

Information bulletin¹ № 5

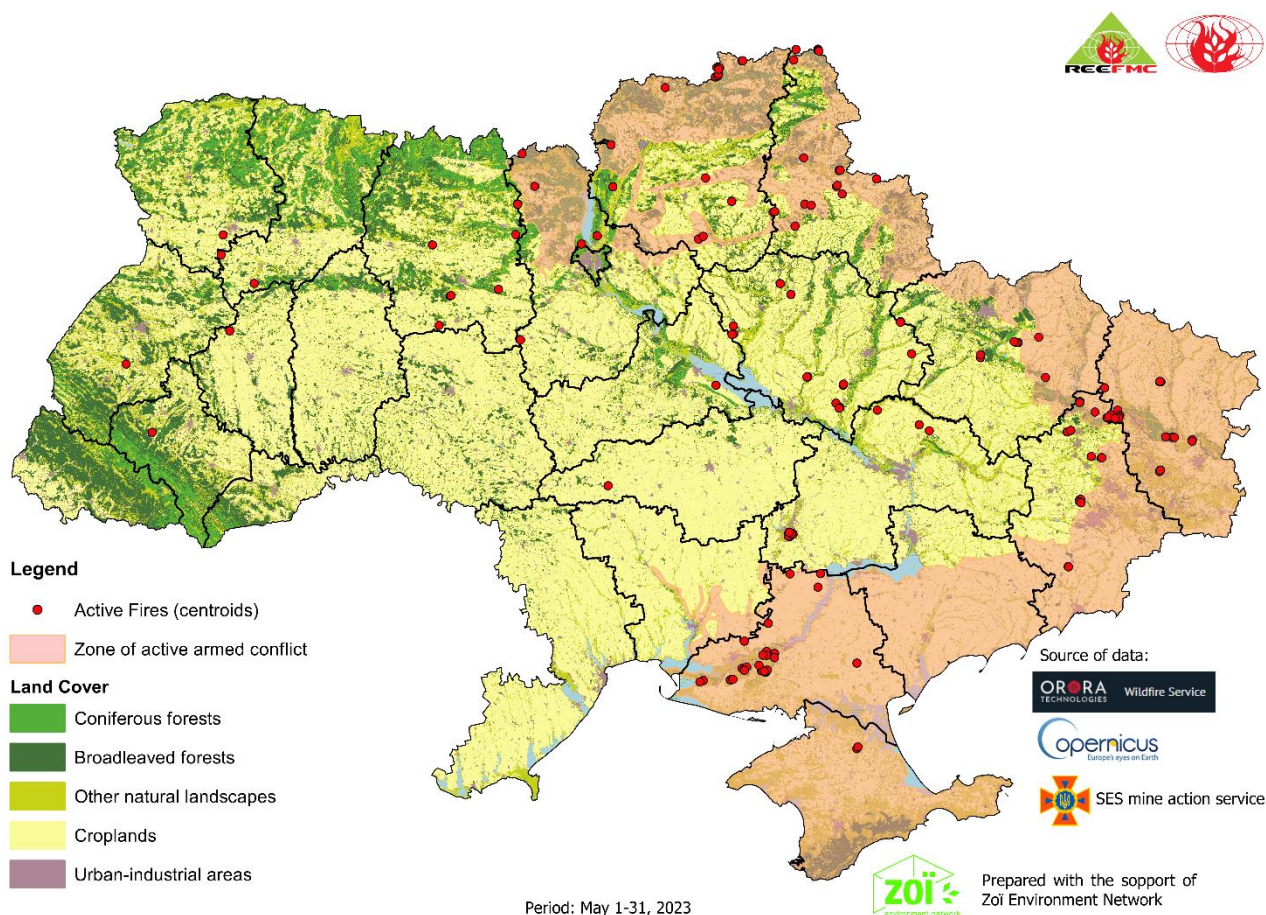
01 June 2023

FIRES ON THE TERRITORY OF UKRAINE

(in ecosystems, agricultural lands and in cities²)

For the period of 01.05.2023 to 31.05.2023

1. Map of active fires on the territory of Ukraine for the period of 01.05.2023 to 31.05.2023



¹ The bulletin was prepared with the financial support of the Swiss organization «Zoi Environment Network» www.zoinet.org

² Methodology for fire monitoring is presented on the last page of this bulletin

Table 1. Statistics of fires on the territory of Ukraine for the period of 01.05.2023 to 31.05.2023

Oblast	Numbers of fires	Area of fires, ha	Distribution of fire area by types of landscapes ² , ha					Area of fires in nature conservation zones ¹
			Forests	Thereof coniferous	Agricultural lands	Other natural landscapes	Settlements	
A	B	C	D	E	F	G	H	I
Crimea	2	23	0	0	4	17	2	0
Volyn	1	40	0	0	0	39	1	40
Dnipropetrovska	29	215	2	0	62	29	122	0
Donetsk	23	1363	626	443	459	278	0	265
Zhytomyr	6	107	8	7	27	72	0	3
Ivano-Frankivsk	1	16	0	0	5	11	0	0
Kyiv	9	174	94	87	42	38	0	71
Kirovograd	1	5	0	0	5	0	0	0
Luhansk	19	2221	1250	1132	83	880	8	2024
Lviv	1	6	0	0	1	5	0	0
Poltava	15	267	0	0	260	3	4	0
Rivne	2	32	0	0	30	2	0	0
Sumy	15	1098	312	281	520	266	0	995
Ternopil	1	78	0	0	78	0	0	0
Kharkiv	8	473	0	0	459	14	0	17
Kherson	37	5513	2702	1069	272	2539	0	4584
Cherkasy	1	15	0	0	15	0	0	0
Chernihiv	27	3492	2740	1761	43	709	0	3276
		1513						
Total, ha	198	8	7734	4780	2365	4902	137	11275
<i>Including the Direct Impact of Military Combat Zone 60 km (30+30 km)³</i>								
Donetsk	23	1363	626	443	459	278	0	265
Zhytomyr	1	8	7	7	0	1	0	0
Kyiv	7	138	94	87	8	36	0	71
Luhansk	19	2221	1250	1132	83	880	8	2024
Sumy	15	1098	312	281	520	266	0	995
Kharkiv	5	127	0	0	126	1	0	17
Kherson	37	5513	2702	1069	272	2539	0	4584
Chernihiv	27	3492	2740	1761	43	709	0	3276
		1396						
Total, ha	134	0	7731	4780	1511	4710	8	11232
%	68	92	100	100	64	96	6	100

Explanatory Note:

¹ In the research, we have used the network of nature conservation areas of European importance, which was created to implement the provisions of the Berne Convention on the Protection of Wild Flora and Fauna and Natural Habitats in Europe (Emerald Network) (<http://emerald.net.ua/>).

² Monthly totals in Columns B and C include the number of fires and area burned all over Ukraine (total of columns D, F, G and H).

³ Military Combat Zone: Permanent corridor spanning 30 km on each side of the LoC. The corridor is determined at the beginning of active military combat and continues to be included in the monitoring areas even after ending of active military combat operations. Reason: Unexploded explosive ordnance remained in this area and continues to pose a threat of ignition. Direct impact of military operations - 60 km along frontline with both sides (30+30) of most intensive shelling and concentration of troops. Daily front line coordinates were provided by ZOI Network for define fires that occurred in the zone of direct impact (ZDI).

2. Map of fires in the nature conservation areas (Emerald Network) for the period from 01.05.2023 to 31.05.2023.

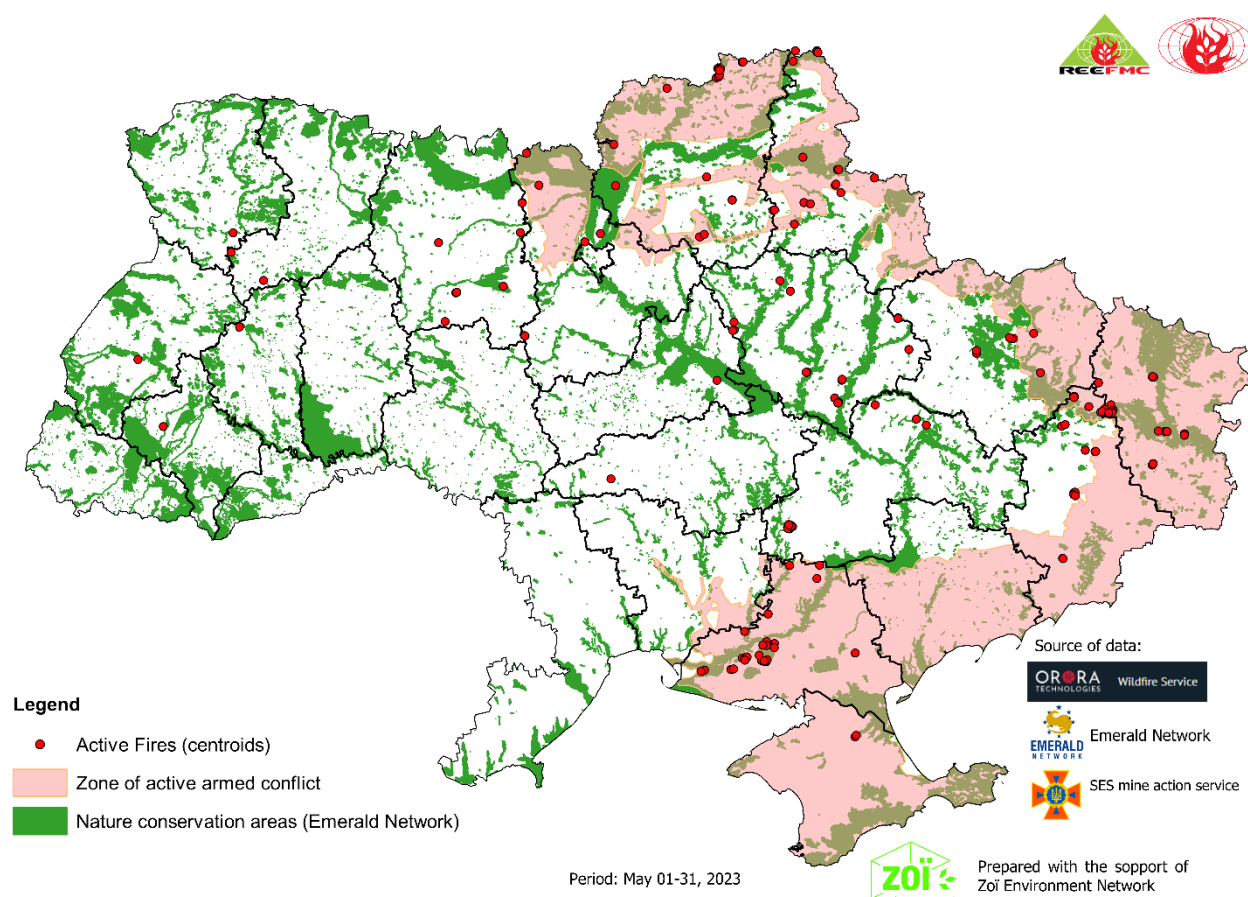


Table 2. Statistics of fires in the areas of nature conservation (Emerald network¹) for the period of 01.05.2023 to 31.05.2023

Oblast	Area of fires, ha	Distribution of fire area by types of landscapes ² , ha				
		Forests	Thereof coniferous	Agricultural lands	Other natural landscapes	Settlements
A	B	C	D	E	F	G
Volyn	40	0	0	0	39	1
Donetsk	265	227	177	0	38	0
Zhytomyr	3	0	0	0	3	0
Kyiv	71	71	66	0	0	0
Luhansk	2024	1197	1082	0	827	0
Sumy	995	311	281	451	233	0
Kharkiv	17	0	0	16	1	0
Kherson	4584	2404	944	15	2165	0
Chernihiv	3276	2703	1736	16	557	0
Total	11275	6913	4286	498	3863	1
<i>Including the Direct Impact of Military Combat Zone³ 60 km (30+30 km)³</i>						
Donetsk	265	227	177	0	38	0
Kyiv	71	71	66	0	0	0
Luhansk	2024	1197	1082	0	827	0
Sumy	995	311	281	451	233	0
Kharkiv	17	0	0	16	1	0
Kherson	4584	2404	944	15	2165	0
Chernihiv	3276	2703	1736	16	557	0
Total	11232	6913	4286	498	3821	0
%	100	100	100	100	99	0

Explanatory Note:

¹ In the research, we have used the network of nature conservation areas of European importance, which was created to implement the provisions of the Berne Convention on the Protection of Wild Flora and Fauna and Natural Habitats in Europe (Emerald Network) (<http://emerald.net.ua/>).

² Monthly totals in Column B include the area burned of fires over Ukraine (total of columns C, E, F and G).

³ Military Combat Zone: Permanent corridor spanning 30 km on each side of the LoC. The corridor is determined at the beginning of active military combat and continues to be included in the monitoring areas even after ending of active military combat operations. Reason: Unexploded explosive ordnance remained in this area and continues to pose a threat of ignition. Direct impact of military operations - 60 km along frontline with both sides (30+30) of most intensive shelling and concentration of troops. Daily front line coordinates were provided by ZOI Network for define fires that occurred in the zone of direct impact (ZDI).

3. Methodology for fire monitoring

Daily front line coordinates were provided by ZOI Network for define fires that occurred in the zone of direct impact (ZDI). Distribution of burned land cover types within fire perimeters were mapped using the Copernicus Dynamic Land Cover map at 100 m resolution for 2019 ([Copernicus Global Land Operations "Vegetation and Energy"](#)), which provides a detailed description of land cover as of 2019 with a resolution of 100 m. Detailed information about the product – https://land.copernicus.eu/global/sites/cgls.vito.be/files/products/CGLOPS1_ATBD_LC100m-V2.0_I2.00.pdf.

The network of nature conservation areas of European importance, which was created to implement the provisions of the Berne Convention on the Protection of Wild Flora and Fauna and Natural Habitats in Europe (Emerald Network) (<http://emerald.net.ua/>), was used for the analysis of areas of nature conservation value that were affected by fires.

The analysis was performed using a free geographic information system. QGIS (3.2.1), which is one of the most functional and convenient desktop geographic information systems.