinformation (accidentally false information) or disinformation (intentionally false or misleading information).

A better definition of wildfire misinformation looks at "any inaccurate, incomplete, vague, misleading, or strategically suppressed information that shapes public understanding of a wildfire".[36] Such a framework would include things like incomplete reporting, premature climate attribution, the politicisation of coverage, suppression of critical voices, the failure to communicate scientific uncertainty, and the structural silences that arise when data, reporting, or scrutiny are missing entirely.

To ground this framework in practice, the next chapter examines how wildfire misinformation manifests across diverse political and media ecosystems. In the next section, we will travel to four countries, examining their recent, devastating wildfires and the misinformation that followed them.

These wildfire case studies illuminate why a wider understanding of misinformation is necessary. While they all share aspects of familiar misinformation rooted in conspiracies, they all also reveal a different aspect of information around wildfires gone dangerously wrong.

The 2023 fire of Dadia in Greece shows how years of administrative neglect lay buried beneath claims of migrant arson and worsening climate, with little coverage or accountability. The 2025 Los Angeles wildfires, with their viral conspiracies racing across TikTok, highlight how crucial evacuation information barely reached Black neighbourhoods in Altadena. Turkey's 2021 Marmaris wildfire shows what happens when misinformation is used as a justification for censorship, with the state labelling critical reporting "defamatory", choking off debate about its response capacity on the

[36] Ruokolainen, Hilda, Gunilla Widén, and Eeva-Liisa Eskola. *How and why does official information become misinformation? A typology of official misinformation.* Library & Information Science Research 45.2 (2023): 101237.

premises of false news. And the deadly 2024 Valparaíso fires in Chile deliver a final twist: rumours of sabotage which proved true, in a scenario where reality outstrips even the wildest speculation.

What will be evident in all four case studies – and should guide newsroom thinking – is that to properly combat wildfire misinformation, journalism must cast its gaze beyond the viral spectacle of conspiracies. It must examine budgets as well as blazes, alert systems as well as arsonists, bureaucratic silence as well as social-media noise.

Most importantly, it should address its very own failures and shortcomings around wildfire reporting if it hopes to properly extinguish wildfire misinformation.

# Dadia, Greece: scapegoating and abandonment

**Misinformation themes**

- **The scapegoat effect** Migrants were quickly blamed, transforming victims into culprits in the absence of verified facts or later stage investigations.
- **Messaging apps as incubators** Conspiracies originated in mass Viber groups before spilling into wider social media platforms. Media and mass fact-checking was largely absent from both of these information ecosystems.
- **Political oxygen** Politicians amplified rumours, shifting them from fringe speculation into the mainstream discourse.
- **Violence in the smoke** Online misinformation fuelled vigilante patrols, leading to harassment, violence and unlawful detention of migrants.
- **Media silences that amplify misinformation** Media overlooked systemic failures in prevention, leaving scapegoating as the dominant public narrative. Lack of aftermath coverage left the population affected feeling abandoned.

## Context

In Greece, burning forest has become something of a seasonal inevitability. Over the past 20 years, the country has witnessed approximately 10,000 incidents of wildfires annually, which have scorched through Mediterranean pine and scrubland and torched an astonishing average of over 53,412 hectares every year.[37]

From the 2007 mass infernos in the Peloponnese to the 2018 Mati tragedy where 104 people lost their lives, to the 2021 fires in north Euboea which alone burned over 50,000 hectares of land (roughly the size of Chicago), Greece has undoubtedly suffered some of the deadliest and most destructive wildfires in European memory.

Wildfire misinformation and conspiracies also have their own set of recurring patterns in Greece. Tziritis has watched these falsehoods take shape over decades. In the 1990s, he said, there were two dominant arson narratives. The first one alleged that Turkish arsonists and spies were intentionally burning the islands, a theory whose flames were fanned again after a former Turkish Prime Minister gave a mysterious statement in an interview, which he later claimed was misinterpreted.[38] Since his statement, however, a

[37] WWF Greece, Fires Factsheet

[38] *Ex-Turkish PM denies comments about Greek wildfires*, Kathimerini, December 2011.

report by the National Intelligence Service found "no link between island fires and Turkish state activity," according to Tziritis.

The second conspiracy revolves around land-grabbing, a familiar narrative around the globe, and one occasionally grounded in reality. In the semi-urban forests of Attica and other Greek cities, unclear forest boundaries and the absence of official forest maps created loopholes. This meant that fires could be used to erase forest classification and pave the way for construction. "Forest maps are actually a preventive measure that doesn't look like a preventive measure," Tziritis noted, highlighting that by legally locking in land classification as Greece did since the 1990s, the state removed the incentive to burn it for development.

Over time, however, new theories took hold in Greece. In 2007, major fires in the region of Ilia were tied, in popular rumour, to a plot to facilitate highway construction. "It circulated that Ilia was a fire to facilitate the investor to build a highway connecting Patra and Pyrgos," Tziritis recalled, noting however that the highway remained unfinished until 18 years later, proving the baseless nature of the claim. Some theories have alluded to more insidious conspiracies: that Americans started the 2007 fires to destabilise the current Greek government, or that they were testing "lasers" and directed-energy weapons in the region.

The Mati tragedy saw an especially virulent falsehood, one that alleged that Jewish residents were warned to evacuate two days before the deadly wildfire. In truth, the U.S. embassy had sent an alert to its own nationals during the moment of the outbreak, in what was a standard safety measure. "A far-right group leaked that email to the media, spinning it into a Jewish conspiracy that tied the wildfire to American weapons testing in the region," said the WWF Greece wildfire expert.

The most recent wildfire conspiracy in Greece revolves around wind turbines, which have become a popular villain, with viral claims that investors have been torching forests to open space for installations. Tziritis is quite blunt about this: regardless of one's stance on wind energy, he claimed there is simply no incentive for investors to burn forests illegally. "Companies can already build wind turbines inside a forest area in a legal way," he said. Doing so through burning land would actually bring scrutiny, delays, and risk – none of which would actually serve their interest.

These patterns of wildfire misinformation thrive in an environment where the state rarely communicates ignition causes with clarity or speed. Demetre Karavellas, director of WWF Greece, underscored the gap: in the past 20 years, only 16.8% of fires have been adequately investigated and a mere 12.1% have a documented cause of ignition.[39]

> *"This void creates a vicious cycle of repeated mistakes and a lack of targeted policy, and amplifies conspiracy theories. How can you prevent and deal with what you don't know?"*

In reality, the most common causes of wildfires in Greece are prosaic and manageable: human negligence and faults in the electrical grid. The grid itself is a significant, recurring ignition source which led to new ignitions in 2025, yet data on its role is withheld or slow to emerge.[40] Internationally, the issue is far from unknown. California's PG&E, for example, paid over $13 billion in compensation for grid-sparked fires. In Greece, however, it remains rather buried from public view.

If these dynamics around wildfires breed uncertainty, the Evros region where the lush forest of Dadia lies, compounds them with local vulnerabilities. This far-northeastern corner of Greece has long been marked by depopulation, economic neglect, and a sense of isolation from the political and economic life of the country.

Staikos, who reported extensively from the area, mentioned that anxieties are amplified by the region's demographic collapse, unemployment, the closure of the Greek sugar industry and mass migration of youth. He described a landscape of near-empty villages, where a feeling of abandonment manifests in the erosion of basic services.

> *"There are villages with two, five, or ten people [...] where most of those left are widows, living alone, in neighbourhoods of ten houses where only one or two are inhabited. There is fear, and a feeling of abandonment which translates into everyday issues. There is no bank, there is no transport. Anyone who doesn't have a car in the villages feels lost."*

[39] Demetre Karavellas, *What we don't know is burning us*, Karthimerini, July 2025
[40] *Power lines are Greece's top wildfire threat*, Kathimerini, June 2025, retrieved from:

Layered atop this chronic neglect is more recent tension. In early 2020, Turkey's President Recep Tayyip Erdoğan announced that migrants and refugees would be allowed to cross into Europe through Greece, in what was interpreted by many as pressure to rally European support for Turkey's military campaign in Syria.

Thousands of migrants and refugees were directed toward the Evros land border, with the Turkish government driving hundreds to the threshold of Greece and live-streaming the process to encourage more to follow.[41] These events triggered a two-week crisis that saw clashes, pushbacks, and a heavy security presence, before the onset of the pandemic led to tensions dissipating.

The Greece-Turkey border crisis of 2020 led to fears and anxieties deepening in the border region of Evros, deepening a pre-existing sense of vulnerability. At the same time, the abandonment felt by the residents mirrored the abandonment in the protected forest area of Dadia. Coupled with the increasing rate of wildfires in the country and the information void around their ignition, this created the fertile ground for a perfect catastrophe.

## Wildfire details

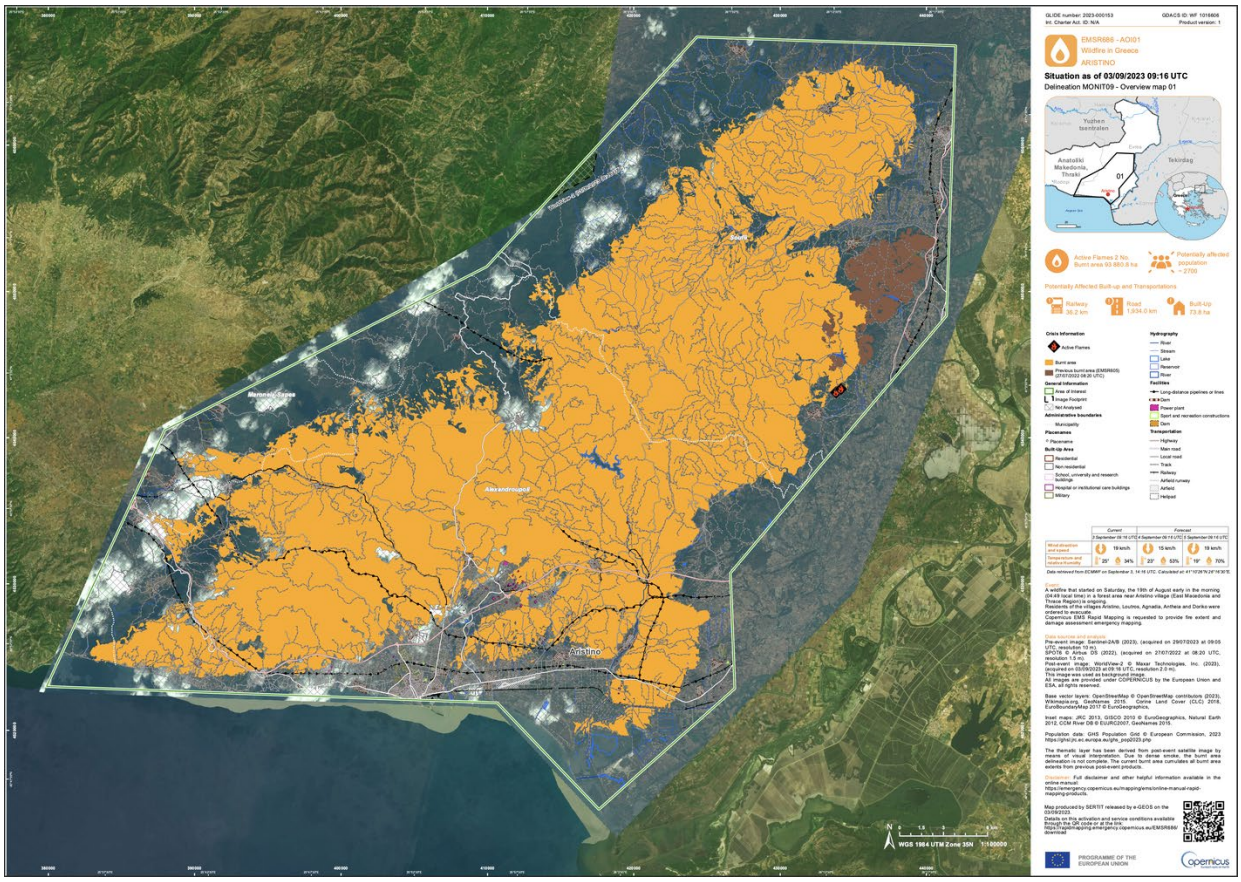
On 18 August 2023, a fire broke out near the village of Melia, in the southern part of Evros. A second ignition point was reported later, deep in the Dadia forest near the peak of Gibrena.

In the extremely hot, dry and gusty days that followed, the two blazes – one on farmland and the other in one of Europe's most protected forest ecosystems – began to converge. The result was a mega inferno that burned for 16 consecutive days, engulfing 94,000 hectares (slightly bigger than Berlin), including over half of the protected Dadia National Park.

The scale of destruction was truly unprecedented. By the time the blazes ended, the wildfire grew to become not just the largest fire in Greek history, but the largest recorded wildfire on European Union territory. Twenty people died in the fires, a significant number of farmed and wild animals were lost, and important damages were

[41] Matina Stevis-Gridneff and Carlotta Gall, *Erdogan Says, 'We Opened the Doors,' and Clashes Erupt as Migrants Head for Europe*, New York Times, March 2020.

caused to houses, stables, warehouses, vehicles, livestock units, crops, farmland and public infrastructure.




*A mapping of the catastrophe captured by the Copernicus Emergency Management Service at the end of the blaze, showing the 93,881 ha. of land affected by the Dadia wildfire.*

The ecological toll in Dadia National Park amounted to a near-total wipeout. Nesting grounds of the endangered Cinereous vulture were incinerated, more than 120,000 olive trees including centuries-old groves in Makri were lost, and entire wildlife populations vanished.[42] Satellite data revealed severe damage across 37% of the burned area, with only 6% left untouched, while over three-quarters of the destruction occurred within the Natura 2000 network. The blaze swept through every type of protected forest, even transitional woodlands still regenerating from a 2022 fire that had affected the region.

[42] Areti Vlachodimou, *Who Lets Greek Forests Burn?*, Revolve Media, September 2024.

As noted by Pavlos Georgiadis, Program Manager at Wildlife Conservation Society, in a 2023 blogpost entitled *Learning from Europe's Largest Wildfire on Record*, by early September the wildfire had completely reshaped Evros's ecology, economy, and future climate.[43] Beyond consuming forests and farmland, it devastated beekeeping and destabilised the local microclimate and water cycle. These cascading losses now threaten food security, risk contaminating Alexandroupoli's drinking water, worsen air quality, and increase the danger of floods across the Evros basin – transforming a single fire into a chain reaction of possible crises.

The sparks behind the Dadia megafire had two different causes of ignition. Surprisingly, the first was a natural one: a lightning strike on a Public Power Corporation (PPC) pole in Melia.[44] Fire crews did, in fact, reach the site and managed to extinguish the flames, but they left without monitoring the area. As wind intensified the next day, the fire re-ignited, turning the blaze into a preventable disaster.

The second ignition was more complex. Based on the location, the timing, and long experience of how fires start in the area, experts strongly suspect a human cause. Tziritis stressed, however, that this does not mean intent. Migrants moving through the forest, directed by traffickers to avoid the main roads, often spend two or three nights in the woods exposed to cold, insects, and hunger. "When you stay in the forest for days, you light a fire to warm yourself or to cook," he explained, adding that fire residue and clothing left behind have long been observed along migrant paths through Dadia. In 2023, Evros saw one of the most intense flows of migrants in years, with groups of up to 150 people reported passing through. The probability of an accidental ignition under these conditions is high, but Tziritis emphasised that there has been zero evidence of arson or malicious intent.

While the ignition points point to how the fire began, they do not explain why it became so catastrophic. That answer lies in decades of neglect and dysfunction.

For George Vlahos, professor of rural and agricultural policy in the Agricultural University of Athens, the Dadia disaster was rooted in the abandonment of forest management. Grazing and thinning that once reduced fuel loads have dwindled. Local

[43] Pavlos Georgiadis, *Learnings from Europe's Largest Wildfire on Record,* LinkedIn, September 2023
[44] Bill Gianopoulos, *Massive Fire near Alexandroupoli believed to be caused by lightning, says Mayor*, August 2023.

livestock farmers no longer enter the forests, with the lack of grazing making them even more vulnerable. "These 100 or so acres have been abandoned," Vlahos observed.

A proper cleanup would have required a systematic management plan, designed and overseen by foresters. Instead, chronic understaffing left Dadia without oversight.

European Union funds earmarked for prevention have remained largely untouched since the 1990s, redirected to easier expenditures such as forest roads. When forest management shifted from the Ministry of Agriculture to the Ministry of Environment, responsibility fell into a bureaucratic void. "It's a silo," Vlahos said. "The Ministry of Environment says, we don't have staff, we can't do anything. The Ministry of Agriculture says it's no longer our responsibility."

The second structural failure came in 1998, when responsibility for fire prevention was transferred from the forest service to the fire brigade. The result has been permanent dysfunction and lack of cooperation. Local knowledge about terrain, vegetation, or stored water tanks went unused.

> *"There is little to no collaboration between the two services," Vlahos pointed out. "Firefighters act in ways that are ineffective, forest services don't assist in the efforts, and basic information that could be crucial in containment never flows."*

Pavlos Georgiadis, in his assessment, agreed that the same institutional failures that left the forest unmanaged also shaped the response. Evros authorities lacked trained personnel, preventive planning, or the integration of scientific data into operations.

> *"The Greek state had not hired a single forester in years. The Forestry Office of Soufli, responsible for managing the precious Dadia Forest National Park, has no foresters, but only four forest technicians with an average age of 60," he wrote.*[45]

[45] Pavlos Georgiadis, *Learnings from Europe's Largest Wildfire on Record*

Despite the presence of national and EU firefighting assets, efforts to contain the blaze failed catastrophically. A post-fire evaluation by WWF Greece, based on interviews with officials, firefighters, and scientists, pointed to a series of fatal missteps.

“There was a failure to identify and act on windows of opportunity,” the report stated, referring to the early hours when a more aggressive, localised suppression strategy might have worked. Instead, resources were deployed unevenly: ground crews were spread too thin across a sprawling perimeter, while aerial assets were often deployed without coordination or scientific input.

In short, most analyses concluded that the chief reason for the Dadia disaster was forest abandonment and lack of preparedness, from prevention to suppression efforts. What was once considered an “unburnable forest”, known for its humid microclimate and thick canopy, had become a tinderbox. Stella Girtsou, who has analysed satellite imagery before, during and after the 2023 fire, summarised it best by sharing an apt lore from the Evros region.

> *“Dadia wasn’t always like this. In World War II, the story goes that it was so moist and dense, that the occupying forces couldn’t burn it while retreating, as hard as they tried. But only half a century later, it was left so dry, brittle and abandoned that it was literally ready to burn. And so, in 2023, all of it burned.”*

## Resulting misinformation

As the Dadia fire was still raging, long before investigators could even begin to trace its origins, a single explanation gained extraordinary traction: migrants had deliberately set the blaze as a form of sabotage. The accusation spread faster than the fire itself and within hours, the narrative hardened into certainty for many in the region.

The narrative tapped into old cultural fault lines. Evros is not just a border but a national symbol – Greece’s outermost edge, facing Turkey. For decades, it has carried the weight of military vigilance, nationalism, and deep anxieties about sovereignty. The 2020 border crisis had already infused local populations with fear and resentment, a sense of being left exposed on Europe’s frontier. In that climate, the leap from

“accidental fire” to “deliberate arson by migrants” was short, offering a scapegoat that displaced responsibility away from state failures and toward outsiders.

According to three independent sources who spoke on condition of anonymity, the first claims blaming migrants for intentional sabotage circulated through a popular messaging app in Greece, Viber, in mass groups formed a day after the fire began.


*Firefighters carrying out an operation to rescue 25 migrants trapped in a burning forest area in Evros, Credit: REUTERS/Alexandros Avramidis*

Screenshots reviewed during interviews showed a familiar formula: a shaky video of smoke rising in the forest, paired with captions that framed the fire as deliberate sabotage by migrants and calling for citizens to take action. Some posts included voice notes – anonymous male voices claiming they had “seen migrant arsonists lighting forests”, while others alleged local farmers had “caught arsonists in the act, who confessed their malicious intent to burn the forest”. None of this was substantiated.

In the closed ecosystem of a messaging app, credibility flowed not from evidence but from proximity. As a resident of Avantas village confided in me, “if a neighbour

forwarded the theory, as it often happened, it simply felt true". Worse is that the insular world of Viber went largely unnoticed by mainstream media, who were largely unaware of the rumour and therefore could not debunk until it had already taken root.

On the fire's third day, the conspiracy had already achieved viral status. Screenshots and audio snippets leapt from Viber into broader social platforms, primed for national amplification. Instagram stories remixed the claims into short, emotionally charged bursts: images of flames cut together with captions like "migrants are burning Greece". On X (formerly Twitter), accounts with large followings circulated posts blaming hordes of migrants burning the forests or videos of supposed arsonists caught in the act.

In reality, many of these clips were old – lifted from fires in Turkey or the U.S., but redubbed with a narration claiming to find evidence of migrant arson and miscaptioned to fit the Dadia story. This recycling of old footage is a hallmark of wildfire misinformation globally.

The narrative gained extra momentum because it dovetailed with existing political rhetoric. Politicians on the right and far right echoed the claims, with some openly suggesting that citizens should take matters into their own hands or even blaming migrants for attacking firefighters as they were trying to put out the flames and calling for "warfare". This legitimisation was crucial: once conspiracy theories are repeated by political figures, they shift from rumour to acceptable public discourse.

Two additional rumours sprung up, both of which were widely replicated by the Greek media. A widely shared claim online said 20 migrants had been arrested outside Alexandroupolis after a shootout with police and the military. Authorities later denied this as baseless after AFP reached out, but the rumour was already reported on by various online news sources.[46] Similarly, the national television station Open corrected a report on 23 August that incorrectly reported that two migrants were arrested red-handed while setting fire in Sapes, Rhodope Mountains.[47]

The consequences were immediate. As the forest was still burning, vigilante groups began to form in Evros. Videos emerged of men driving into scorched areas, claiming to "hunt arsonists." The most emblematic incident involved an individual who

[46] Konstantinidis Petros, Kyriakoulis Vasilis, *Wildfires in Northeast Greece fire up misinformation against migrants*, AFP Greece, August 2023.
[47] *Ibid.*

intercepted a group of migrants on the roads, detained them in his vehicle and filmed the process, uploading the footage online and reaching millions of views. The images sparked outrage but were also celebrated in certain domestic circles as evidence of "patriotism", with inflammatory remarks flooding the comment section. Law enforcement eventually arrested the man.


*Screengrab of a livestream that reached hundreds of thousands of viewers: a vigilante captured a group of migrants in a van, blaming them for intentionally lighting the Dadia blaze.*

At the height of the crisis, the misinformation became self-perpetuating. Each vigilante video was fed back into the digital ecosystem, proof to some that the conspiracy was real. The narrative achieved a dangerous loop where misinformation inspired action, and action further reinforced the misinformation.

If scapegoating defined the days of the fire, silence defined the weeks after. National television coverage pivoted quickly once the fires subsided. The systemic failures that had allowed Dadia to burn – lack of forest management, bureaucratic dysfunction, misallocation of resources – received only fleeting attention.

There were also moments of tone-deafness by coverage. One journalist reporting for the national broadcaster declared, on air, "thank God there were no deaths" – a statement that ignored the 20 lives of migrants lost. Beyond such lapses, the broader failure was one of omission. By not covering the systemic roots and confirmed causes (the lightning-struck PPC pole in Melia, the unmanaged biomass in the forest, the

chronic understaffing of the Soufli Forestry Office), reporting left space for scapegoating to dominate the narrative.

In the smoke of that omission, and in the lack of post-wildfire coverage in the region, what remained in Evros was a deepening sense of isolation. Apostolos Staikos, captured it starkly by sharing a statement shared to him by one of the locals.

> *"One of the things that still made us proud up here was the amazing Dadia forest. Vast, lush and unburned, people from all over would visit to marvel at it. But it burned. And so the wildfire of Dadia [...] it ended up magnifying our depression. It felt like a tombstone, solidifying our crises".*

# Los Angeles, USA: hypervirality and information gaps

**Misinformation themes**

- **Classic conspiracies recycled** Directed-energy weapons, "smart cities," and geoengineering narratives resurfaced, adapted from earlier fires in California, Maui, and abroad.
- **Celebrity distortion and culture wars** Viral posts tied the wildfires to celebrity scandals (e.g., Sean "Diddy" Combs, Mel Gibson), pulling attention away from verified facts. Politicisation and group discourse spins disaster response into a proxy battle of cultural issues.
- **Hypervirality through influencers** Conspiracy personalities amplified false claims that reached tens of millions of views, outpacing official updates.
- **Information voids and post-crisis communication** Delayed evacuation alerts in western Altadena and lingering confusion over aid and relief left residents vulnerable.

## Context

The United States has long been fertile ground for wildfire-related conspiracy theories, often blending distrust in government with anxieties over climate change. Amplified by online personalities with large followings and fuelled by the sheer scale of the American information ecosystem, these narratives often reach hypervirality and keep recurring with new wildfires.

An illuminating example of this is the directed-energy weapons (DEW) theory, which first reached the mainstream during California's 2018 Camp Fire. Conspiracy theorists and QAnon followers first claimed in various online fora that the blaze was triggered by space lasers, allegedly at the time to clear land for the state's high-speed rail project.[48]

Now-Congresswoman Marjorie Taylor Greene echoed these claims in a 2018 Facebook post, speculating about "blue beams of light", Rothschild financiers, and "space solar generators" as culprits behind the disaster and nebulously tying them to plans by then-California Gov. Jerry Brown (D) to build a high-speed rail project.[49] Though the post was later deleted, it gave political oxygen to an otherwise fringe idea.

At the time, wildfire experts stressed that even though such theories may appear outlandish, they exploit public confusion over fire behaviour. Jack Cohen, a retired U.S.

[48] Eric Hananoki, *Marjorie Taylor Greene penned conspiracy theory that a laser beam from space started deadly 2018 California wildfire*, Media Matters, January 2021.
[49] *Ibid*.

Forest Service firefighter told the *Los Angeles Times* that people are "obscenely obsessed" with what causes wildfires and fill in the blanks when they can't explain them.[50] He recalled that the conspiracies started after the Camp Fire, when drone images showing homes reduced to ash while nearby trees stood intact baffled the public. Similar "illogical" burn patterns during the Carr Fire in Northern California the same year primed communities to accept explanations involving lasers from space.

The same pattern repeated in 2023, when wildfires swept Maui in the deadliest U.S. wildfire in over a century. As Lahaina burned, false claims circulated that secret energy weapons had ignited the blaze. This time old and unrelated visual material – such as footage of a 2018 SpaceX launch – was recycled online on platforms like Facebook and Instagram and apps like X and TikTok, to fabricate proof of technological sabotage.[51]

In Maui, two additional factors made the conspiracies even more challenging: international involvement in disinformation and the use of generative AI. An investigation by Microsoft researchers and others revealed that Chinese state-linked accounts amplified Maui disinformation, alleging that U.S. weather weapons were responsible.[52] Many of these posts used AI-generated images of supposed weapon testing, giving the claims fresh virality and making them harder to debunk.

In short, what began as a fringe California rumour had, by 2023, become a national narrative. This backdrop primed the environment for similar dynamics during the January 2025 wildfires in Los Angeles. But, this time, the information ecosystem was even more vulnerable due to the recent and divisive presidential election of 2024, which caused an unusually polarised media environment and growing public distrust in institutions and the media.

## Wildfire details

Between 7-31 January 2025, a series of 14 destructive wildfires swept through the Los Angeles metro area as well as San Diego County. The fires were intensified by Santa

[50] Hailey Branson-Potts, Joseph Serna and Alejandra Reyes-Velarde, *How wildfires became ripe areas for right-wing conspiracy theories*, January 2021.
[51] Kalhan Rosenblatt, *Maui wildfire becomes latest fodder for disaster conspiracy theorists*, NBC News, August 2023.
[52] David E. Sanger and Steven Lee Myers, *China Sows Disinformation About Hawaii Fires Using New Techniques*, New York Times, September 2023.

Ana winds, some exceeding 100mph, as well as a buildup of vegetation from the previous winter.


*A branch of McDonald's on fire during the Los Angeles fires. Source: REUTERS/ Mario Anzuoni*

Among the blazes, the Eaton Fire in Altadena and the Palisades Fire in Pacific Palisades were the most destructive, killing at least 30 people and destroying more than 18,000 homes and structures. In total over 23,000 hectares burned (that's the size of roughly 230 Hyde Parks) and more than 200,000 residents were evacuated.[53]

Municipal fire departments, along with CAL FIRE and federal assistance, deployed aircraft and ground teams to combat the blazes. The wildfires were fully contained by the end of January, but the devastation was massive, especially in working-class areas like Altadena, revealing glaring disparities in impact and recovery.

The sources of ignition of the two most destructive wildfires are still under investigation. According to reporting by the *Los Angeles Times*, investigators believe the

[53] *CALFIRE: Current Emergency Incidents*. CAL FIRE.

Palisades Fire may have been linked to a smaller 8-acre blaze in the same area on 1 January, that reignited under severe wind conditions.[54] Another possibility is that a new fire was sparked nearby that morning. In either case, officials have ruled out power lines as an ignition source and are treating the fire as most likely human-caused, given the trail's popularity and the absence of electrical infrastructure in the area.

The Eaton Fire, by contrast, is widely suspected to have been triggered by Southern California Edison's (SCE) equipment. Evidence from security camera footage, utility data, and witness accounts suggests sparks from SCE's power lines may have ignited the blaze during peak winds.[55]

Lawsuits filed by victims allege that SCE failed to shut off power despite dangerous conditions and though the company has not confirmed responsibility, it has since acknowledged its equipment is under investigation. The ongoing investigations could take 12 to 18 months, while a judge recently set a 2027 trial date for the first set of lawsuits against SCE for Eaton fire, highlighting the long gap until ignition causality is actually established.

Beyond questions of ignition, what the 2025 California fires undeniably underscored was the role of climate and weather in setting the stage for catastrophe. World Weather Attribution researchers concluded that extreme climate conditions made the January 2025 fires not only possible but highly likely.[56] The combination of record-dry vegetation, powerful winds, and the absence of seasonal rains meant that once ignited, the blazes spread with unprecedented speed.

While California's largest wildfires typically occur in late summer, the region's most destructive often coincide with the Santa Ana winds of autumn and winter. These downslope winds funnel hot, dry air from the Great Basin toward the coast, turning any spark into a fast-moving blaze. In early January 2025, this synoptic pattern aligned with unusual atmospheric dynamics: a mid-troposphere cut-off low broke from the jet

[54] Richard Winton and Hannah Fry, *What — or who — started the Palisades fire? Two leading theories emerge as investigation intensifies*, Los Angeles Times, January 2025.
[55] Michelle Watson and Sara Smart, *Video of sparks points to Eaton Fire's origins, lawsuit says*, CNN, January 2025.
[56] *Climate change increased the likelihood of wildfire disaster in highly exposed Los Angeles area*, World Weather Attribution, January 2025.

stream, amplifying the Santa Anas and creating near-perfect conditions for fire spread.[57]

Compounding the risk was the state of the landscape. Normally, winter rains dampen vegetation by late fall, muting the Santa Ana threat. But Southern California had seen almost no significant rainfall since May 2024, leaving grasses and shrubs tinder-dry. At the same time, above-average precipitation in the two previous winters had fuelled dense vegetation growth. Together, these factors created a paradox: lush growth that later dried into abundant fuel.[58]

Still, many California reporters were struck by how quickly online speculation sprung, and how often it denied these climate explanations. "On social media there were a lot of unverified claims," said Taiyler Mitchell, a *HuffPost* reporter and LA resident.

> *"When it comes to what started these fires, there were a lot of narratives insisting there is no way this is the way the weather or climate works. Even though California has always had wildfires, and even though we know that once it gets hot and dry, a fire may eventually spread."*

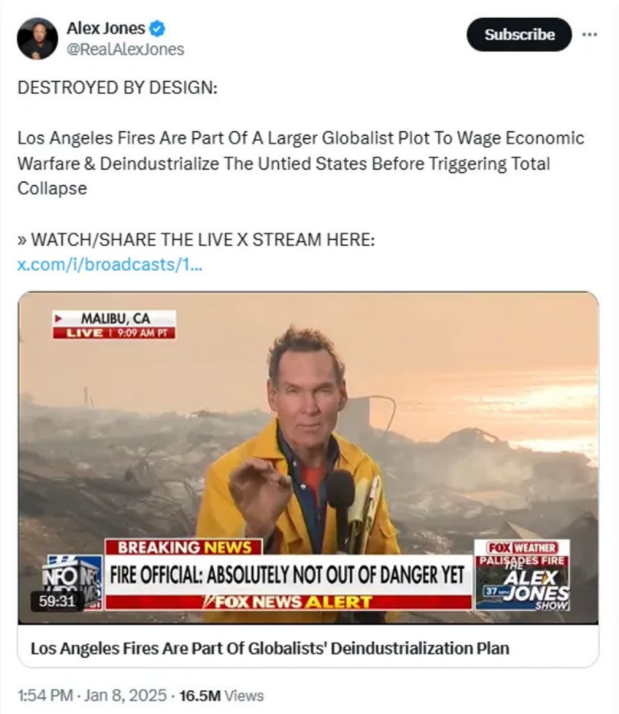
## The misinformation: hypervirality and information gaps

As LA burned in January 2025, familiar wildfire conspiracies returned with new force. Numerous false claims suggested the fires were ignited by directed-energy weapons (DEWs) or by deliberate geoengineering, while others alleged the blazes were set to clear land for "smart cities".[59] Many of these narratives distorted LA's SmartLA 2028 initiative, which involves infrastructure upgrades but no demolition, and most recycled older falsehoods from Maui, Canada, and Spain's Canary Islands.[60] Misleading video clips and memes gave them renewed virality.

[57] *Ibid*.
[58] James MacCarthy and Jessica Richter, *4 Graphics Explain Los Angeles' Rare and Devastating January Fires*, World Resources Institute, February 2025.
[59] Laura Doan & Erielle Delzer, *Wildfire conspiracy theories are going viral again. Why*?, CBS News, January 2025.
[60] Daniel Patrick Galgano, *Los Angeles fires spark 'smart city' conspiracy theories*, AFP, January 2025.

Los Angeles' celebrity culture added an unusual layer to the fire's information ecosystem, helping conspiracies achieve further hypervirality. Posts on TikTok, viewed millions of times and aided by the platform's algorithm according to investigations by Media Matters, claimed the fires were staged to destroy evidence in the Sean "Diddy" Combs trafficking case, falsely alleging his mansion had burned.[61] In reality, his property remained untouched by the fire. Meanwhile, actor Mel Gibson also speculated about intentional fires and hidden agendas, giving conspiracies further visibility and celebrity clout.[62]

Then there was the politicisation, moulded by post-election divisions and the political climate of the first days of the Trump administration. Several far-right groups reframed the wildfires as a culture-war issue, targeting LA Fire Chief Kristin Crowley, the city's first female and openly LGBTQ+ leader and suggesting – without evidence – that she favoured DEI initiatives over disaster preparedness or hired unqualified candidates in the name of diversity.




*A post by Alex Jones, suggesting wildfires prove that "globalists" are plotting against the U.S., reached over 16 million viewers. Source: X*

On Telegram, one Proud Boys chapter shared a meme featuring Crowley that read, "0% contained 100% DEI".[63]

Billionaire Elon Musk aided the spread of this spinning of the LA wildfire on his platform X, writing: "They prioritised DEI over saving lives and homes".[64]

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[61] Olivia Little, *TikTok's algorithm appears to be boosting LA wildfire misinformation*, Media Matters, January 2025.
[62] Alex Galbraith, *Is it on purpose?": Gibson peddles wildfire conspiracies on Fox News after home burns*, Yahoo News, January 2025
[63] *Los Angeles Wildfires Trigger Conspiracy Theories and Hate*, Anti-Defamation League, January 2025.
[64] Lisa Hagen, Jude Joffe-Block, *Why right-wing influencers are blaming the California wildfires on diversity efforts*, NPR, January 2025.

Many of these theories spread at breakneck speed. Conspiracy influencers such as Stew Peters and Alex Jones cast the fires as a "false flag" or part of a "globalist plot", gaining millions of views in social media and often outpacing official updates.

Beyond viral conspiracies, there were also critical gaps in essential information. As HuffPost reporter Taiyler Mitchell wrote, during the Eaton Fire, eastern Altadena received evacuation warnings within an hour, but western neighbourhoods – where 17 of 18 deaths occurred – did not receive alerts until 3.25am, nearly eight hours later.[65] Residents west of Lake Avenue, in predominantly Black neighbourhoods, said they were stunned by how long it took to get the evacuation order, and that by the time they received them many homes in the area were on fire, further eroding trust.[66]

> *"There was also a lot of confusion about evacuation warnings versus evacuation orders, what areas they applied to, even the names of the fires and other critical information," she noted.*

In the information vacuum sprung unlikely messengers, occasionally filling the gap with live-saving information. Greg Cochrane, a journalist and Engagement Lead for the Oxford Climate Journalism Network who interviewed various journalists who covered the California fires, recounted how various residents in Altadena turned to a young local meteorologist with a modest online presence for critical information.

Edgar McGregor, 24, had built a Patreon and Facebook page by posting hyperlocal forecasts for the region's unique microclimate. McGregor became a local hero in Altadena after issuing early warnings credited with saving lives. His updates spread faster than official alerts and were later highlighted in *Local News Pasadena* as an example of how nontraditional sources filled an information gap.[67]

Even after the flames subsided, various information problems persisted. Cochrane described how a contributor he interviewed painted a picture of inconsistent claims

[65] Taiyler S. Mitchell, *Altadena Residents Know Their Community Is Worth Rebuilding. Can They Protect Its Legacy?*, HuffPost, April 2025.
[66] Terry Castleman and Ian James, *Western Altadena got evacuation order many hours after Eaton fire exploded. 17 people died there*, LA Times, January 2025.
[67] Phil Hopkins, *How Two Words from a 24-Year-Old Pasadena Climate Specialist Saved Hundreds of Lives*, Local News Pasadena, January 2025.

about aid eligibility, fake relief funds and misleading fundraising pages, describing the conflicting public information that lingered in the context of misinformation.

> *"Misinformation is not just a story that's contained whilst the fires are burning. The contributor I interviewed [...] spoke about it in a very practical lens, and as far as he's concerned, he's still dealing with misinformation and disinformation four months later."*

These information gaps grew larger as traditional coverage quickly shifted away from the destructive LA wildfires. Mitchell, who planned the release of her HuffPo story on the three-month anniversary of the Eaton wildfire, recalls this shift in national attention, while also noting the Altadena wildfire faded even more quickly from view.

> *"There was a lot of coverage in the first week or two, and then it just fell off. I also feel like the majority of the coverage was focused on the Palisades fire, where a lot of the wealthier people [...] and celebrities are also known to live" Mitchell says, noting that attention was also diverted by coverage of the first 100 days of the incoming presidential administration.*

The 2025 California wildfires showed how hypervirality, culture wars, and structural information failures collided in real time. The same dynamics that amplified conspiracies left space for gaps in evacuation alerts, inequities in media coverage, and confusion around recovery or relief.  Taken together, they demonstrate that wildfire misinformation is not only confined to fringe claims, but woven into the fabric of how crises are communicated and remembered.

# Marmaris, Turkey: censorship & suppression

**Misinformation themes**

- **Scapegoating and interference conspiracies** Ministers and officials speculated about PKK arson without evidence, fuelling fear and prompting vigilante patrols. Media figures dredged up old theories about foreign powers altering flora to make it fire-prone.
- **Hotel & construction plot** Narratives claimed fires were set to clear land for resorts, despite laws mandating reforestation after burns.
- **State weaponisation of "misinformation"** Authorities used "disinformation" laws as a pretext to suppress coverage, fine broadcasters, and deter reporting.
- **Digital repression** The viral #HelpTurkey hashtag was criminalised as spreading "fear and anxiety," reframing citizen pleas or accounts conveying critical information as propaganda.

## Context

Turkey faces a yearly wildfire season between late June and September, when hot, dry summers turn its Aegean and southern coasts into tinderboxes. As is the case in many Mediterranean countries, the decline in traditional land use has resulted in a build-up of fine fuels and a further increase in fire potential, making wildfires in Turkey more frequent and more intense.[68]

In the last eight years alone, the country has averaged nearly 2,500 forest fires annually. These blazes now account for roughly 20% of deforestation in Turkey over the past two decades, second only to logging.[69]

Much like the case of Greece, Turkey's wildfire data is revealing not just for what it shows, but also for what it obscures. While 11% of fires are attributed to lightning, 89% are human-caused. Within that 89%, more than half have "unknown" causes, leaving accountability murky. Recent reporting alleged that from 2015 to 2024, over 20% of the burned area was linked to faults in electricity distribution networks – yet regulatory scrutiny of utility companies remains lax.[70]

[68] Coşkun Okan Güney, Kevin C Ryan, Aylin Güney, and Sharon M. Hood, *Wildfire in Turkey*, International Association of Wildland Fire, March 2019.
[69] Global Forest Watch, *Turkey Dashboard*, accessed June 2025, retrieved from:
[70] Arzu Geybullayeva, *Turkey's forests ablaze: recurring crisis ignites anger and demands for accountability*, Global Voices, June 2025.

For journalists, this opacity makes meaningful coverage nearly impossible. Journalist Sophia Cherici, who worked on an investigative piece on the causes of Turkey's wildfires for *New Lines* magazine, noted that the lack of reliable public data creates a fundamental obstacle: without clear ignition records, it is very challenging to connect a fire in a particular place to its real cause.

> *The lack of public data is a major problem. It's hard to have reports backed by strong evidence. This is because of the nature of wildfires itself and the way they propagate, but also because there is no access to the real causes, and most of them remain uncertain. This also can also be weaponised by the government, which can simply claim that criticism is not backed by data."*

These information gaps also leave ample room for rumour and suspicion to grow, particularly in Turkey – a country uniquely primed for conspiratorial explanations.[71] Surveys rank Turkish citizens among the most vulnerable to misinformation in Europe, a vulnerability rooted in low media literacy, weak institutional trust, and decades of polarised politics.[72]

Wildfires have long been drawn into this conspiratorial culture. Groups such as the People's United Revenge Militia have at times claimed responsibility for arson, most recently in the 2019 fires near Dalaman, giving politicians ready-made scapegoats.[73] Even when no such claims exist, authorities and commentators are quick to hint at PKK or Kurdish involvement, allowing unverified allegations to fill gaps left by weak inquiry.

Another recurring suspicion holds that wildfires are set deliberately to make way for lucrative construction projects in tourist areas such as Antalya, Bodrum, and Muğla. Though there have been some cases where wildfires led to construction, the reality is often the reverse. As Cherici noted in her article, human activities close to forest areas – like roads, parcelisation, and logging activities in the summer – raises ignition risk, making fires more likely in the first place.[74] But the narrative of deliberate sabotage persists, feeding public anger and deflecting from systemic weaknesses.

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[71] Mustafa Akyol, *The Tin-Foil Hats Are Out in Turkey*, Foreign Policy, September 2016.
[72] Marin Lessenski, *Common sense wanted: Resilience to 'post-truth' and its predictors in the new media literacy index 2018*, Open Society Institute – Sofia, March 2018
[73] BIA News Desk, *HBİM Group Claims Forest Fires in İstanbul*, Muğla, Bianet, July 2019.
[74] Sofia Cherici & Aylin Elci, *The Political Machine Feeding Turkey's Wildfires*, New Lines, July 2025.

Overlaying this combustible mix is the information environment shaped under President Recep Tayyip Erdoğan. Since the failed 2016 coup attempt, successive laws have expanded the government's powers to control digital platforms and stifle criticism, many under the banner of combating "disinformation".

The recently founded Presidential Communications Directorate (İletişim Başkanlığı) has often served as the state's central censor, blocking websites, social media accounts, and entire news portals, while the country's broadcast regulator, RTÜK is quick to impose fines to critical media.[75]

The tactic has become especially visible during crises of various forms. Following a sharp fall in the value of the Turkish lira against the U.S. dollar in 2018, for example, the government undertook measures targeting "fake news" and disinformation focused on the economy and finance.[76] This tactic was repeated during the 2021 wildfires, when calls for international aid were smeared as "terror propaganda", as well as the 2023 earthquakes in Hatay, when Twitter was briefly throttled as citizens used it to coordinate rescues.

Environment and Climate reporter Hazal Ocak, who had faced trial on the charge of "insulting a public official" due to her reporting but was later acquitted in court, summarises the situation quite aptly, by painting a context where misinformation becomes a tool wielded by authorities to silence criticism and critical information altogether and avoid accountability.

> *Unfortunately, "disinformation" has become one of the government's most powerful weapons. When we journalists try to track the facts behind a story, we can quickly be labelled as enemies of the state. I believe this strategy is not only used to neutralise the impact of journalism, but also to isolate and punish journalists. The government wants a press that claps, not one that questions.*

[75] Zuzanna Krzyżanowska, *Discipline and punish: how Turkey controls the internet*, Ośrodek Studiów Wschodnich, June 2025

[76] Robinson, Olga, Alistair Coleman, and Shayan Sardarizadeh. *A report on anti-disinformation initiatives*., Oxford Technology and Elections Commission, Oxford Internet Institute, August 2019.

## Wildfire details

On 28 July 2021, nearly 200 wildfires erupted across Turkey's southern coast, tearing through the coastal provinces of Antalya, Muğla, and Marmaris. Fanned by searing winds and record-breaking heat, the fires burned for over a week, scorching some 1,700 square kilometres of forest – around 1.7% of Turkey's total forest cover.[77]

It was the country's most destructive fire season on record: nine people lost their lives, thousands were displaced, and the blazes left entire communities in ruin.


*A firefighter extinguishes a forest fire near the town of Manavgat. Source: REUTERS/Kaan Soyturk*

Though summer wildfires are common in Turkey's Mediterranean and Aegean regions, the 2021 season was unprecedented in both intensity and scale. May had already been the hottest in more than fifty years, followed by drought and then a ferocious July heatwave. Temperatures soared to 49.1°C in Cizre, the highest ever recorded in Turkey, while anomalies up to 12°C above seasonal norms were measured as far north as Istanbul.

[77] Tin Lok Wu, *Lessons Learnt from the Wildfires in Turkey*, Earth.Org, June 2022.

The heatwave was part of a wider phenomenon gripping the Mediterranean and beyond in 2021. Scientists linked it to a "heat dome", in which a mass of hot air is trapped near the surface by high-pressure systems and amplified by climate change.[78] Copernicus satellites measured fire intensity peaking at nearly 20 gigawatts – four times the previous national record. By early August, the European Forest Fire Information System estimated the burnt area was almost ten times Turkey's seasonal average.

The Marmaris fires became emblematic of this catastrophe: flames devoured coastal pine forests and tourist resorts alike, forcing mass evacuations by sea as residents and holidaymakers fled by boat. Images of red skies over luxury hotels and villages along the turquoise coast seared themselves into the national memory, crystallising the sense that Turkey had entered a new era of climate-driven disaster.

## Resulting misinformation

As flames swept Turkey's Mediterranean coast in July 2021, the search for culprits quickly veered into familiar territory. Government ministers speculated that the fires might be arson by Kurdish separatists but provided no evidence, while Erdoğan himself made nebulous and suggestive remarks of deliberate arson.[79] Conspiracies were replicated in national media, as a columnist in Sözcü, the country's most-read daily, dredged up a century-old theory suggesting foreign powers altered Turkey's flora in an attempt to make it fire-prone and undermine the country.[80]

Much like the case of Dadia the insinuations stoked paranoia and tangible consequences. In Muğla and Antalya, self-organised patrols armed with sticks and rifles set up checkpoints, stopping cars in search of "saboteurs".[81]

> *What I remember most vividly is the fear – both the fear of how massive the fires were becoming and the sorrow I felt for the forests being destroyed." recounted Ocak. "From the very beginning, there was an overwhelming sense of uncertainty. As journalists, it was extremely difficult to access reliable information. That stands out clearly in my memory."*

[78] Tin Lok Wu, 2022.
[79] Jonathan Watts, Turkish fires sweeping through tourist areas are the hottest on record, The Guardian, July 2021
[80] Nevşin Mengu,*Wildfires and AKP's obsession with social media hashtags*, Duvar English, August 2021.
[81] Ibid.

Another narrative, pushed more by opposition voices, blamed hotel construction. Wildfires, the story went, were being used to clear forestland for luxury resorts. Yet this claim was also misleading. "The narrative that emerged was really about how these wildfires were a consequence of hotels," journalist Sophia Cherici explained. "But actually, by law, you cannot build on forest land after it burns."

If conspiracies shaped public chatter, the state's response was to weaponize "misinformation" as a pretext for censorship. The sequence followed a familiar script, and it began with threats by the country's usual censors and media watchdogs.

While fires were still burning on 3 August, Turkey's broadcast regulator, RTÜK, warned television channels that showing burning forests or reporting local failures would "create chaos" and "demoralise" the public, threatening penalties to networks that failed to abide.[82]

Within a week, six networks – including Fox TV, Halk TV, and TELE1 – were fined for critical coverage, in some cases simply for using words like "nightmarish" to describe the scale of destruction.[83]

Repression extended to the digital sphere affecting social media discourse. When the hashtag #HelpTurkey went viral, driven by desperate pleas for aid and amplified by images of Erdoğan tossing tea bags to fire victims, prosecutors opened a criminal investigation, accusing it of spreading "anxiety and fear".[84] The government framed citizen appeals as disinformation, while at the same time refusing foreign firefighting assistance on the grounds that "Turkey is strong."

Ocak recalls an enormous wave of videos and emotional appeals on social media, which she remembers moved the Turkish public. Though some misinformation did spread, it was also clear the government failed to manage the crisis and in the end, both unverified content and the government's poor communication made the crisis worse. Amplifying the bad coverage was an overwhelming phenomenon of self-censorship by the country's media ecosystem.

[82] Duvar English, *Turkey's media watchdog threatens broadcasters over wildfire coverage*, August 2021.
[83] International Press Institute, *Turkish broadcasters fined for reporting on wildfires*, August 2021.
[84] Nevşin Mengü, 2021.

> *“Sadly, a wall of fear has been built in Turkey. Journalists now cannot predict what kind of consequences they might face for publishing a story,” she said. “For instance, I was prosecuted for reporting that the Istanbul Municipality had demolished an illegal pavilion and fireplace built by the Presidential Communications Director in a protected area on the Bosphorus. I was charged with ‘targeting a public official fighting terrorism’ and ‘violating privacy’, facing up to 14 years in prison. I was eventually acquitted, but I believe such cases are filed to intimidate reporters.*

In the Marmaris fires, misinformation did spread in familiar forms, but its greatest impact came when the state itself weaponised the label of “disinformation” to silence scrutiny. By prosecuting hashtags, fining broadcasters, and intimidating reporters, authorities shifted attention away from structural failures and the absence of prevention, precisely the blind spots that Cherici and others have highlighted. The flames, in effect, consumed not only Turkey’s forests, but the public sphere itself.

# Valparaíso, Chile: truth stranger than fiction

**Misinformation themes**

- **Foreign conspiracies recycled** Global conspiracy tropes imported into Chile, detached from local realities, but gaining huge traction online.
- **Truth stranger than fiction** The actual cause of the fire turned out more shocking than conspiracies, blurring the line between misinformation and reality.
- **Normalisation, erasure and lack of preparedness coverage** Even the deadliest urban fire in Chile's history quickly faded from coverage and collective memory, treated as just another emergency.
- **Lack of aftermath reporting** Media failed to sustain attention on structural failures and survivor stories.

## Context

Wildfires are not an aberration in Chile, but a predictable part of the country's environmental cycle. Yet they remain persistently unmanaged. In 2020, Chile had 15.3 million hectares of natural forest, covering 20% of its land area. Fires have increasingly consumed this resource: from 2001 to 2024, the country lost roughly 300,000 hectares of tree cover to wildfires (that's roughly the size of Puerto Rico).[85]

Peak fire season runs from late November for about 20 weeks, but 2017 stands as a particularly catastrophic year for Chile, as wildfires caused 67,000 hectares of loss – nearly a third of all tree cover loss that year, in an area close in size to Singapore.

Despite their alarming prevalence, or perhaps even because of it, wildfires are treated as episodic emergencies rather than a structural issue in Chile.

This normalisation is deeply embedded in Chile's institutional and cultural memory. As journalist and ESG expert María Julia Arana Sema noted, wildfires have been mentioned in every annual presidential speech over the last decade as a manifestation of climate change, yet always in a reactive frame.

> *"In Chile, they approach wildfires like earthquakes," she said, "just something that happens, and you deal with the damage. There is very little information about preparedness or prevention. Additionally, Chileans tend to naturalise the emergency. A wildfire may happen*

[85] Global Forest Watch, Chile Factsheet, accessed June 2025

> *today, and by tomorrow the country's media might move on because there is something else in the agenda."*

Arana Sema also noted that the media rarely covers wildfire preparedness, focusing exclusively on blame narratives. "Finding guilt and responsibility is the only thing that matters, and it's easy because you end the conversation there," she said.

Misinformation also thrives in this context, and unsurprisingly Chile has a fraught history of politically charged fire attribution. In 2012, President Sebastián Piñera invoked anti-terrorism laws to accuse Mapuche activists of arson, without any evidence, reviving the criminalisation of Indigenous resistance.[86] Legal experts and NGOs denounced these moves as scapegoating, highlighting instead the environmental degradation caused by commercial forestry companies, especially through the introduction of fire-prone eucalyptus and pine monocultures. An additional and frequent rumour in Chile revolves around deliberate fire for land use, usually primed for construction.

This mix of normalisation, historical scapegoating, and reactive discourse sets the stage for how Chileans understand, respond to, and often misinterpret wildfires. As Arana Sema observed, "People move on quickly. They're used to emergencies. But prevention? It's simply not in the frame."

## Wildfire details

In early February 2024, wildfires broke out across the Valparaíso region during a period of record high temperatures and strong winds fuelled by the El Niño weather pattern. Within days, the fires spread uncontrollably, engulfing more than 8,000 hectares of forest and urban land (that's roughly the size of Cambridge).

Entire neighbourhoods in Viña del Mar, Quilpué, and Villa Alemana were overtaken. The death toll surpassed 130, making this the deadliest urban wildfire in Chilean history.

Environmental conditions were catastrophic. Low humidity, intense heat, and shifting winds created what meteorologists refer to as "perfect fire weather". Yet, the disaster was also deeply human-made: many of the affected regions had no effective evacuation plans. And as the fires occurred in urbanising areas where urban planning regulation

[86] BBC, *Chile blames Mapuche Indians for deadly forest fires*, January 2012.

has been chronically inadequate, with no building regulation, and narrow streets with limited access to emergency services when needed.

Chile's national early warning system was also spotty, as several antennas were affected by the fires leading to many people not receiving the message on time.[87]


*A picture from burned property in Valparaiso. The sign reads "We were left alone". Source: Muriel Alarcón*

Additionally those sent only contained the word "evacuate" with no relocation site suggested, leading to traffic jams – some of which became engulfed in the middle of the fires.[88]

Muriel Alarcón, a journalist who visited the area after the disaster and is currently working on a book about the Valparaiso wildfire, described the haunting aftermath: burned-out cars still lining the escape routes, memorials in front of new homes, families that lost multiple generations in one night.

Authorities initially cited climatic and environmental factors. But from the first day, suspicions of arson surfaced. Rodrigo Mundaca, governor of Valparaíso, noted the fires had started at four different, almost equidistant, points simultaneously. President Gabriel Boric echoed this suspicion, calling for an investigation.

The wildfire was both a climate event and a governance failure. It exposed how deeply ill-prepared Chile remains for recurring catastrophes. As one survivor told Alarcón, "We saw the fire across the valley. I made coffee. By the time it boiled, the flames were at my door."

[87] Yasna Palmeiro Silva, *In Chile, huge wildfires have killed at least 131 people – but one village was almost untouched*, The Conversation, February 2024.
[88] *Ibid.*

## Resulting misinformation

As the flames spread through Valparaíso, misinformation followed. One of the most viral conspiracy theories, mostly spread by accounts outside of Chile with astronomical speed, held that homes and buildings painted blue were mysteriously spared from destruction.[89]

Social media users claimed that these fires were not natural or accidental but caused by DEWs. According to believers, these supposed high-energy laser devices do not affect blue-coloured objects. Videos circulated showing intact blue homes among ruins, while others showed people painting their roofs blue.[90]

This outlandish narrative found millions of viewers across TikTok, X and YouTube. Posts from English- and French-speaking users linked the Chile fires to similar conspiracy theories from Hawaii, portraying them as part of a globalist plot to displace populations and enforce climate-related controls.[91] Hashtags like #DEW and #BlueRoof gained traction, amplifying disinformation, before fact-checking outlets eventually debunked the story.

Alarcón also noted that some locals had initially speculated about road construction companies being behind intentional arson. But the truth that eventually emerged was more staggering than any conspiracy: the fires were in fact deliberately set — by those tasked with fighting them.

After months of investigation, prosecutors revealed that a small group of firefighters, together with employees of Chile's national forest agency CONAF, had orchestrated the blaze. They developed a crude but effective ignition device made from clusters of matches bound together, designed to maximise spread once placed in dry valleys. One such device, left unburned, provided investigators with critical proof.

[89] Alex Demas, *Fact Checking Claims About Directed Energy Weapons*, The Dispatch, February 2024.
[90] Quentin Peschard, C*hile wildfires: Conspiracy theorists claim blue paint can save homes, Observers*. France 24, February 2024.
[91] *Ibid*.

*The ignition devices found during the investigation in Chile. Source: Muriel Alarcón*

Further evidence came from WhatsApp messages exchanged between the perpetrators. According to Alarcón, these revealed how the group coordinated ignition points and even synchronised their roles: one would light the fire, while another would rush to "arrive heroically" as the flames spread.

The inquiry had almost cinematic turns. Prosecutors first traced cars moving near the ignition points, narrowing down suspects. One vehicle, registered to a deceased person, eventually resurfaced at the fire's origin site, where investigators were waiting in hiding. After following it, the authorities were stunned to see a firefighter stepping out. Years earlier, one of the suspects had been seen gazing mesmerised at a blaze, declaring, "When I grow up, I want to be a bombero so I can put these out."

The revelation of the firefighter involvement shook Chile, with reactions ranging from fury to pure disbelief.

> *"People were angry and shocked," recalled Arana Sema. "Here, policemen and firefighters are heroes. To discover that both firefighters and CONAF workers were involved in killing more than a hundred people — many just couldn't or didn't want to believe it."*

As to the firefighters' motive behind the arson, prosecutors have been careful, rejecting the idea of pyromania which could allow defendants to plead insanity. Instead, they described a cycle of perverse incentive: men who set fires in order to put them out, sometimes for the adrenaline or heroism that comes with it. Alarcón noted that the investigation may expand to earlier blazes, but the painstaking process means the full truth will emerge long after the tragedy has faded from public view.

Despite its death toll and cinematic investigation, the Valparaíso fire quickly faded from Chile's national narrative. Just days after the flames subsided, former President Sebastián Piñera died in a helicopter crash. Media attention swung almost entirely to his death, and never really revisited Valparaíso thoroughly.

> *"Everyone was talking about the fires for two days, and then nobody talked about the fires again at all" Alarcón noted. "The coverage during the time of the wildfire wasn't enough to put that event in the consciousness and history of Chileans."*

Though the resurgence of evidence for the firefighters involvement did spark fleeting interest in late spring, Alarcón's reporting in Valparaiso also exposed the silent aftermath — communities left with a complex task of rebuilding, with entire neighbourhoods left in ruins and survivors navigating grief with little state support or media interest.

"It was shocking to be there and see what went unnoticed," she recalled as she described walking through a mass memorial erected by the citizens.

> *"It is as if fires and disasters kind of erase some places. And I guess it is not clear what our role is over there as journalists?"*

# Avenues for improvement: a preparedness approach

From Evros to Los Angeles, Marmaris to Valparaíso, the four cases examined above are all stories of destruction as well as informational failures. At times, they risk leaving one with a sense of despair: if wildfires themselves keep increasing in frequency and intensity, and if misinformation spreads faster than any fire line, then what chance does journalism have?

As any good crisis manager would tell us, the answer lies not in despair but in preparedness. As Ilan Kelman, Professor of Disasters and Health, explains: disasters essentially are situations where the "ability of people to cope with a hazard or its impacts by using their own resources is exceeded".[92]

Journalism has something to learn from the story of fire itself. As the case studies established, modern megafires are rarely "natural disasters" alone: they are often the product of under-preparedness. With unmanaged forests, abandoned grazing practices, and decades of neglected prevention measures, landscapes accumulate fuel until a single spark becomes a catastrophe.

The same principle applies to information. When the information ecosystem is left unprepared, without strategies, tools or anticipatory coverage, the sparks of rumour and conspiracy inevitably spread. A wildfire of misinformation inevitably follows every wildfire of flames.

Preparedness, therefore, must become a central journalistic mindset when it comes to covering wildfires if we hope to compete with, and extinguish, wildfire misinformation.

This means equipping newsrooms with tools and strategies before the first flames ignite. It means anticipating the questions audiences will ask and preparing clear, evidence-based answers before speculation fills the void. It also means staying present after the flames die down, covering recovery and accountability when attention wanes.

Frazer-Baxter explained the opportunity for newsrooms clearly:

[92] Ilan Kelman, *Pakistan's floods are a disaster – but they didn't have to be*, The Conversation, September 2022

> *"Wildfires are more or less predictable: we do know when there is an increased risk of wildfires. So newsrooms can definitely prepare for them in advance. Identifying local experts and wildfire scientists is definitely really important, while pre-preparing correct lines about the link between wildfires and climate change that can be easily dropped into stories would also help."*

Crucially, preparedness also means understanding that there is no one-size-fits-all toolkit for every wildfire story, and that a single wildfire strategy is not enough to keep newsrooms "wildfire resilient" forever. As Jeffrey Schlegelmilch, director of the National Center for Disaster Preparedness at Columbia University's Climate School puts it: "Preparedness is not a static point in space and time or an end goal achieved; it's a process that has to be engaged".[93]

The preparedness mindset should therefore turn wildfire coverage from reactive scramble to a planned and regularly updated response. It should also permeate the entire newsroom, and cannot be siloed to climate or environment desks. Political reporters must know how to interrogate the government response. Business or energy desks must track infrastructure failures, such as power lines sparking fires.

Ivan Couronne, Future of the Planet Global Editor at AFP, underscored this point at an event organised in February 2024 by the Reuters Institute for the Study of Journalism:

> *"I always say the most important climate event of the year for the media is not COP, it's summer. So this is what the media should prepare for. News organisations should have a plan, since we know there are going to be extreme weather events like wildfires. There is a list of things you should do. Do you have written guidelines for your newsroom, not just for your climate reporters? Have you trained your business or political editors?*

[93] Daniella Zandi, *Why It's So Hard to Be Prepared for Disasters,* State of the Planet: News from Columbia Climate School, March 2023

**Solutions in storage**

In practice, newsroom preparedness for wildfires means building and maintaining what can be called a "storage of solutions" – resources that can be integrated or adapted into wildfire reporting much quicker than reinventing the wheel.

A good start for this is checklists, both for wildfire stories and for wildfire fact-checking. Every fire prompts similar "first principles" questions. A checklist forces editors and reporters to go beyond the spectacle of flames and towards the structural questions that determine both cause and consequence, and answer the questions that often pop up in public discourse.

## Key editorial questions to guide wildfire coverage

| Theme | Examples |
|---|---|
| Critical Information | • Where is the fire right now?<br>• Where is it heading currently according to current climate and wind conditions?<br>• Are there evacuation alerts that need to be communicated?<br>• Are evacuation orders distinct from warnings, has this been made clear to the public?<br>• What infrastructure (roads, hospitals, power stations) is currently threatened? |
| Ignition | • What is the ignition cause? If still unknown, communicate the uncertainty transparently.<br>• Do we know the precise ignition spot(s)?<br>• Were power lines, infrastructure, or human activity near the first ignition site?<br>• Are there multiple ignition points — and if so, could they plausibly be linked to lightning, human negligence, or coordinated arson?<br>• Is there historical fire activity in this region (recurring hotspots)? |
| Climate and environmental conditions | • What were the climate conditions leading up to the fire (temperature, drought, vegetation dryness, "hot and dry index")?<br>• What are the current wind conditions?<br>• Was this region experiencing unusual climate anomalies (heatwaves, El Niño, etc.)? |

| | |
|---|---|
| | • How do these fires connect to longer-term climate trends in the region?<br>• Are invasive species (e.g., eucalyptus, pine monocultures) contributing to flammability? |
| Preparedness & prevention | • Was there a prevention or management plan in place for this area? Were fire breaks, grazing, or controlled burns used to reduce fuel loads?<br>• How many foresters/fire prevention staff are responsible for this area, and are they adequately resourced? |
| Impact & response | • How many people have been displaced or evacuated?<br>• Which communities are the most vulnerable (elderly, isolated villages)?<br>• Is aid (water, shelters, relief funds) reaching affected areas quickly?<br>• Are there verified reports of casualties — and who are they? (important for countering erasure, as in Dadia). |

A second dimension of this is evergreen wildfire content. Before wildfire seasons start, newsrooms can prepare explainers on things like the physics of fire, why forest land laws and demarcations debunk land plot conspiracies, or how climate change links to heatwaves and droughts. These assets can be updated and re-circulated each season, serving as prebunks before misinformation takes root.

Enrique Anarte, Multimedia LGBTQ+ reporter at *Context* and the first TikTok Lead of *Context* and the Thomson Reuters Foundation, points out how crucial prebunking is in today's information ecosystem, where conspiracies tend to be recycled and travel with astronomical speed.

> *"Integrating prebunking into our newsroom strategy can be really powerful, especially if you have evergreen content. If you have a video which you can repost or quickly adapt to the local reality, that gives you time to start building resilience against the fake claims that are starting to spread. The problem with misinformation is that the lie will always travel faster than the truth. Good planning can help try to counter that a little bit. I feel like [journalists are] very reactive when it comes to journalism and*

> *misinformation. We've been hearing about the same conspiracies – we should be better prepared to meet them."*

A third possible preparedness route, as Frazer-Baxter already mentioned, is establishing human networks. Journalists should not have to scramble for experts mid-crisis when both newsrooms and responders are already under pressure. Mapping out local wildfire specialists – firefighters, foresters, ecologists, meteorologists, community leaders – every wildfire season ensures rapid access to trusted voices. These pre-prepared networks make coverage not only faster, but more grounded in the lived realities of affected communities.

These human networks between journalists, civil society and wildfire experts can also lead to seasonal newsroom training. Before each fire season, outlets can organise workshops with experts ranging from fire ecologists to incident commanders, to help make reporters wildfire literate. Such sessions can familiarise journalists with basic fire behaviour, common terminology, and seasonal risk assessments, giving them the vocabulary and understanding to ask sharper questions, avoid errors, and recognise when misinformation is distorting reality.

The common thread between these practices is clear: media shouldn't improvise in crisis, but create strategies that anticipate recurring informational needs and recurring falsehoods.

This approach underpins four additional avenues of improvement explored in this last chapter of the paper. Each speaks to a different dimension of the wildfire information ecosystem: tone, format, credibility, and reach. But all converge on the same principle that wildfire journalism and fact-checking must be proactive, not reactive.

# Rethinking the tonality of fact-checking

Fact-checking can be journalism's firewall against misinformation. But when it comes to wildfires, its current practice is sometimes poorly equipped to withstand the heat.

Debunks that read as condescending, overly technical, or aligned with political agendas rarely persuade the audiences most susceptible to conspiracy theories. In some cases, they can backfire, deepening distrust. In Greece, for example, national TV panels on wildfires have often lapsed into demeaning language toward those who believe conspiracies – a tone that alienates rather than convinces.

If the goal of fact-checking is to truly win the hearts and minds of those most prone to conspiracies, a new approach to tone is required. Below are three, by no means expansive, pillars of a more inclusive and effective tonality of wildfire fact-checking.

### Clear language, no jargon

Wildfires are complex phenomena, but the language used to explain them should not be. Instead of abstract climate terms like "fuel load anomalies", journalists should opt for plain, descriptive language that resonates with lived experiences – what people saw in their neighbourhoods, how embers travel, why houses burn while trees stand. Ffact-checks rooted in lived realities speak to observation rather than ideology.

"We should definitely avoid jargon or complex terminology wherever possible and should never assume that an audience knows what we know," said Frazer-Baxter when referring to wildfires and climate attribution.

> *"It is definitely important to describe the climate links and the processes in simple and accessible language, to break down the steps between temperatures going up, the evaporating water out of plants and soils, and as a result, the soil becoming more flammable.*
> *Especially for wildfires, which are more complex than heat waves or floods, it is very crucial to do so clearly and in detail, in descriptive and comprehensible language.*

## 'Show your work'

Transparency is another useful pillar that can lead to more persuasive fact-checking. The BBC's Verify model, for instance, shares the precise steps and methodology of debunking in its fact-checking stories.[94] This includes things like what sources were consulted, what evidence was weighed or how pictures or video were reverse-image-searched for authenticity, shared as tools to establish credibility and trust.

For wildfire coverage, this means illustrating not only what's known, but exactly how something was verified or debunked.

> *"I always go back to that motto we all learned in maths class: show your work." explained Marco Silva. "Don't just tell the audience this is false. Tell them why it's false, where the evidence is drawn from, and let them see it for themselves. Show them all the ways and places where you can see the evidence for themselves and see why a theory is wrong. That way you're not shoving things down people's throats. You're giving them the tools to make informed decisions."*

## Communicate the uncertainty

The third, and perhaps most crucial, component that Silva highlights is communicating uncertainty properly. Wildfires unfold in real time; ignition causes and climate attributions often take months to confirm. If journalism rushes to frame certainty where science has not, it risks losing trust or setting itself and the experts up for failure. Admitting what is not yet known, and explaining why, makes fact-checking more credible, not less.

> *When there are uncertainties, reflect those uncertainties. Explain as simply as you can possibly do, exactly where those uncertainties are.*

This process means adjusting expectations as journalists, as George Vlahos explained. Media pressure for quick answers often ends up misrepresenting science and distorting information.

[94] BBC, How BBC Verify is transparent in its fact checking, June 2023.

> *"Scientists must express themselves with doubt – it's the correct way. But the media pushes us with questions like: 'Do you rule out a fire resurgence in the next 24 hours?'; 'Can you fully rule out the possibility of arson?'. The logical answer is usually no, I cannot rule this out. But then headlines twist it: 'Expert says fire could reignite, or expert suggests arson' The nuance is lost, and the pressure rewards those who speak with false certainty."*

A good litmus test before any fact-checking piece is for a journalist to ask themselves the following question: would someone already believing the conspiracy be more likely to be convinced by this? Himanshu Panday, a digital anthropologist and co-founder of Dignity in Difference, an organisation which builds resistance against hate speech in South Asia, put it perfectly.

> *"When was the last time you saw someone change their mind because they were told they were wrong? When a fact-check collides with political identity, the brain reacts as if under attack. People feel as if a knife is at their throat. In that state, nothing gets across. But empathetic and inclusive fact-checking can change that."*

**Spotlight: Bunk with Kindness**

Bunk With Kindness is a platform developed by Panday and his team at Dignity of Difference, which helps guide reporters on how to debunk false claims using empathy and reason. The platform essentially aids fact-checkers to craft responses that are not only accurate but also compassionate – because as the organisation's philosophy is that "changing minds isn't just about facts; it's about connection, context, and community".

At the back-end, the platform uses AI models trained to recognise, in real-time, attributes known to work across political divides and evaluates reporters' fact-checking based on them.

"For the last decades, there has been substantial progress in psychology, linguistics and natural language processing that helps us understand what makes people talk beyond political beliefs." Panday said. "Those attributes seem to be agnostic of topic."

# Wildfire coverage for the Tik-Tok era

The case studies above all showed that wildfire misinformation thrives in short-form, high-velocity spaces like TikTok, Instagram Reels or YouTube Shorts. Too often, traditional journalism continues to favour text-heavy explainers and long reports, which rarely penetrate the platforms where rumours spread fastest.

If journalism wants to extinguish wildfire misinformation, it should do so in the information ecosystem where it spreads, with content designed and packaged for the video-first era.

Audiences increasingly expect it as well. For the first time, this year's Reuters Institute's *Climate Change and News Audiences* report (2024) asked respondents about their preferred formats for consuming news and information related to climate change. It found that in every country polled apart from the UK, video (including documentaries), is the most popular format for climate information (51%), ahead of text-based formats.[95]

Despite their complexity, wildfires may actually be primed for the video-first content era. During a tour at the BBC Broadcasting House, BBC's Analysis Editor Ros Atkins shared that his now iconic "Ros Atkins On…" video explainer format began during the 2019-20 Australian bushfires, when a simple video he recorded on a shaky phone camera about the wildfires garnered a very encouraging response.

### Preparedness in vertical form

Newsrooms often complain that vertical videos take time away from live coverage. The truth is much of this content can be created *before* wildfire season and adjusted as needed. Evergreen explainers, like short, adaptable videos on the basics of fire behaviour and climate, can serve both as public education and as prebunks against recurring rumours.

[95] Waqas Ejaz, Mitali Mukherjee, Richard Fletcher, *Climate change and news audiences report 2024: Analysis of news use and attitudes in eight countries*, Reuters Institute for the Study of Journalism, January 2025

“Wildfires are one of those topics that come every year at around the same time,” noted Anarte. “If you have evergreen explainer content about wildfires ready, you can post, repost, and adapt it as searches spike.”

Popularising wildfire information can be difficult, as fires can be complex and multifaceted. What newsrooms can do is to break down different steps of wildfire knowledge, and package them in short and digestible formats. Below are some ideas indicative of directions for possible vertical video wildfire explainers.

- “Did you know 90% of wildfires are human-caused?”
- “How heatwaves dry out forests and help wildfires spread.”
- “Three hidden risks that linger after a wildfire.”
- “Why multiple hotspots don’t always mean arson.”

Having these clips ready gives journalists a head-start when misinformation emerges, and makes it possible to circulate truth at the same speed as lies.

These videos can also be adjusted as prebunking to counter recurring wildfire myths – arsonists, foreign saboteurs, directed-energy weapons. Instead of reinventing the wheel each season, newsrooms can maintain a library of ready-to-use clips that are recycled and updated with local context. They can then be redeployed at speed across social media platforms, where misinformation is most likely to spread.

### Humanise the wildfire content

Vertical formats reward personality, not logos. A journalist, meteorologist, or local expert speaking directly to camera is far more engaging than an anonymous statement or text hovering over stock footage.

This means abandoning the idea that a written article clipped into a video of wildfires will suffice. Instead, wildfire explainers should be crafted for vertical formats: 30 or 60 second clips that use captions, animation, or split-screen comparisons to make science intuitive.

Above all, they should be driven by personality, which resonates in those formats. For newsrooms, this means utilising their talent and putting a face behind both wildfire content and wildfire fact-checking.

In an era of deepfakes and AI manipulation, Anarte argues the shift towards personality-driven content is an opportunity for the media to rebuild trust. "If there is one thing we can learn about the rise of news creators or creators in general, it is that people want to trust people, especially in an age where trust is so decentralised, and particularly when it comes to news and information," he said.

> *"How is a typical stock footage explainer going to stand out? We're in a world where people learn to consume information on TikTok, Instagram, Snapchat, whatever they are. So newer generations do not have the same idea of inherent trust in the media that we did. But when audiences see a person they can connect. That's the opportunity we have to rebuild trust."*

Journalist Lewis Denison, who helped ITV News grow a TikTok politics channel to over 20 million likes, visited RISJ for a seminar with the journalist fellows and offered a practical tip about explainer videos for complex things, like wildfires:

> *"Start your videos with a question. And always make it relatable, like you're explaining it to the average person you know."*

## Building feedback loops

Social platforms are not just distribution channels – they are listening posts. Misinformation often first appears in the comments under wildfire coverage. By being active in these spaces, journalists can both spot emerging rumours earlier and learn what language or explanations resonate with audiences by looking directly at engagement.

As Anarte puts it, feedback loops inherent to social media content help tailor journalism to real concerns: "The new relationship with the audience is really useful in terms of spotting falsehoods fast," he said.

> *“I am working on a story now where people just started commenting misinformation in some of our earlier videos, which led us to the story. Basically, by covering the topic on social media, you can also start uncovering the misinformation on the topic.”*

In short: wildfire conspiracies thrive in short-form ecosystems, so wildfire journalism must thrive there too. With preparedness, human voices, and active engagement, newsrooms can stop ceding TikTok to the conspiracy theorists and start meeting audiences where they are.

**Spotlight: ‘DisastrousHistory’**

Anthony Finchum is a disaster area specialist, with expertise in fire, arson, and explosion investigation.

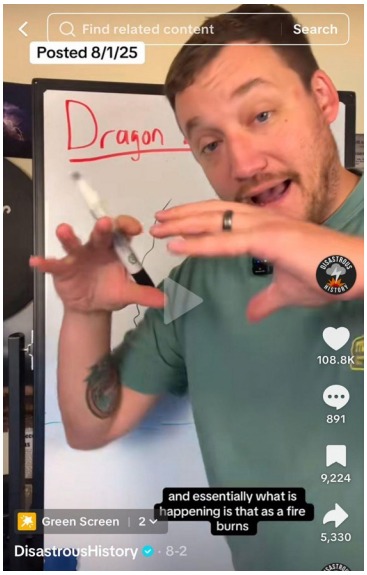
He is also the face behind the highly successful DisastrousHistory project, that spans across platforms and includes podcasts and vertical videos.

His TikTok account has garnered over 430,000 followers and more than 16 million likes.

For newsrooms that complain that vertical video requires too much time and resources, DisastrousHistory offers an astonishing answer.

Some of Anthony’s most viral videos are what he calls “whiteboard disasters”, where he explains various complex aspects of wildfire behaviour, simply by drawing information into an empty whiteboard.

His platforms show that video wildfire content can be successful even when intricate, and it should definitely not be constrained by production budget limitations.



# Using Earth Observation and Satellite Data

Timely and accurate monitoring of wildfires has become a critical part of managing wildfires in the 21st century. Satellites are one of the most powerful tools for wildfire policy, with Earth Observation (EO) being a critical part of wildfire detection, real-time tracking, and post-fire assessment.

Journalism too could benefit from integrating EO, both to enhance its wildfire reporting and to help extinguish wildfire misinformation. Satellite data in the form of images or maps can provide a bird's-eye view during an unfolding blaze, flag early warning signals before ignition, and deliver authoritative mapping in the aftermath.

By providing timely and authoritative depictions of burned areas and active fire fronts, we can cut through the noise of rumour and speculation.

## A wealth of data

The good news is there is a wealth of public data, and, as Girtsou said, it is "often made accessible to [journalists] at times of emergencies like wildfires". Sebastian Walczak, a writer for Geoawesome, recently compiled a list of key data providers in wildfire EO, even classifying key players in terms of preparedness and prevention data, detection data and response and aftermath.[96]

**Three useful satellite data providers**

- NASA FIRMS Provides near real-time global fire detection using MODIS and VIIRS sensors. Offers web maps, downloadable data, and mobile tools that show active fire locations and thermal anomalies.
- Copernicus EFFIS An EU program using Sentinel satellites to track wildfires, emissions, and smoke dispersion. Supplies near real-time forecasts on wildfires, how fires affect air quality and the atmosphere.
- Earth Fire Alliance A global nonprofit coalition working to democratise wildfire data. It integrates information from multiple providers and involves local communities in validating and responding to real-time fire activity.

Often wildfire misinformation thrives in uncertainty, through inflated numbers, fake maps, or videos wrongly attributed to the fire zone. By integrating satellite data,

[96] Sebastian Walczak, *How Earth Observation is Transforming Wildfire Monitoring and Management*, GeoAwesome, January 2025.

newsrooms can counteract many such rumours, providing audiences with a bird's-eye view of the disaster and establishing trust and credibility.

### Both re-active and pro-active

EO data about wildfires doesn't only have to be reactive. By tracking vegetation, humidity, and biomass accumulation, satellites can highlight conditions where fire risk is rising. This kind of prebunking coverage can prepare the public for wildfire season and can explain why some years and some areas are more vulnerable.

Various actors that provide EO wildfire data, like the EU Science Hub, provide regular wildfire risk assessments, which can be useful to policymakers and journalists alike.

Ioannis Papoutsis, Head of Orion Lab and Assistant Professor of Artificial Intelligence for Earth Observation, mentioned how EO data can also reveal whether too much biomass has accumulated, leaving forests underprepared for wildfire season.

> *"EO data can give you a good assessment of wildfire risk. This is based on meteorological conditions of the previous days and following days, the vegetation conditions as seen by the satellite, and some variables that have to do with the anthropogenic factor. This can be embedded in journalist's reporting."*

Integrating EO risk maps into seasonal wildfire explainers can help win audience trust, by not simply showing where fires are burning, but also where they are most likely to start, and shift the conversation towards prevention.

EO is also incredibly useful for aftermath reporting. Once a fire subsides, satellite data provides unmatched capacity for damage assessment: burned-area polygons, links to infrastructure, grid damage, and road or settlement exposure. If processed correctly, these layers can allow journalists to hold governments accountable and help the public understand the scale of catastrophe.

But as Cherici stressed, EO is not a silver bullet. Her investigative project attempted to use satellite data to analyse how various factors and human activities contributed to Turkish wildfires, but the collaboration with the design studio ran into synergy problems.

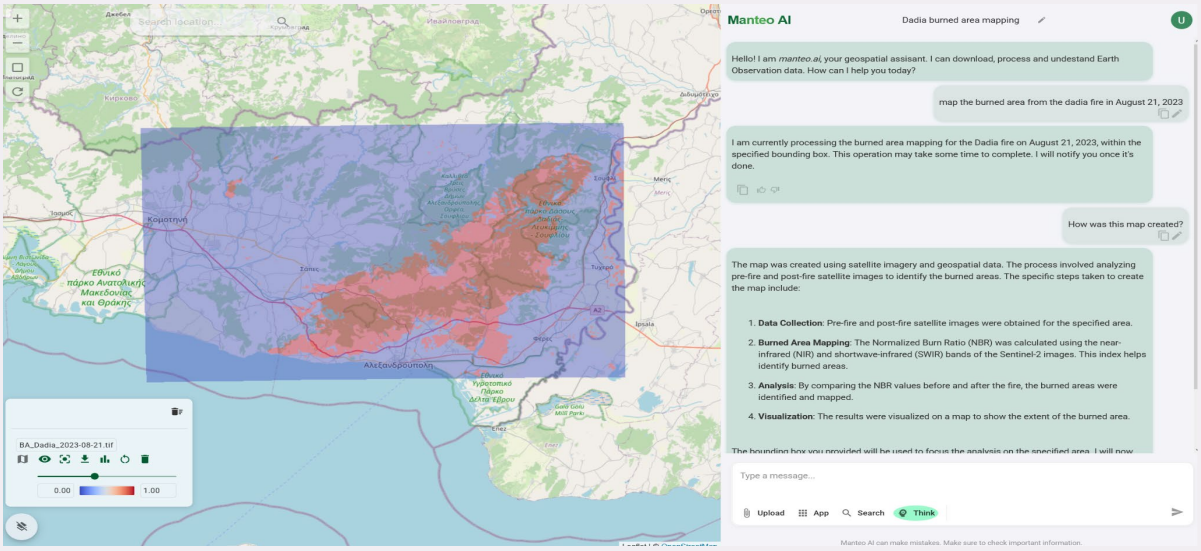
> *"They were really applying a research approach, but at times they were not understanding the journalistic perspective. Satellite images have a lot of potential, but the data needs a lot of work, processing and localisation. There are a  few constraints that may be easy to underestimate."*

**Spotlight: Manteo.AI**

Manteo AI is a chat-map assistant that simplifies access to Earth Observation (EO) data and insights, eliminating the need for technical expertise or specialised software.

Taking its name from the ancient oracle of Delphi, this assistant is developed by Girtsou and her team, and it offers an interactive map interface, various EO data processing tools, and AI-powered analysis for wildfires, all accessed through simple prompting.

Below is a screenshot depicting the Manteo's interface, after the assistant was asked to map the Dadia 2023 wildfire.




"Think of it like a house for geographic data," said Girtsou. "Say you have an ongoing wildfire and a journalist wants to map the entire burned area quickly, for a short report to cut through confusion. They can go to our chatbot and ask that in a prompt, which will produce a burned area map, and at the same time a narrative report, while also giving access to all products and data used for the response so the journalist can process them accordingly."

## Bridging the skills gap

Where skills gaps exist, the solution may be regular workshops between journalists and EO researchers before wildfire season begins. Girtsou sees a lot of potential in this idea, arguing that establishing workflows where scientists provide data outputs, and journalists translate them into stories can be a mutually beneficial process that elevates both wildfire reporting and science communication.

> *"It's a two-way learning stream. Journalists can familiarise themselves with trends and terminology. But scientists can also get a reality-check in terms of what society and audiences care for.*
> *Working for years with wildfires, both with operational actors and the media, I realise that many times, since I am far from the event, I may produce statistics that no one cares about. I may fixate with the altitude of the fire, for example, because it is useful for me as a variable to predict how the fire moves and at what speed. But really, a journalist doesn't care about the middle step of altitude, they care about where the fire is moving".*
> *Every fire season, journalists and EO scientists should meet to set out what interests us, how we exchange information in times of crisis, and how we become true collaborators."*

In terms of skills development, Girtsou argued that newsrooms should train at least one staffer per climate or science desk to use basic GIS or editing tools (equivalent to Photoshop-level skills) so they can quickly adapt EO maps into broadcast and social-ready visuals.

Cherici highlighted that journalists don't need to be academics to use EO effectively, but adds that basic data literacy is non-negotiable:

> *"To utilise satellite data you need some data skills, even basic ones. Things like excel, geo-localisation, or connecting databases. In some cases, you can even trace the fires yourself using open satellite images. Though it needs meticulous work on a localisation level, you actually don't need to be an academic for this."*

Every newsroom covering wildfires should train or hire at least one "geo-journalist" – someone comfortable with EO basics and able to liaise with scientists to turn raw data

into credible reporting. A good starting point is NASA's useful open course on how to use its earth observations and tools for wildfire monitoring and management.

By weaving satellite data into wildfire coverage before, during, and after blazes, journalists gain a toolset that strengthens accuracy, builds trust, and anticipates the rumours that thrive in uncertainty. Preparedness here means more than stockpiling maps. It means cultivating skills, partnerships, and workflows that allow EO to become not just a reporting tool, but an evidence-based firewall against wildfire misinformation.

# New angles, local insights

Wildfire reporting is so much more expansive than playbook disaster coverage. Often conspiracies thrive because they feel relevant and personally resonant – journalism and wildfire coverage should do the same.

Wildfires intersect with almost every domain: economics (insurance markets collapsing under repeated losses), health (air quality and respiratory disease), culture and inequality. By widening the lens, journalists can make wildfire coverage matter to broader audiences – not just those in fire-prone regions.

At a Reuters Institute event, Bloomberg Green managing editor Sharon Chen said audiences often respond more when stories are reframed to feel close to their everyday lives.

> *"It's easy for reporters to get sucked into the emotion of a climate change story, and the editors are the ones who need to pull back the lens and say, how do we get someone to care about this story?" she said. "We write about it from a risk management perspective, like this is how it's going to impact your home, business, land, insurance costs."*

Greg Cochrane discovered a similar power in cultural framing. While reporting for the *Guardian* on the aftermath of California's wildfires, he told the story of how the wildfires decimated LA's local music scene, also using captivating images of the catastrophe. "It emerged as a beat, really, of music and climate change," he recalled.[97]

> *"People ask, 'What do music and climate change have in common?' Well, climate change is an everything story… We've become almost immune to seeing burned-out houses. But when you see a piano teacher's instruments incinerated, it's a symbol. It's resonant. It's the same story, but a different way in for audiences."*

[97] Greg Cochrane, *'Everything we built – gone': how the wildfires decimated LA's music scene*, The Guardian, May 2025

As important as fresh angles are, the second step is to centre them around human voices. Human-centred storytelling cuts through noise and rumour because it connects to lived experience. Taiyler Mitchell's reporting on Altadena, where delayed evacuation alerts disproportionately hit Black neighbourhoods, resonated because it showed how inequality shaped risk, rooted in long testimonies from the residents of West Altadena.

> *"It's always super important when you have a piece like this to have that human voice outside of the journalist's voice," Mitchell explained. "They're going to have that anecdote, that level of storytelling that I can't necessarily recreate. As journalists the most important thing here is to help our sources feel comfortable".*

In Evros, Apostolos Staikos found audio to be a powerful medium for this kind of intimacy, particularly with victims of wildfires that may still be undergoing a lot of trauma. "There is a lot of interest from locals who are not used to reporters visiting an area long after the catastrophe," he said.

> *"I believe people in Evros opened up also because we were doing podcasts, relying on audio which is less invasive. One or two people told me that if I had a camera they wouldn't have spoken to me. But I noticed that after 30 minutes, most people forgot they were speaking to a journalist. There is no camera, no bright light and microphone in hand, which makes people feel put on the spot. Audio was very liberating for both of us."*

New angles rooted in local insights matter because they show communities that journalism sees them, hears them, and values their stories. By rooting wildfire coverage in local and human perspectives, journalism does more than enrich its storytelling – it helps ensure that fire-prone communities do not feel abandoned or instrumentalised by the media.

When people see their lived realities reflected with care, they are less likely to turn to conspiracies that claim to speak for them. Locally grounded reporting therefore limits the resonance of misinformation where it spreads most easily, while also deepening trust and engagement with broader audiences. In short, telling wildfire stories with local insight is not only more human; it is also more resilient.

# Conclusion

If there is one takeaway from the project, it is that to properly extinguish wildfire misinformation, journalists have to do more than just debunk. They have to capture the entire story of wildfire, with its complexities and recurring questions.

Wildfires are never only about flames. They are about governance and preparedness, forests and climate, human negligence and resilience. When journalism fails to tell that story in its full dimension – before, during and after the blaze – misinformation fills the void.

Our work starts by understanding what makes wildfires prone to wildfire misinformation, and anticipating questions, rumours that frequently pop up. It means learning from previous and recurring conspiracies, but also extending the lens of misinformation to understand the gaps in information and the media's own blind spots.

It also means developing new avenues for wildfire coverage and fact-checking – ones that are rooted in an attitude of preparedness. Wildfires are more or less predictable: we know the season, we know the risks, and we know that rumours will follow the flames. Journalism has no excuse to be caught unprepared. Coverage should not wait until smoke is visible on the horizon. It should anticipate the recurring questions, prebunk the recurring falsehoods, embed wildfire literacy across beats and develop proactive tools, from checklists to wildfire literacy workshops

There are multiple avenues to improve our wildfire coverage: clearer and inclusive fact-checking that avoids condescension and properly communicate uncertainty, personality-driven vertical video content that fights misinformation in the ecosystems where it spreads, Earth Observation data that cut through rumour and noise, and above all, new angles and local insights that restore relevance and credibility.

This summer in the Mediterranean underscored the urgency of these lessons. In my home country of Greece, the island of Chios lost almost a third of its forests to wildfire, Patras – the third-largest city – was surrounded by flames, and major fires once again scarred the forests surrounding Athens. Alongside the destruction came familiar informational flaws, from sensationalist coverage that reduced catastrophe to spectacle, to false claims about the location and spread of fires in Patras.

The hopelessness was palpable – the sense of *déjà vu* as forests thinned and coverage mistakes repeated. But there was also hope. More than ever before, preparedness and prevention entered the public discourse. And when conspiracy theories about wind turbines resurfaced, fact-checking was prompt, clear, and notably less patronising. That shift matters. It suggests that audiences are ready for more serious, sustained wildfire coverage, and that journalism can rise to meet them.

There is no shortage of public interest in wildfires. Audiences are waiting for us. Wildfires will only grow in frequency, scale, and relevance. They are among the most complex stories of our time – but also among the most urgent.

If journalism prepares, there are stories we can – and must – tell well.

# Acknowledgments

First and foremost, I want to thank the Reuters Institute for the Study of Journalism for giving me the opportunity of a lifetime. To be given the time to step back and think with a bird's-eye view about a devastating problem in the news industry, aided by clarity and thought-provoking debates with guests and colleagues from all over the world, has been truly life-changing.

An immense gratitude goes to Caithlin Mercer for her incredible guidance, patience, and contagious enthusiasm for our work. She not only helped sharpen this project with critical clarity, but also pushed us to uncover the deeper questions beneath it, encouraging us to find our own voice and thinking within them. Working with her has been both a privilege and a joy.

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I am also deeply grateful to George Vlahos, my very first interviewee, whose insights set the foundation for much of my research and inspired me throughout. And a special thanks to the community of Evros, who were so receptive and open during my field trip there.

Finally, I want to thank my fellow members of this year's RISJ fellowship cohort. Their thought-provoking conversations, kindness, and care changed not only the shape of this project, but also my coverage and belief in the mission of our profession.

# Appendix A

## List of interviewees

| Name | Title | Organization |
|---|---|---|
| Muriel Alarcón Luco | Reporter, Tony Horwitz Fellow | Columbia University Graduate School of Journalism |
| Enrique Anarte | Multimedia LGBTQ+ Correspondent | Context, Thomson Reuters Foundation |
| Maria Julia Arana Sema | Advisory in Sustainable Development and Communications | UN Global Compact, Chilean Ministry of Science, Technology, Knowledge and Innovation |
| Sofia Cherici | Multimedia Journalist | Journalismfund Europe |
| Greg Cochrane | Journalist, Engagement Lead | Oxford Climate Journalism Network |
| Stella Girtsou | Earth Observation and Machine Learning Researcher | Frontier Development Lab Europe |
| Sam Fraser-Baxter | Communications Manager | World Weather Attribution, Imperial College London |
| Taiyler S. Mitchell | Breaking News Reporter | Huffpost |
| Hazal Ocak | Journalist | Le Monde diplomatique Türkçe |
| Himanshu Panday | Founder, Digital Anthropologist & Researcher | Dignity in Difference |
| Yiannis Papoutsis | Head of Orion Lab, Assistant Professor of Artificial Intelligence for Earth Observation | National Technical University of Athens |
| Karen Rebelo | Deputy Editor, Journalist and fact-checking expert | BOOM Live |
| Marco Silva | Senior Journalist reporting on climate change disinformation | BBC News, BBC Verify |
| Vasilis Sitokonstantinou | Postdoc Researcher on Machine learning for Earth and Environmental science | Image Processing Lab, Universitat de València |
| Apostolos Staikos | Journalist | Euronews, IMEddB |
| Costas Synolakis | Gordon S. Marshall Professor of Engineering Technology and Professor of Civil and Environmental Engineering | University of Southern California, Viterbi School of Engineering |
| Elias Tziritis | Forest Fires Actions Coordinator | WWF Greece |
| George Vlahos | Associate Professor | Agricultural University of Athens |