

Регіональний Східноєвропейський центр моніторингу пожеж

Address: Kyiv, 03041, Dniprovska Naberezhna St. 7A, office 104. Tel. +38 067 2611682 E-mail: <u>reefmc@nubip.edu.ua</u> URL: <u>https://nubip.edu.ua/node/9083</u>

Information bulletin<sup>1</sup> № 3

April 1, 2024

# FIRES ON THE TERRITORY OF UKRAINE

(in ecosystems, agricultural lands and in cities<sup>2</sup>)

For the period of <u>01.03.2024 to 31.03.2023</u>

# 1. Map of active fires on the territory of Ukraine <u>for the period of 01.03.2024 to</u> <u>31.03.2024</u>



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

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

Table 1. Statis	Numbers of fires	Area of fires, ha	Dis	Area of fires					
Oblast			Forests	Thereof	Agricultural	Other natural		in nature conservation	
			1 010505	coniferous	lands	landscapes		zones <sup>1</sup>	
А	В	С	D	E	F	G	Н		
Crimea	4	137	0	0	5	132	0	43	
Vinnytsia	21	400	7	0	304	88	1	57	
Volyn	5	76	0	0	53	23	0	0	
Dnipropetrovsk		6695	15	0	3808	2805	67	600	
Donetsk	570	43557	1880	588	29907	11568	202	2085	
Zhytomyr	13	164	0	0	129	35	0	0	
Transcarpathian		65	19	0	28	17	1	4	
Zaporizhzhya	194	9855	33	0	8078	1733	11	276	
Ivano-Frankivsl		108	15	0	11	82	0	0	
Kyiv	19	502	0	0	339	161	2	157	
Kirovograd	25	468	0	0	449	18	1	173	
Luhansk	317	48304	2781	1530	21128	24235	160	8449	
Lviv	6	352	0	0	34	317	1	0	
Mykolaiv	23	539	0	0	267	272	0	177	
Odesa	12	178	5	0	169	4	0	0	
Poltava	17	221	5	0	100	116	0	12	
Rivne	17	833	114	0	261	458	0	0	
Sumy	11	820	14	0	621	184	1	6	
Ternopil	1	30	0	0	27	3	0	0	
Chernihiv	7	250	0	0	239	11	0	7	
Kharkiv	362	42513	831	12	27454	14003	225	8013	
Kherson	70	1944	0	0	1547	396	1	442	
Khmelnytsky	7	49	0	0	47	2	0	9	
Cherkasy	2	20	0	0	15	5	0	0	
Chernivtsi	15	483	2	0	291	169	21	0	
Total, ha	1871	158563	5721	2130	95311	56837	694	20510	
Including the Direct Impact of Military Combat Zone									
60 km (30+30 km			_						
Dnipropetrovs		569	0	0	414	95	60	64	
Donetsk	531	41927	1862	588	29293	10570	202	2011	
Zaporizhzhia	190	9696	23	0	8063	1599	11	243	
Kyiv	14	384	0	0	232	150	2	157	
Luhansk	224	31769	2541	1530	13343	15809	76	4607	
Mykolaiv	13	409	0	0	143	266	0	177	
Sumy	11	820	14	0	621	184	1	6	
Chernihiv	7	250	0	0	239	11	0	7	
Kharkiv	308	40059	776	10	26616	12444	223	7672	
Kherson	54	1510	0	0	1180	329	1	8	
Total, ha	1370	127393	5216	2128	80144	41457	576	14952	
%	73	80	91	100	84	73	83	73	

### Table 1. Statistics of fires on the territory of Ukraine for the period of 01.03.2024 to 31.03.2024

#### Explanatory Note:

<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) (<u>http://emerald.net.ua/</u>).

<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>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 01.03.2024 to 31.03.2024.



Table 2. Statistics of fires in the areas of nature conservation (Emerald network<sup>1</sup>) for theperiod of 01.03.2024 to 31.03.2024

	Area of fires,	Distribution of fire area by types of landscapes <sup>2</sup> , ha						
Oblast	ha ha	Forests	Thereof coniferous	Agricultural lands	Other natural landscapes	Settlements		
А	В	С	D	E	F	G		
Crimea	43	0	0	0	43	0		
Vinnytsia	57	0	0	22	35	0		
Dnipropetrovska	600	1	0	158	440	1		
Donetsk	2085	591	359	441	1051	2		
Transcarpathian	4	4	0	0	0	0		
Zaporizhzhya	276	0	0	20	256	0		
Kyiv	157	0	0	144	13	0		
Kirovograd	173	0	0	160	13	0		
Luhansk	8449	1897	1530	2886	3664	2		
Mykolaiv	177	0	0	14	163	0		

	Area of fires, ha	Distribution of fire area by types of landscapes <sup>2</sup> , ha					
Oblast		Forests	Thereof coniferous	Agricultural lands	Other natural landscapes	Settlements	
А	В	С	D	E	F	G	
Poltava	12	2	0	0	10	0	
Sumy	6	1	0	0	5	0	
Chernihiv	7	0	0	4	3	0	
Kharkiv	8013	143	1	3477	4392	1	
Kherson	442	0	0	375	67	0	
Khmelnytskyi	9	0	0	9	0	0	
Total	20510	2639	1890	7710	10155	6	
Including the Direct In 60 km (30+30 km) <sup>3</sup> Дніпропетровська	npact of Milita 64	ry Combat Zoi 0	1e <sup>3</sup>	44	20	0	
Донецька	2011	591	359	426	992	2	
Запорізька	243	0	0	19	224	0	
Київська	157	0	0	144	13	0	
Луганська	4607	1855	1530	1088	1662	2	
Миколаївська	177	0	0	14	163	0	
Сумська	6	1	0	0	5	0	
Чернігівська	7	0	0	4	3	0	
Харківська	7672	143	1	3400	4128	1	
Херсонська	8	0	0	8	0	0	
Total %	14952 73	2590 98	1890 100	5147 67	7210 71	5 83	

Explanatory Note:

<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) (<u>http://emerald.net.ua/</u>).

<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>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).

## 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 resolution of 100 m. Detailed information about the product а 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) (<u>http://emerald.net.ua/</u>), 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.