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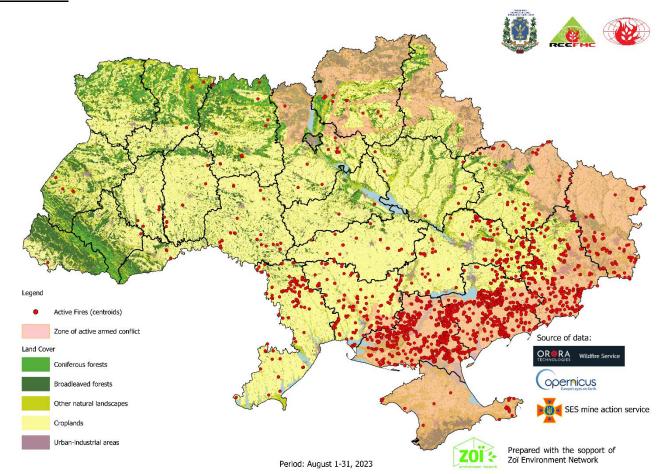
### **Information bulletin<sup>1</sup> № 8**

September 1, 2023

#### FIRES ON THE TERRITORY OF UKRAINE

(in ecosystems, agricultural lands and in cities <sup>2</sup>)
For the period of <u>01.08.2023</u> to <u>31.08.2023</u>

# 1. Map of active fires on the territory of Ukraine <u>for the period of 01.08.2023 to</u> 31.08.2023



<sup>&</sup>lt;sup>1</sup> The bulletin was prepared with the financial support of the Swiss organization «Zoï Environment Network» www.zoinet.org

<sup>&</sup>lt;sup>2</sup> Methodology for fire monitoring is presented on the last page of this bulletin

 $Table 1. \, Statistics \, of \, fires \, on \, the \, territory \, of \, Ukraine \, for \, the \, period \, of \, 01.08.2023 \, to \, 31.08.2023 \,$ 

	Numbers	Area of fires, ha	Distribution of fire area by types of landscapes <sup>2</sup> , ha					Area of fires
Oblast						Other natural landscapes		in nature
Johnst	of fires		Forests	coniferous	lands			conservation
Δ.	В	С	D	E	F	G	Н	zones <sup>1</sup>
A Crimea	22	3152	2	0	333	2816	<u> </u> п	2826
	29	569	0	0	560	2810	0	0
Vinnytsia		4041	4		3691	346	0	129
Dnipropetrovska Donetsk	315	49274	231	0	38692	10237	114	141
Zhytomyr	13	285	10	4	65	210	0	0
Transcarpathian		203	0	0	2	0	0	0
Zaporizhzhya	602	30579	53	0	23191	7066	269	2269
Ivano-	002		33	O	23171	7000	207	220)
Frankivsk	1	58	0	0	56	2	0	0
Kyiv	11	608	0	0	567	41	0	0
Kirovograd	16	454	0	0	426	28	0	0
Luhansk	101	10997	1188	871	3475	6322	12	2264
Lviv	4	87	0	0	64	23	0	0
Mykolaiv	133	4485	72	45	3594	811	8	451
Odesa	117	3248	37	22	2938	273	0	0
Poltava	7	95	0	0	91	4	0	0
Rivne	3	257	9	0	65	183	0	0
Ternopil	4	91	0	0	87	4	0	0
Kharkiv	62	3790	1645	1507	1497	633	15	80
Kherson	697	49071	1809	748	30577	16444	241	4758
Khmelnytsky	8	351	0	0	346	5	0	161
Cherkasy	4	74	0	0	73	1	0	0
Chernivtsi	4	190	0	0	190	0	0	0
Chernihiv	11	342	12	9	212	118	0	59
Total, ha	2318	162100	5072	3207	110792	45576	660	13138
Including the D	irect Impac	t of Milita	ıry Comba	t Zone				
60 km (30+30 k	$(m)^3$	<u>u</u>	·					
Dnipropetrovska	25	605	0	0	508	97	0	81
Donetsk	256	45786	220	1	35903	9549	114	141
Zhytomyr	4	51	5	0	8	38	0	0
Zaporizhzhya	580	29750	50	0	22498	6933	269	2194
Kyiv	8	465	0	0	424	41	0	0
Luhansk	61	5667	1073	871	2110	2472	12	2048
Mykolaiv	94	3486	71	44	2756	652	7	294
Poltava	1	3	0	0	1	2	0	0
Kharkiv	49	3236	1644	1507	962	615	15	80
Kherson	602	44994	1809	748	27955	14995	235	3452
Chernihiv	11	342	12	9	212	118	0	59
Total, ha	1691	134385	4884	3180	93337	35512	652	8349
%	73	83	96	99	84	78	99	64

Explanatory Note:

<sup>&</sup>lt;sup>1</sup> 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/).

<sup>&</sup>lt;sup>2</sup> 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).

<sup>&</sup>lt;sup>3</sup> 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 01.08.2023 to 31.08.2023.

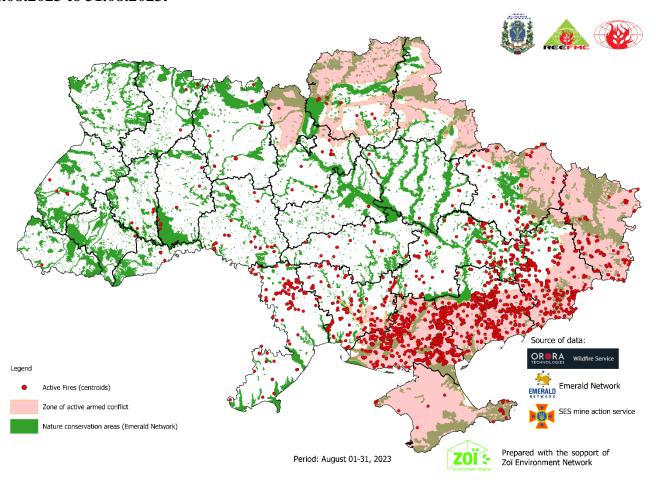


Table 2. Statistics of fires in the areas of nature conservation (Emerald network<sup>1</sup>) for the period of 01.08.2023 to 31.08.2023

	Area of fires,	Distribution of fire area by types of landscapes <sup>2</sup> , ha					
Oblast		Forests	Thereof coniferous	Agricultural lands	Other natural landscapes	Settlements	
A	В	С	D	Е	F	G	
Crimea	2826	0	0	116	2709	1	
Dnipropetrovska	129	0	0	44	85	0	
Donetsk	141	4	0	65	72	0	
Zaporizhzhya	2269	21	0	885	1360	3	
Luhansk	2264	990	871	387	882	5	
Mykolaiv	451	72	45	85	294	0	
Kharkiv	80	2	0	21	57	0	
Kherson	4758	708	363	543	3501	6	
Khmelnytsky	161	0	0	160	1	0	
Chernihiv	59	12	9	0	47	0	
Total	13138	1809	1288	2306	9008	15	

	Area of fires,	Distribution of fire area by types of landscapes <sup>2</sup> , ha						
Oblast		Forests	Thereof	Agricultural	Other natural	al Settlements		
			coniferous	lands	landscapes	Settlements		
A	В	C	D	E	F	G		
Including the Direct Impact of Military Combat Zone <sup>3</sup> 60 km (30+30 km) <sup>3</sup>								
Dnipropetrovska	81	0	0	30	51	0		
Donetsk	141	4	0	65	72	0		
Zaporizhzhya	2194	21	0	881	1289	3		
Luhansk	2048	990	871	368	685	5		
Mykolaiv	294	71	44	52	171	0		
Kharkiv	80	2	0	21	57	0		
Kherson	3452	708	363	316	2425	3		
Chernihiv	59	12	9	0	47	0		
Total	8349	1808	1287	1733	4797	11		
%	64	100	100	75	53	73		

Explanatory Note:

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### 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 - <a href="https://land.copernicus.eu/global/sites/cgls.vito.be/files/products/CGLOPS1\_ATBD\_LC100m-V2.0\_I2.00.pdf">https://land.copernicus.eu/global/sites/cgls.vito.be/files/products/CGLOPS1\_ATBD\_LC100m-V2.0\_I2.00.pdf</a>.

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) (<a href="http://emerald.net.ua/">http://emerald.net.ua/</a>), 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.

<sup>&</sup>lt;sup>1</sup> 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) (<a href="http://emerald.net.ua/">http://emerald.net.ua/</a>).

<sup>&</sup>lt;sup>2</sup> Monthly totals in Column B include the area burned of fires over Ukraine (total of columns C, E, F and G).

<sup>&</sup>lt;sup>3</sup> 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).