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Attica Region, Greece July 2018: A tale of two fires and a seaside tragedy

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"Uniting Our Global Wildfire Community"

APRIL 2019 - VOLUME 28.2

WILDFIRE[®]

THE FIRE GLOBE

GREECE | JULY 2018

CALIFORNIA | NOVEMBER 2018

TASMANIA | JANUARY/FEBRUARY 2019



An official publication of the **International Association of Wildland Fire**



FIRE GLOBE - GREECE. In the aftermath of the East Attica fire, the narrow roads continued to clog traffic. During the fire, Demokratias Street was one of many that became death traps. Learn more about this and other factors that led to this disaster in the first of three articles on the Fire Globe.

Fire is a global phenomenon — a topic of study, concern, action and advocacy. In this issue we expand our coverage with a new, regular focus on global fire, with articles this issue on extreme fires from Greece, California and Tasmania.

These articles support another new feature as we launch a series of IAWF Issue Papers. The first topic on 'Extreme Fires' is anchored in our Fire Globe coverage in this issue and in the experience and expertise of our IAWF members.

ON THE COVER:
Burning out on the Western Hills Fire on February 5, 2019 near Zeehan, Tasmania.

Photo: Michael Scott Hill

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ATTICA REGION, GREECE

JULY
2018

By Gavriil Xanthopoulos and Miltiadis Athanasiou
(Photos by the authors)

The 2018 fire season in Greece started out quietly. The weather was quite favorable, with above average precipitation and lack of strong winds and/or heat waves. But on July 23rd - things changed dramatically. On that tragic day, a wildfire in Northeastern Attica set a new record for fire fatalities in Greece, and became the second deadliest fire in the world for this century. One hundred people were killed and 150 more injured. More than 1,650 homes burned along with 1,431 hectares (5.5 square miles) of agro-forestry vegetation and urbanized land. We provide a synoptic overview of what happened that day and identify the major factors contributing to the disaster in the hope of helping Greece and other countries to avoid similar tragedies in the future.

The information is sourced from:

- Video footage and photographic material of numerous citizens uploaded on social media. Most people were located, contacted, and in many cases interviewed in person.

- Interviews with professional and volunteer firefighters who worked on the fire perimeter.
- Interviews with locals during numerous visits in the area immediately after the fire, including residents who chose to leave and many who decided to stay, accepting the risk of entrapment.
- Data and information reported in the mass media, by public agencies, and in photos.

July 23rd was the first day of the 2018 season for which a “very high” fire danger rating (class 4 in the 1-5 range) had been assigned in the region of Attica, and to a large part of southeastern continental Greece, in the Fire Danger Prediction map issued daily by the General Secretariat for Civil Protection. This rating was due to a forecast of strong to extreme westerly winds.

At 12:03 that day, the first fire erupted on Mount Geraneia in western Attica, about 50 kilometers (31 miles) west of Athens near the town of Kineta, which is surrounded by forest. Fanned by the strong wind, it grew rapidly and swept through Kineta destroying many houses. It then spotted over the six-lane national road that connects Athens with Peloponnese, reaching the sea



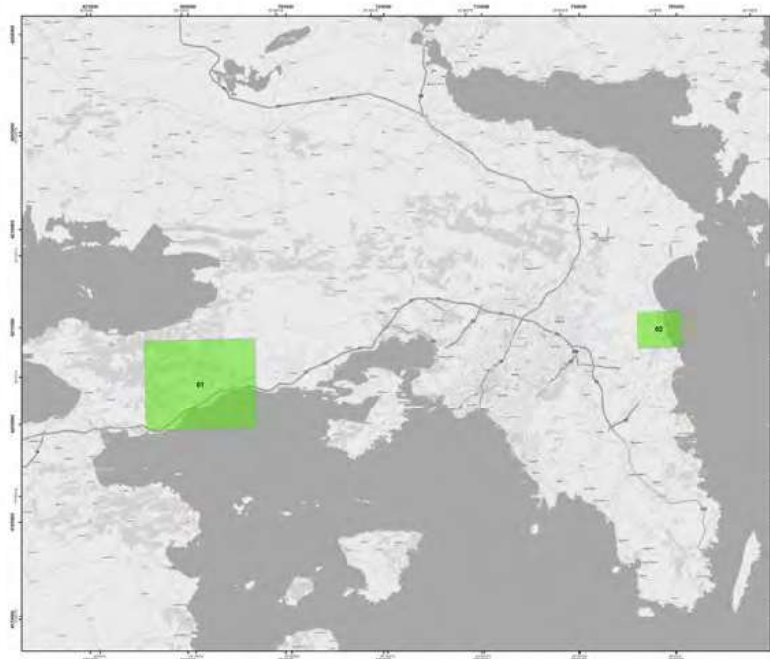
A TALE OF TWO FIRES *and* A SEASIDE TRAGEDY

where it threatened a large oil refinery. It was the high risk to people and property in the Kineta wildland-urban interface (WUI), to the travelers on the national road (where traffic had to be stopped for hours), and to the oil refinery, that forced the Fire Service to dispatch a very large portion of ground and aerial firefighting resources in Attica to the affected area.

While attention and resources were concentrated in western Attica, a second wildfire erupted on Mount Penteli at 16:41 in the northeastern part of the Attica region (Figure 1). The start was within the perimeter of an August 2009 wildfire in the settlement of Daou Pentelis, roughly 5.2 km west of the coast. According to weather measurements at the National Observatory of Athens on Mt. Penteli, the prevailing wind was WNW with speeds ranging from 32 to 56 km/h for the first two hours after the fire start, with gusts of 50 to 89 km/h. Temperature didn't exceed 31°C and relative humidity varied between 34% and 43% making the probability of spotting relatively low. Until that day, the season had been much wetter than usual and the vegetation was not water stressed.

In eastern Attica on the 20th of July, the older needles of the

*Above: Where the fire burned, moving from left to right.
Figure 1. Fire areas in western and northeastern Attica (in green).*



following days, while a few more are still hospitalized as of this writing. The total death toll currently stands at 100 fatalities. In addition to the unimaginable suffering and loss, this catastrophe left a very strong impression to the public, created extensive finger-pointing between agencies, and generated intense political conflict. The lack of knowledge or guidance among residents regarding fire preparation and response became the major issue.

In September 2018, the government appointed an Independent Committee of wildfire experts to shed light on the deeper causes of the worsening wildfire problem in Greece and propose solutions, while scientists continued to identify lessons to be learned from this tragic event. The Committee completed and delivered its report to the Prime Minister in February 2019. In March, twenty current and former Greek officials were charged for their alleged failures to respond to the situation. Some lessons learned bear a strong resemblance to those identified in similar disasters around the world. Others are necessarily attributed to the Greek reality regarding fire policies, organization and cooperation of relevant agencies, and public education, along with ongoing development and expansion of settlements. Efforts must focus on medium to long-term improvements that will mitigate fire management problems and risk in order to prevent future disasters like this.

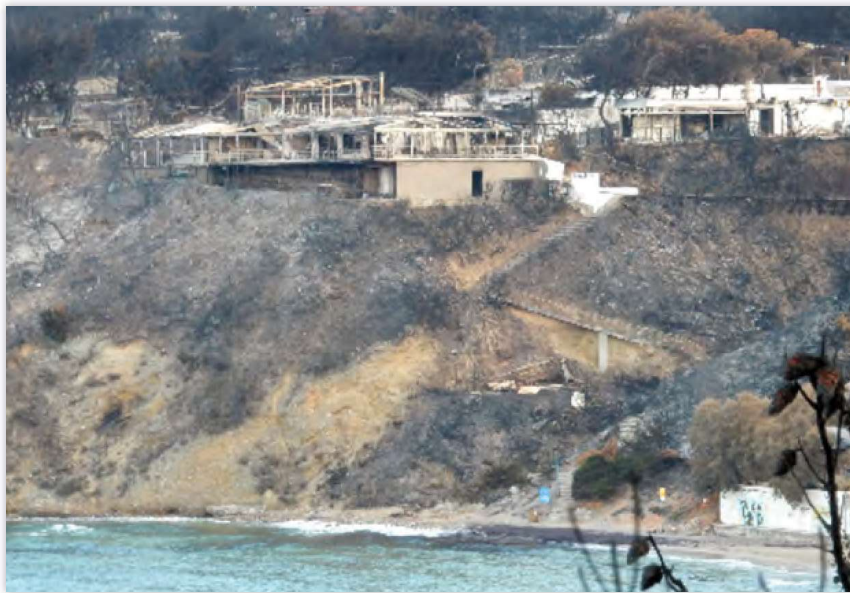
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FIRE GLOBE: GREECE



*Above: Winds pushed fire through oak lanes to the sea (at far edge).
Below: the steep slopes where people sought escape from the flames.*



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