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Information bulletin¹ № 2

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FIRES ON THE TERRITORY OF UKRAINE

(in ecosystems, agricultural lands and in cities²)

For the period of <u>01.02.2024 to 29.02.2024</u>

1. Map of active fires on the territory of Ukraine <u>for the period of 01.02.2024 to</u> <u>29.02.2024</u>



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

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

| | Numbers of fires | Area of fires, ha | Distribution of fire area by types of landscapes ² , ha | | | | | Area of fires | | | | |
|--|---------------------|-------------------|--|--------------------|--------------------|--------------------------|-------------|---|--|--|--|--|
| Oblast | | | Forests | Thereof coniferous | Agricultural lands | Other natural landscapes | Settlements | in nature conservation zones ¹ | | | | |
| A | В | С | D | E | F | G | Н | | | | | |
| Vinnytsia | 22 | 3152 | 2 | 0 | 333 | 2816 | 1 | 2826 | | | | |
| Dnipropetrovsk | 29 | 569 | 0 | 0 | 560 | 9 | 0 | 0 | | | | |
| Donetsk | 153 | 4041 | 4 | 0 | 3691 | 346 | 0 | 129 | | | | |
| Zaporizhzhia | 315 | 49274 | 231 | 1 | 38692 | 10237 | 114 | 141 | | | | |
| Kirovograd | 13 | 285 | 10 | 4 | 65 | 210 | 0 | 0 | | | | |
| Luhansk | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | | | | |
| Mykolaiv | 602 | 30579 | 53 | 0 | 23191 | 7066 | 269 | 2269 | | | | |
| Odesa | 1 | 58 | 0 | 0 | 56 | 2 | 0 | 0 | | | | |
| Kharkiv | 11 | 608 | 0 | 0 | 567 | 41 | 0 | 0 | | | | |
| Kherson | 16 | 454 | 0 | 0 | 426 | 28 | 0 | 0 | | | | |
| Total, ha | 242 | 8256 | 106 | 4 | 4541 | 3602 | 7 | 2500 | | | | |
| Including the Direct Impact of Military Combat Zone 60 km (30+30 km) ³ | | | | | | | | | | | | |
| Dnipropetrovsk (National Street | 4 | 268 | 0 | 0 | 168 | 100 | 0 | 241 | | | | |
| Donetsk | 67 | 2127 | 24 | 0 | 1362 | 739 | 2 | 234 | | | | |
| Zaporizhzhia | 53 | 1347 | 0 | 0 | 689 | 658 | 0 | 275 | | | | |
| Luhansk | 7 | 731 | 6 | 4 | 171 | 554 | 0 | 354 | | | | |
| Mykolaiv | 1 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | | | | |
| Kharkiv | 23 | 740 | 1 | 0 | 361 | 377 | 1 | 351 | | | | |
| Kherson | 18 | 507 | 24 | 0 | 327 | 154 | 2 | 0 | | | | |
| Total, ha % | 173 71 | 5724 69 | 55 52 | 4 100 | 3082 68 | 2582 72 | 5 71 | 1455 58 | | | | |

Table 1. Statistics of fires on the territory of Ukraine for the period of 01.02.2024 to 29.02.2024

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

² Monthly totals in Columns B and \overline{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 01.02.2024 to 29.02.2024.



Table 2. Statistics of fires in the areas of nature conservation (Emerald network¹) for the
period of 01.02.2024 to 29.02.2024

| | Area of fires, | Distribution of fire area by types of landscapes ² , ha | | | | | | | | | | |
|---|----------------|--|--------------------|--------------------|--------------------------|-------------|--|--|--|--|--|--|
| Oblast | ha | Forests | Thereof coniferous | Agricultural lands | Other natural landscapes | Settlements | | | | | | |
| А | В | С | D | Е | F | G | | | | | | |
| Dnipropetrovsk | 723 | 0 | 0 | 502 | 221 | 0 | | | | | | |
| Donetsk | 234 | 12 | 0 | 39 | 183 | 0 | | | | | | |
| Zaporizhzhya | 275 | 0 | 0 | 81 | 194 | 0 | | | | | | |
| Kirovograd | 37 | 0 | 0 | 37 | 0 | 0 | | | | | | |
| Luhansk | 596 | 5 | 4 | 94 | 497 | 0 | | | | | | |
| Odesa | 53 | 0 | 0 | 1 | 52 | 0 | | | | | | |
| Kharkiv | 351 | 0 | 0 | 81 | 269 | 1 | | | | | | |
| Kherson | 231 | 0 | 0 | 231 | 0 | 0 | | | | | | |
| Total | 2500 | 17 | 4 | 1066 | 1416 | 1 | | | | | | |
| Including the Direct Impact of Military Combat Zone ³ 60 km (30+30 km) ³ | | | | | | | | | | | | |
| Dnipropetrovsk | 241 | 0 | 0 | 143 | 98 | 0 | | | | | | |
| Donetsk | 234 | 12 | 0 | 39 | 183 | 0 | | | | | | |
| Zaporizhzhia | 275 | 0 | 0 | 81 | 194 | 0 | | | | | | |
| Luhansk | 354 | 5 | 4 | 14 | 335 | 0 | | | | | | |
| Kharkiv | 351 | 0 | 0 | 81 | 269 | 1 | | | | | | |
| Total | 1455 | 17 | 4 | 358 | 1079 | 1 | | | | | | |
| % | 58 | 100 | 100 | 34 | 76 | 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) (<u>http://emerald.net.ua/</u>).

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) (<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.