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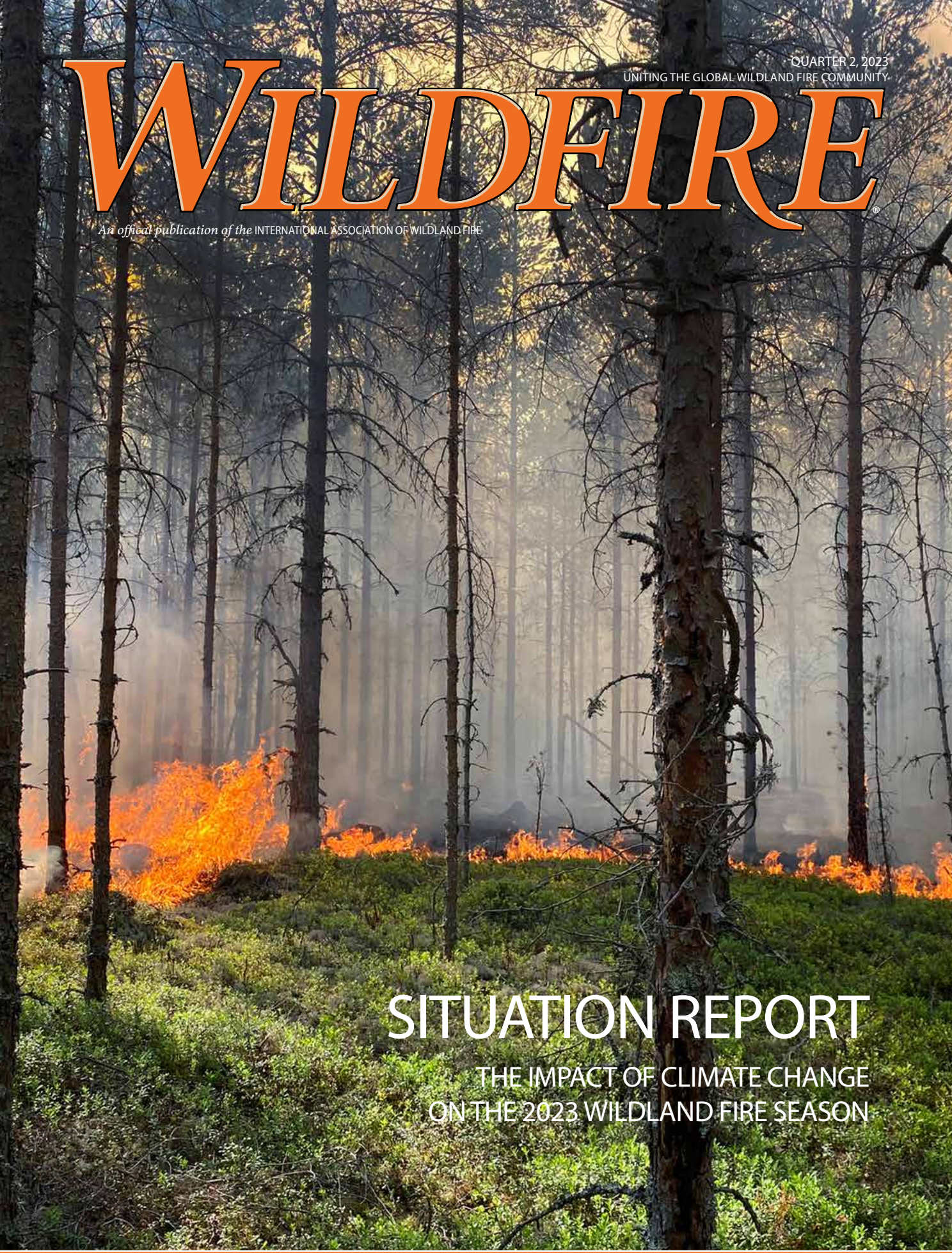

SITUATION REPORT

THE IMPACT OF CLIMATE CHANGE ON THE 2023 WILDLAND FIRE SEASON

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Typical flame heights in no-wind, no-slope conditions on the Scandavian Peninsula (Sweden and Norway). The forest floor of the pine stand is carpeted with Pleurozium moss and Cladonia lichens under a Vaccinium field layer. See Situation Report – Scandanivian Peninsula, page 16. Photo by Frida Vermina Plathner.

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SITUATION REPORT

GREECE

NOT BUSINESS AS USUAL

NEW PROJECTS, POLICIES, AND PERSONNEL AIM TO PREVENT WILDFIRE DISASTERS

BY GAVRIIL XANTHOPOULOS, EMMANOUELA ZEVGOLI, AND KONSTANTINOS KAOUKIS

In 2018, Greece faced an unprecedented wildfire disaster in East Attica, with 102 fire fatalities. Three years later, in 2021, the country experienced a devastating fire season characterized by the largest wildfire on record, which burned more than 50,000 hectares and stopped at the sea. These disasters happened at a time during which the firefighting mechanism had more resources than ever before.

While the 2018 fatalities occurred within two to three hours in a single fire due to extreme fire weather conditions, the disaster of 2021 revealed many weaknesses regarding the firefighting organization and serious deficiencies in the forest fire management policies of the country. The main shortcoming was an extreme emphasis on fire suppression while fire prevention had been neglected, regarding attention and funding. One exception was that in the spring of 2021, the General Secretariat of Civil Protection secured 25 million Euros for an urgent forest fuel management program, mainly in areas where forest vegetation had been heavily affected by wind and snow damage caused by two recent serious winter storms. The project, titled DRYADS, after the nymphs of the forest in ancient Greek mythology, was carried out with the supervision of the Hellenic Republic Asset Development Fund (HRADF) in 21 wildland-urban interface (WUI) areas. The program started rather late, in June, and continued through the main part of the fire season. The Forest Service was largely ignored.

In September 2021, after the fire season disaster, the government established a new Ministry of Climate Crisis and Civil Protection (MCCCP). The General Secretariat of Civil Protection was moved from the Ministry of Citizen Protection to the new ministry. The government also decided to change the structure of the Forest Service back to a vertically structured organizational chart, as it had been organized until the end of the 1990s. The decentralized structure that was tried for about 20 years, with the local Fire Service offices belonging to the seven decentralized regional administrations of the country under the Ministry of Interior, and the headquarters being a general direction in the Ministry of Environment and Energy (MEE), had shown many weaknesses and had caused many ineffectiveness problems. The restructured Forest Service now belongs to the MEE.

After an effort to identify the existing weaknesses, the new minister of MCCCP tried to introduce changes that will help Greece avoid future wildfire disasters. Among these, was an increased emphasis on fire prevention, in parallel with strengthening fire suppression further. By April 2022, the MCCCP, in co-operation with the Ministry of Environment and Energy, initiated a forest fire prevention program called ANTI-NERO. The program put an emphasis on forest fuels treatments. The MEE relayed the management of the works to the Hellenic Republic Asset Development Fund in co-operation with the Forest Service, applying fire prevention studies that had been prepared by the local Forest Service offices in the last few years but had not been applied due to lack of funding. Despite these studies, the works started relatively late and, in most cases, continued during the fire season. The treatments were applied by private contractors. In November 2022 the Hellenic Republic Asset Development Fund announced that it had completed clearing 8,000 hectares of forests (understory removal) and woodlands in 40 locations across the country, maintained or built 12,000 kilometres of forest

roads and maintained or created 1,600 kilometres of fire breaks, at a cost of 39.5 million Euro from the European Recovery Fund.

Fire suppression was also strengthened in 2022, with an increase in aerial firefighting capacity through the addition of 15 Air Tractor AT-802F planes contracted for the summer for patrol and initial attack, as well as four Bell 214 helicopters offered by a private donor. However, the most important step was the recognition that the Fire Service needed specialized firefighters for forest fire fighting. After the end of the 2021 fire season the government promised to hire 500 new firefighters who would be dedicated to forest fire suppression.

Beating the usually slow bureaucratic procedures, these new personnel were hired by June. Following the earlier example of the Forest Service "forest commandos" that had operated in the 1990s, they formed a special unit of the Fire Service with the acronym EMODE (standing for Special Forest Firefighting Units in Greek), and with minimal training were sent to the fire fronts. After the 2022 fire season, the training continued. However, the Forest Service, with its aging and dwindling personnel, has still not received the 500 new foresters that it was promised even before the 2021 fire season.

Also, in the first months of 2022, the Ministry of Climate Crisis and Civil Protection acted to legalize the use of fire in fire fighting, in the form of backfire (or suppression fire) and of burning out, for the first time in Greece. By June, a committee of experts had also drafted guidelines outlining the procedure to be followed when using fire. This is a major step forward that improves the capacity for effective indirect attack, making it more likely that fuel-treated areas will be used effectively to stop high intensity fires. The current setting provides that the use of fire will be done by the EMODE.

Aside from the use of fire as a suppression tool, fire is still not used in fuels management and wildfire prevention in Greece. However, since 2021, a pilot project on prescribed burning for fuel management is being contacted on the island of Chios in Greece. WWF Greece works with the Institute of Mediterranean Forest Ecosystems and the Volunteer group OMIKRON to demonstrate the feasibility of introducing prescribed burning for the first time in the country and to suggest needed policy changes and guidelines.

Currently, as the 2023 fire season approaches, the ANTI-NERO program continues as ANTI-NERO2. Funding comes from the European Recovery Fund and the national budget. As the procedure has been streamlined, the works are to be completed by April 2023, which is important for maximum utilization. Currently, a review of the whole procedure is needed, including effectiveness, efficiency, environmental issues, and future planning.

Another current development is that in Greece, as in much of the European Union, it gradually becomes evident that the well-known methods of linear fuel isolation (fuelbreaks and firebreaks) have shown their limits. The intensity of the fires today calls for new, innovative fuel management approaches leading to what has been termed Fire-Smart Territories (FSTs) characterized by improved resilience to catastrophic fires. The FST approach considers all the territory including managed forests, wildland, agricultural and pastoral lands, and all the humans collectively living there. Its main pillar is involving local communities

Canopy thinning and shrub understory removal in a young Pinus halepensis forest stand in Attica, Greece. Photo courtesy of ILVERDE.

as a crucial factor to prevent and control destructive wildfires, going away from the current top-down approach and promoting the productive use of the land while maintaining fuels at safe levels.

The European Commission has clearly identified climate change as a subject of vital importance and has set territory resilience as a key target. This target has become the focus of many European projects. One such recently started project, with 15 partners around the Mediterranean, is called ResAlliance and aims to facilitate information and knowledge flow and increase the awareness, understanding and capacity of farmers and foresters on landscape resilience in Mediterranean countries. The project is co-ordinated by the European Forest Institute and includes two Greek partners. One of the first activities in Greece in this direction was the organization of a workshop on Prevention and Management of Agroforestry Fires in light of climate change on Nov. 10, 2022, at the Institute of Mediterranean Forest Ecosystems in Athens. The important point about this workshop was the representation at a high level of three ministries, the Ministry of Climate Crisis and Civil Protection, the Ministry of Environment and Energy, and the Ministry of Rural Development and Food, offering the opportunity to start an effort to promote the necessary co-operation among them for the development of Fire-Smart Territories.

In the last year or so, Greece has tried to move away from the business-as-usual approach of the past, seeking to tackle the forest fires issue more effectively. The problem is far from solved, but at least there is hope that future steps will be rational, scientifically supported, and will help avoid future disasters.

Creation of firebreaks in Attica, Greece. Photo courtesy of ILVERDE.

ABOUT THE AUTHORS

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