

Information bulletin¹ № 9

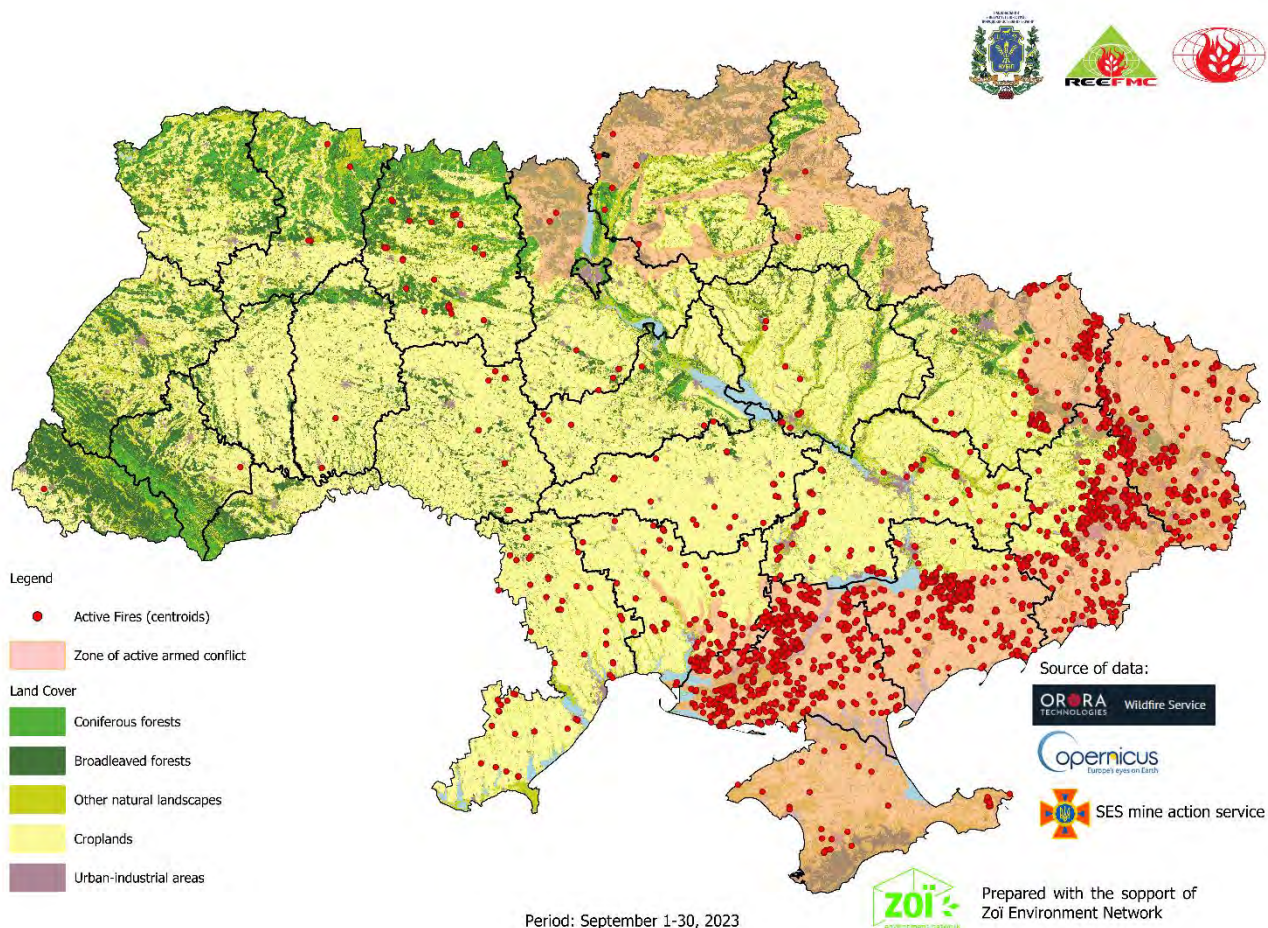
October 1, 2023

FIRES ON THE TERRITORY OF UKRAINE

(in ecosystems, agricultural lands and in cities²)

For the period of 01.09.2023 to 30.09.2023

1. Map of active fires on the territory of Ukraine for the period of 01.09.2023 to 30.09.2023



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 01.09.2023 to 30.09.2023

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	29	1058	0	0	177	878	3	362
Vynnytsia	10	68	0	0	58	9	1	0
Dnipropetrovska	80	5240	22	0	3713	1434	71	1990
Donetsk	385	27466	357	0	15386	11522	201	2201
Zhytomyr	23	2502	96	5	728	1678	0	0
Transcarpathian	1	10	0	0	10	0	0	0
Zaporizhzhya	340	18550	85	7	13745	4606	114	734
Ivano-Frankivsk	1	15	0	0	15	0	0	0
Kyiv	7	358	0	0	264	94	0	139
Kirovograd	23	681	23	0	614	43	1	89
Luhansk	314	19876	2756	2025	7439	9562	119	4846
Mykolaiv	88	7113	37	1	5140	1918	18	462
Odesa	52	1338	6	0	1065	255	12	55
Poltava	8	201	3	0	45	152	1	126
Rivne	4	34	0	0	9	25	0	0
Sumy	2	20	0	0	7	13	0	20
Kharkiv	155	10425	1168	838	5633	3560	64	1579
Kherson	502	39337	1940	496	24146	12977	274	7917
Khmelnysky	2	102	0	0	67	35	0	71
Cherkasy	5	139	0	0	121	17	1	0
Chernihiv	7	41	0	0	5	36	0	30
Total, ha	2038	134574	6493	3372	78387	48814	880	20621
<i>Including the Direct Impact of Military Combat Zone 60 km (30+30 km)³</i>								
Dnipropetrovska	23	1401	15	0	1007	349	30	112
Donetsk	365	23753	236	0	14315	9005	197	2139
Zaporizhzhya	333	18493	85	7	13725	4577	106	734
Kyiv	2	120	0	0	52	68	0	120
Luhansk	253	15185	2720	2025	5530	6820	115	4755
Mykolaiv	73	4358	37	1	3040	1263	18	324
Sumy	2	20	0	0	7	13	0	20
Kharkiv	150	10140	1155	838	5582	3339	64	1579
Kherson	478	37138	1940	496	22167	12757	274	6967
Chernihiv	7	41	0	0	5	36	0	30
Total, ha	1686	110649	6188	3367	65430	38227	804	16780
%	83	82	95	100	83	78	91	81

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 01.09.2023 to 30.09.2023.

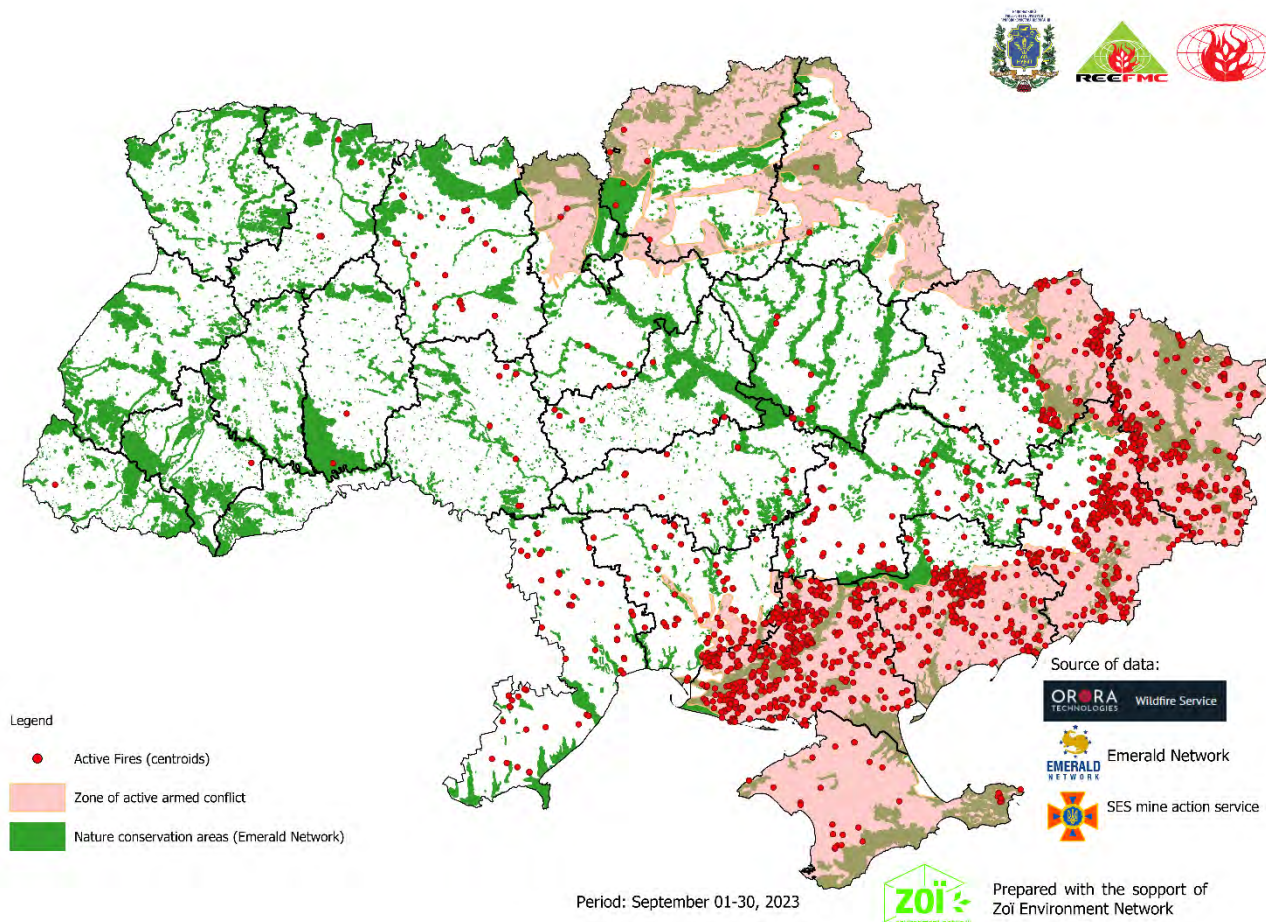


Table 2. Statistics of fires in the areas of nature conservation (Emerald network¹) for the period of 01.09.2023 to 30.09.2023

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
Crimea	362	0	0	56	306	0
Dnipropetrovska	1990	5	0	1524	461	0
Donetsk	2201	11	0	749	1441	0
Zaporizhzhya	734	48	7	183	496	7
Kyiv	139	0	0	60	79	0
Kirovograd	89	0	0	89	0	0
Luhansk	4846	2158	1757	377	2311	0
Mykolaiv	462	37	1	257	168	0
Odesa	55	0	0	53	2	0
Poltava	126	0	0	5	120	1
Sumy	20	0	0	7	13	0
Kharkiv	1579	13	1	529	1037	0
Kherson	7917	1062	215	1794	5047	14
Khmelnitskyi	71	0	0	36	35	0
Chernihiv	30	0	0	0	30	0
Total	20621	3334	1981	5719	11546	22

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
<i>Including the Direct Impact of Military Combat Zone³ 60 km (30+30 km)³</i>						
Dnipropetrovska	112	1	0	36	75	0
Donetsk	2139	11	0	702	1426	0
Zaporizhzhya	734	48	7	183	496	7
Kyiv	120	0	0	52	68	0
Luhansk	4755	2147	1757	369	2239	0
Mykolaiv	324	37	1	119	168	0
Sumy	20	0	0	7	13	0
Kharkiv	1579	13	1	529	1037	0
Kherson	6967	1062	215	844	5047	14
Chernihiv	30	0	0	0	30	0
Total	16780	3319	1981	2841	10599	21
%	81	100	100	50	92	95

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"](https://land.copernicus.eu/global/sites/cgls.vito.be/files/products/CGLOPS1_ATBD_LC100m-V2.0_I2.00.pdf)), 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.