

## Information bulletin<sup>1</sup> № 10

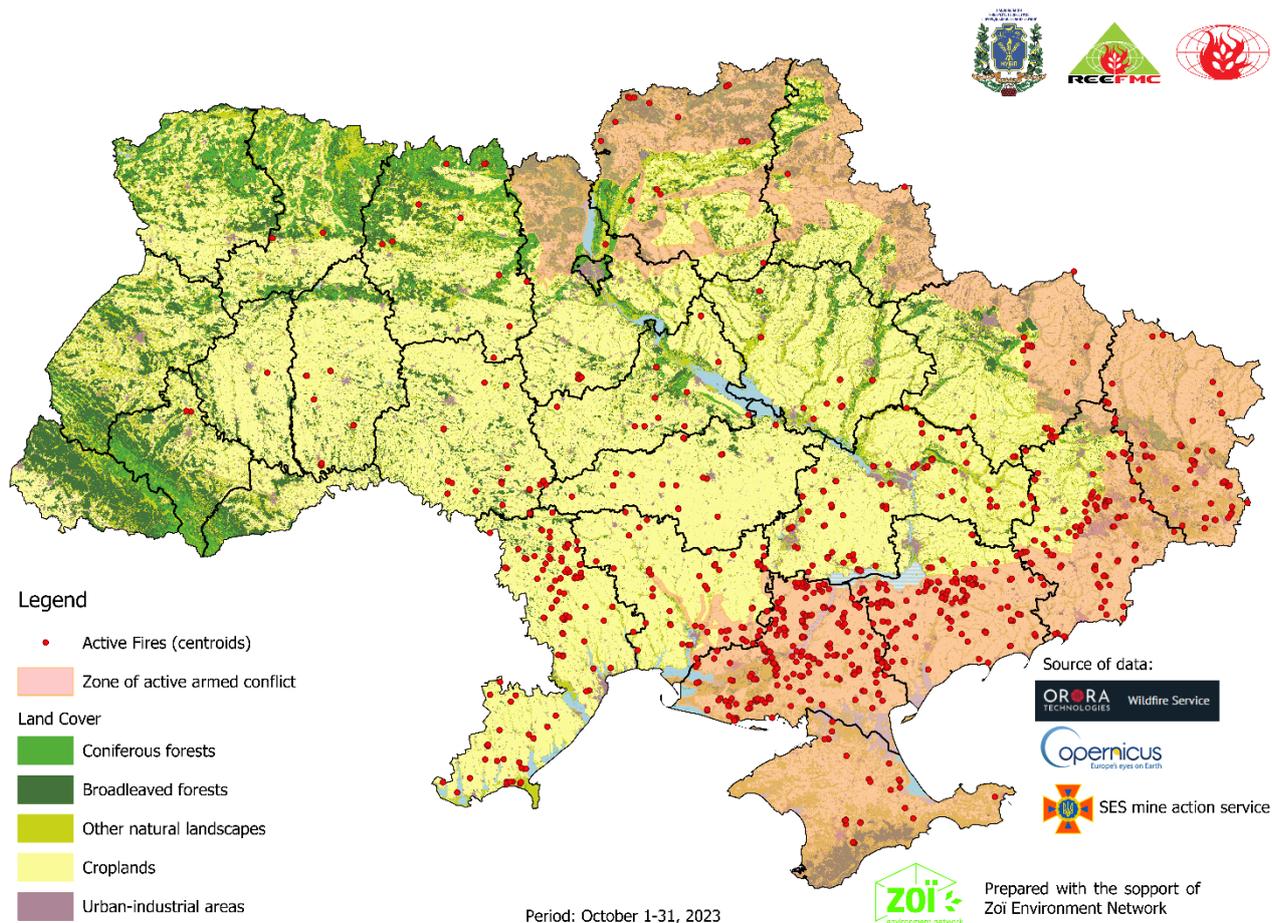
November 1, 2023

### FIRES ON THE TERRITORY OF UKRAINE

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

For the period of 01.10.2023 to 31.10.2023

#### 1. Map of active fires on the territory of Ukraine for the period of 01.10.2023 to 31.10.2023



<sup>1</sup> The bulletin was prepared with the financial support of the Swiss organization «Zoi Environment Network» [www.zoinet.org](http://www.zoinet.org)

<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 01.10.2023 to 31.10.2023**

Oblast	Numbers of fires	Area of fires, ha	Distribution of fire area by types of landscapes <sup>2</sup> , ha					Area of fires in nature conservation zones <sup>1</sup>
			Forests	Thereof coniferous	Agricultural lands	Other natural landscapes	Settlements	
A	B	C	D	E	F	G	H	I
Crimea	28	1162	1	0	317	842	2	251
Vynnytsia	25	362	0	0	345	13	4	30
Dnipropetrovska	85	2875	27	11	1834	993	21	279
Donetsk	107	6626	60	0	4539	1983	44	188
Zhytomyr	11	297	28	9	113	155	1	23
Zaporizhzhya	151	5347	3	0	4157	1110	77	241
Ivano-Frankivsk	2	16	0	0	7	9	0	0
Kyiv	6	353	0	0	340	13	0	0
Kirovograd	22	322	9	0	275	37	1	0
Luhansk	59	4686	127	49	2004	2534	21	880
Mykolaiv	60	1894	0	0	1471	416	7	182
Odesa	107	4515	10	0	3649	855	1	156
Poltava	13	262	14	0	133	114	1	82
Rivne	4	429	21	0	71	337	0	0
Sumy	2	33	7	0	25	1	0	8
Ternopil	1	195	0	0	188	0	7	0
Kharkiv	26	2448	38	12	1988	410	12	374
Kherson	241	13858	444	178	8761	4600	53	980
Khmelnysky	12	126	0	0	111	13	2	22
Cherkasy	13	261	6	0	110	140	5	45
Chernihiv	21	173	64	32	42	67	0	87
<b>Total, ha</b>	<b>996</b>	<b>46240</b>	<b>859</b>	<b>291</b>	<b>30480</b>	<b>14642</b>	<b>259</b>	<b>3828</b>
<i>Including the Direct Impact of Military Combat Zone 60 km (30+30 km)<sup>3</sup></i>								
Dnipropetrovs'k	17	889	0	0	745	129	15	0
Donetsk	95	6094	56	0	4226	1768	44	188
Zhytomyr	3	35	8	7	25	2	0	10
Zaporizhzhia	149	5253	3	0	4063	1110	77	241
Kyiv	1	19	0	0	7	12	0	0
Luhansk	45	3004	88	49	1354	1542	20	65
Mykolaiv	47	1609	0	0	1246	356	7	182
Sumy	2	33	7	0	25	1	0	8
Kharkiv	21	2404	38	12	1962	392	12	374
Kherson	227	13635	444	178	8570	4569	52	935
Chernihiv	21	173	64	32	42	67	0	87
<b>Total, ha</b>	<b>628</b>	<b>33148</b>	<b>708</b>	<b>278</b>	<b>22265</b>	<b>9948</b>	<b>227</b>	<b>2090</b>
<b>%</b>	<b>63</b>	<b>72</b>	<b>82</b>	<b>96</b>	<b>73</b>	<b>68</b>	<b>88</b>	<b>55</b>

*Explanatory Note:*

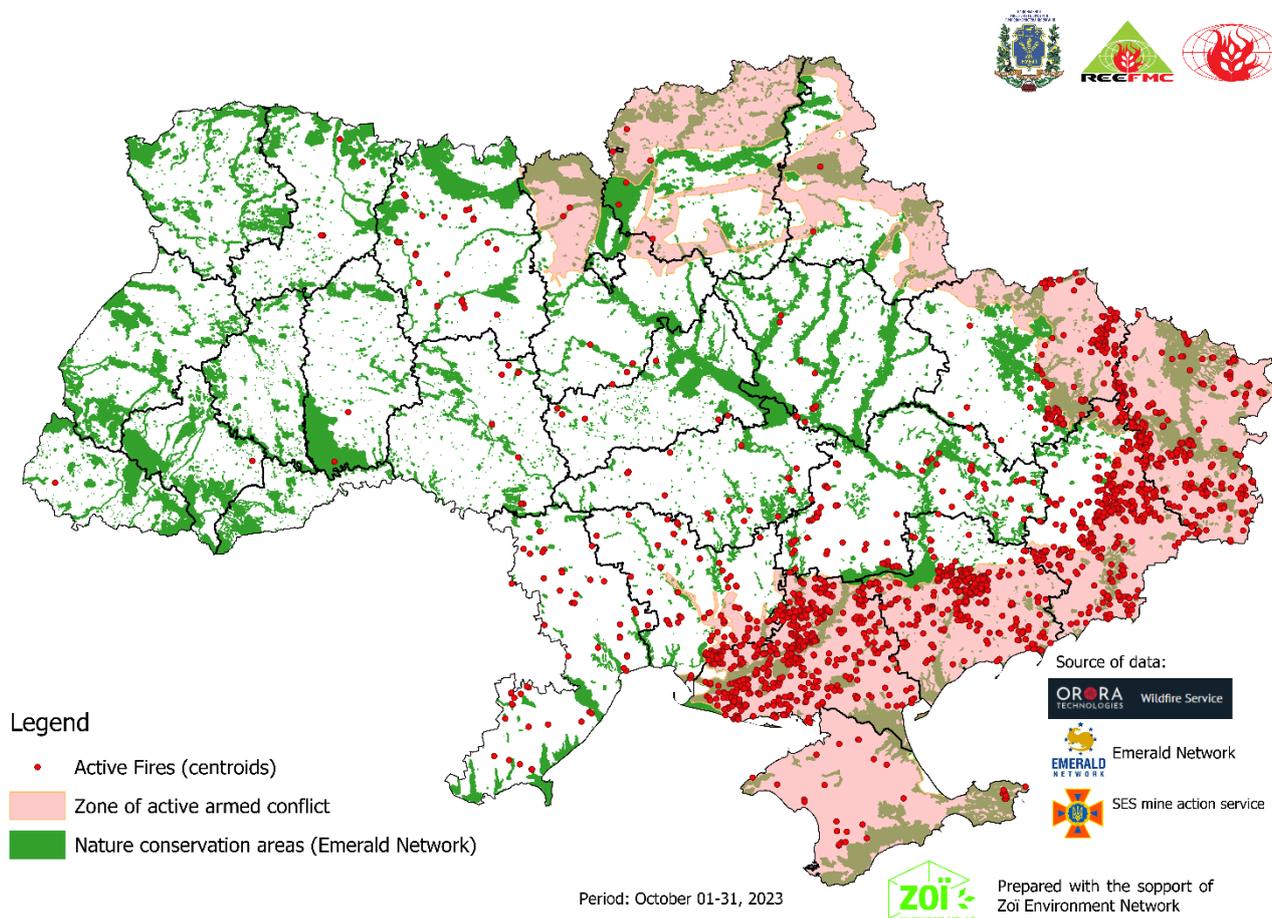
<sup>1</sup> In the research, we have used the network of nature conservation areas of European importance, which was created to implement the provisions of the Berne Convention on the Protection of Wild Flora and Fauna and Natural Habitats in Europe (Emerald Network) (<http://emerald.net.ua/>).

<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 01.10.2023 to 31.10.2023.



**Table 2. Statistics of fires in the areas of nature conservation (Emerald network<sup>1</sup>) for the period of 01.10.2023 to 31.10.2023**

Oblast	Area of fires, ha	Distribution of fire area by types of landscapes <sup>2</sup> , ha					Settlements
		Forests	Thereof coniferous	Agricultural lands	Other natural landscapes		
A	B	C	D	E	F	G	
Crimea	251	0	0	11	240	0	
Vinnitsia	30	0	0	23	7	0	
Dnipropetrovska	279	24	11	87	168	0	
Donetsk	188	0	0	13	175	0	
Zhytomyr	23	13	7	0	10	0	
Zaporizhzhya	241	1	0	47	193	0	
Luhansk	880	83	49	217	580	0	
Mykolaiv	182	0	0	119	63	0	
Odesa	156	0	0	148	8	0	
Poltava	82	4	0	2	75	1	
Sumy	8	7	0	0	1	0	
Kharkiv	374	1	0	80	293	0	
Kherson	980	179	102	165	635	1	
Khmelnysky	22	0	0	22	0	0	

Oblast	Area of fires, ha	Distribution of fire area by types of landscapes <sup>2</sup> , ha				
		Forests	Thereof coniferous	Agricultural lands	Other natural landscapes	Settlements
A	B	C	D	E	F	G
Cherkasy	45	6	0	2	34	3
Chernihiv	87	20	3	7	60	0
<b>Total</b>	<b>3828</b>	<b>338</b>	<b>172</b>	<b>943</b>	<b>2542</b>	<b>5</b>
<i>Including the Direct Impact of Military Combat Zone<sup>3</sup> 60 km (30+30 km)<sup>3</sup></i>						
Donetsk	188	0	0	13	175	0
Zhytomyr	10	8	7	0	2	0
Zaporizhzhya	241	1	0	47	193	0
Luhansk	65	56	49	1	8	0
Mykolaiv	182	0	0	119	63	0
Sumy	8	7	0	0	1	0
Kharkiv	374	1	0	80	293	0
Kherson	935	179	102	120	635	1
Chernihiv	87	20	3	7	60	0
<b>Total</b>	<b>2090</b>	<b>272</b>	<b>161</b>	<b>387</b>	<b>1430</b>	<b>1</b>
<b>%</b>	<b>55</b>	<b>80</b>	<b>94</b>	<b>41</b>	<b>56</b>	<b>20</b>

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

<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).

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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"](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](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.