

EDITORIAL

FORESTRY REVIEW OF THIS YEAR'S FIRE SEASON

Another fire season has ended in the Republic of Croatia. It was marked by numerous fires and a large burnt area. According to the data of the State Fire Operational Center 193, in the period from June 1 to September 10, 2024, a total of 2,420 open space fires were recorded, which is an increase of 40% compared to the same period in the previous year. A total of 14,689 ha were burned, which is an increase of 534% compared to 2023. According to data of Croatian Forests, 76 forest fires were recorded in the area of Split Forest Administration alone, with a total burnt area of forests and forest lands of 10,749 ha and an estimated material damage of more than 120 million euros.

Long-term statistics of the Croatian Firefighting Association show that more than 90% of fires occur in the neglected areas of unresolved ownership and in privately owned land. Pictures of the burnt landscape also confirm this because there is a clearly visible network of drystone walls around such areas. That is why such fires should not be called forest fires but rather by their true name – fires of neglected private areas. Therefore, the most effective fire prevention measure would be to resolve the problem of ownership and maintenance of private areas.

After forest fires, reforestation with pioneer tree species has to be conducted. Long-term research of the progressive successional development of Mediterranean forests has shown that the best species for this purpose are Aleppo pine in the eu- and steno-Mediterranean vegetation zone and black pine in the sub-, epi- and hemi-Mediterranean vegetation zone. Both are native, fast-growing and vital pioneer tree species that relatively quickly biologically prepare the habitat for the arrival of tree species from the

climatogenic forest community. The planting of other coniferous tree species such as maritime pine, stone pine, cypress and cedars is very limited by the characteristics of the habitat. In addition, maritime pine and cedars are not native tree species. Deciduous tree species may be used in exceptional cases. Oaks, mahaleb cherry, nettle tree and Montpellier maple are not suitable species for reforestation after forest fires. Flowering ash, Oriental hornbeam and hop-hornbeam can only be used in combination with pines in areas where the soil is deeper and there is no frost or direct exposure to wind and sun.

The implementation of prescribed silvicultural works (afforestation, forest restoration, forest care, forest conservation, forest protection, construction of fire trails) according to the management units' programs will contribute to the renewal of the degraded forest land after forest fires, enable the progression of forest vegetation and prevent new erosion processes.

Browsing and pasture cannot be preventive firefighting measures in forests. Livestock makes progressive silvicultural dynamics impossible because it damages and deforms saplings, and thus prevents the renewal of forests. Livestock particularly likes tree species from climate zone forest communities. By destroying the saplings, livestock inhibits the restoration especially of the oak climate zone forest community and obstructs the long-term progressive process. For this reason, forests and livestock are incompatible concepts that should not be taken into account during serious forest restoration planning and progressive development.

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