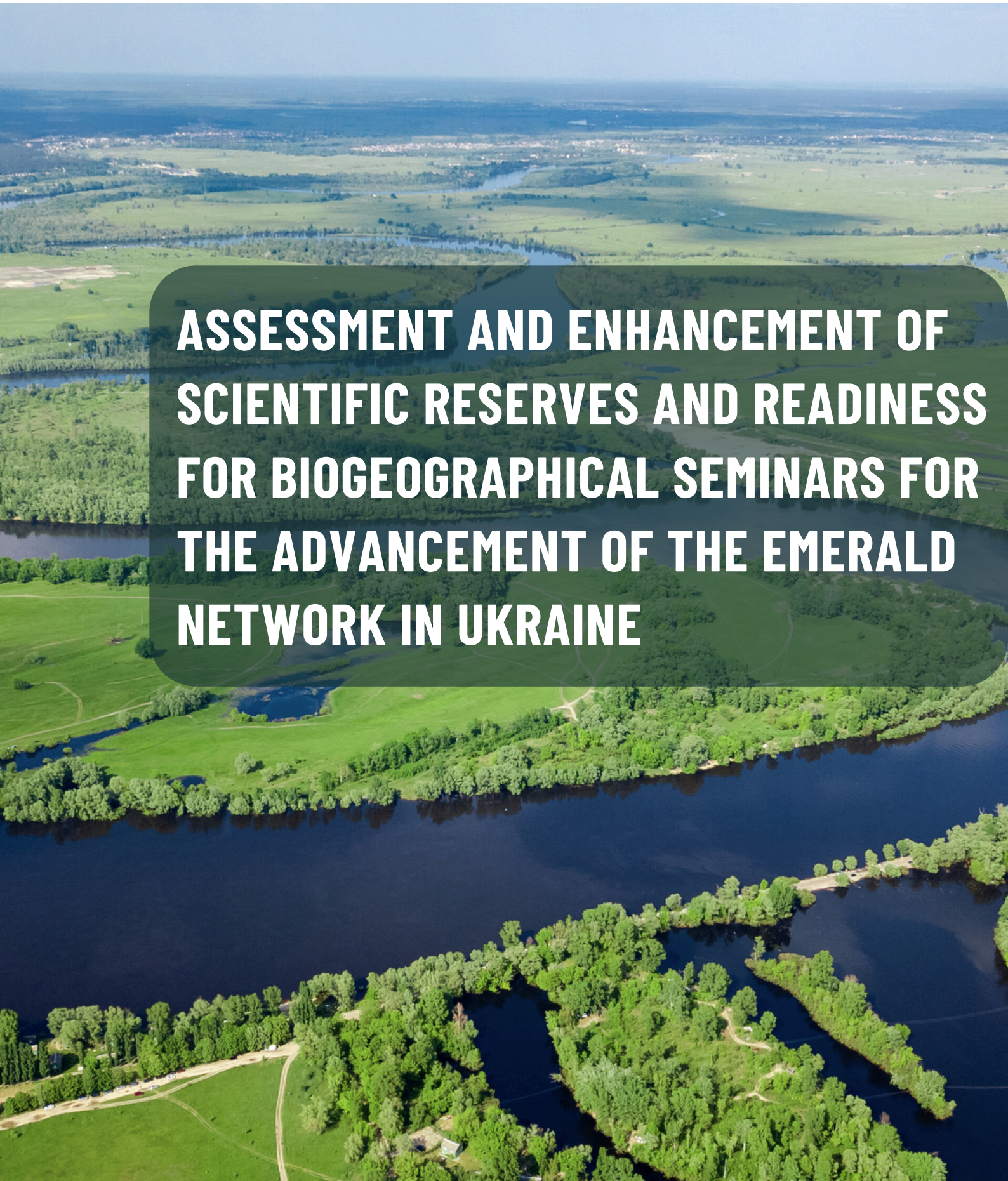
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ASSESSMENT AND ENHANCEMENT OF SCIENTIFIC RESERVES AND READINESS FOR BIOGEOGRAPHICAL SEMINARS FOR THE ADVANCEMENT OF THE EMERALD NETWORK IN UKRAINE

Assessment and Enhancement of Scientific Reserves and Readiness for Biogeographical Seminars for the Advancement of the Emerald Network in Ukraine

December 2025

This report was prepared under the EU-funded 'European Union for Environment Programme' (EU4Environment), implemented by the OECD, UNECE, UNEP, UNIDO, and the World Bank.

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This report was produced with the financial assistance of the European Union.

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Please cite the work as follows: EU4Environment. 2025. *Assessment and Enhancement of Scientific Reserves and Readiness for Biogeographical Seminars for the Advancement of the Emerald Network in Ukraine.*

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Acknowledgments

The World Bank gratefully acknowledges the contributions of the expert team from **Estonian, Latvian & Lithuanian Environment, SIA (ELLE)** and the **Institute of Landscape Ecology of the Slovak Academy of Sciences (ILE SAS)**, who provided analytical inputs, technical assessments, and expert reviews for the preparation of this report. The core expert team included **Juraj Lieskovský, Luboš Halada, Miriam Vlachovičová, Laura-Patricia Gavilan Iglesias, Eva Schlimbachová, Peter Gajdoš, Pavol Purgat, Petra Gašparovičová**, with **Valts Vilnītis** serving as Team Leader and **Nurgul Smagulova-Đulić** supporting coordination and communications.

The World Bank also acknowledges the valuable cooperation and substantive inputs provided by national authorities, research institutions, and individual experts in the Republic of Moldova. In particular, contributions were provided by **Vitalie Dragan**, **Veronica Josu**, and **Elisaveta Alexandrov** from the Ministry of Environment; **Marius Cațț** from the Environmental Agency; **Ajder Vitalie**, **Ala Donica**, **Aliona Miron**, **Elena Tofan-Dorofeev**, **Dumitru Bulat**, **Victoria Nistreanu**, **Galina Bușmachiu**, **Ion Talmaci**, **Alexandru Galupa**, **Alexandru Gulupa**, and **Viorica Paladi** from national research and scientific institutions; **Mamai Iulian** and **Nicolae Grigoras** from the Moldsilva Agency; **Elena Fedorenco**, **Natalia Jardan**, and **Olga Ioniță** representing scientific reserves and protected areas; **Constanța Țărnă** and **Ion Marin** from civil society organizations; **Teodor Glavan-Caranghel** as an independent ornithological expert; and **Aurel Lozan** as EU4Environment World Bank Activity Coordinator in Moldova.

The World Bank is grateful to all experts and stakeholders who participated in consultations and the self-evaluation workshop in Chișinău, whose insights helped validate findings and strengthen the relevance of the report for the next biogeographical seminar and future Emerald Network development.

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Acronyms and Definitions

A sites for habitats	Sites where the habitat covers more than 15 percent of total habitat coverage of the country
A sites for species	Sites which contain more than 15 percent of total population of species in the country
ALP	Alpine biogeographical region
ATL	Atlantic biogeographical region
B sites for habitats	Sites where the habitat covers 2–15 percent of total habitat coverage of the country
B sites for species	Sites which contain 2–15 percent of total population of species in the country
bp	Breeding pairs
BGR	Biogeographical region
C sites for habitats	Sites where the habitat covers less than 2 percent of total habitat coverage of the country
C sites for species	Sites which contain less than 2 percent of total population of species in the country
CON	Continental biogeographical region
D sites	Non-significant population or habitat cover
EBBA2	European Breeding Bird Atlas 2 (Keller et al. 2020)
ERL	European Red List
EU	European Union
IBA	Important Bird Area (BirdLife International)
IN MAJ	Habitat or species is present but is not protected by the Emerald Network
IN MIN	Known presence of habitat or species in specific Emerald site. Protection of habitat or species needs to be declared in a specific Emerald site.
IN MOD	Habitat or species is protected by Emerald site(s). Protection is not sufficient and more sites for the protection of habitat or species need to be declared.
MBLS	Marine Black Sea biogeographical region
SDF	Standard Data Form; information provided in the Emerald databases by national authorities— r = reproducing, p = permanent, c = concentration, w = wintering and units: pairs (= p), individuals (= i)
SR	Scientific reserve; insufficient knowledge about habitats or species
SR REF	Scientific reserve on Reference list: insufficient knowledge about the presence of habitats or species in the respective biogeographical region of the country
SUF	Sufficient protection of specific species or habitat by the Emerald Network
UA	Ukraine

1. Introduction

This report is an output of the activity 'Regional Collaboration in Protecting Biodiversity & Ecosystems (the Emerald Network) in the Eastern Partnership (EaP) Countries' under the EU4Environment Programme. The document is intended to assist Ukraine in preparing the next version of its Emerald database for submission to the Bern Secretariat. It should serve the Ukrainian government, authorities, scientists, experts, nongovernmental organizations (NGOs), and local stakeholders as a tool for preparing for the next biogeographical seminar and for further development of the Emerald Network in Ukraine.

This document presents findings on the progress, current situation, and remaining gaps related to the representation of Bern Convention species and habitats within the Emerald Network in Ukraine. The report summarizes the analytical work conducted to assess progress in knowledge about Bern Convention species and habitats in Ukraine. It draws on information presented in the pre-scoping document 'Review of Progress in Scientific Knowledge of Emerald Habitats and Species Distribution in Ukraine'. To prepare the pre-scoping document, we analyzed the national Emerald Network development plans and performed an extensive literature review covering scientific papers, reports, national conservation lists, databases, and citizen science sources. These materials were used to summarize existing knowledge on those Bern Convention species and habitats identified in the last biogeographical seminar as not sufficiently represented in the Emerald Network in Ukraine or for which there was insufficient information and a need for further study. Data sources supporting these recommendations are provided in the relevant sections and in the list of references.

The pre-scoping document was delivered to authorities and experts in Ukraine. Its findings were then discussed with local experts during the self-evaluation workshop in Kyiv on October 9–10, 2025. This discussion provided additional information, which we have included under 'Comments from local experts' in the tables in Chapter 3. These insights helped us refine our recommendations for developing the Emerald Network in Ukraine and addressing remaining scientific gaps.

The core of the document focuses on individual species and habitats that are insufficiently protected by the Emerald Network. Their identification is based on conclusions from the last biogeographical seminars, namely the seminar on animals, habitats, and plants held on June 18–19, 2019, and the seminar on birds held on May 23–24, 2018. We focused on species with insufficient knowledge (conclusion: SR), insufficient knowledge that does not allow for confirming the presence or absence of the species or habitat in the biogeographical regions (BGRs) of Ukraine (conclusion: SR REF), insufficient species or habitat protection by Emerald Network (conclusion: IN MOD), or absence of such protection (conclusion: IN MAJ). We checked the current distribution of species in the Emerald Network and, based on conclusions from the biogeographic seminar and our literature review, provided recommendations for each assessed species and habitats.

Besides reviewing the status and knowledge of individual species and habitats, the Kyiv workshop also provided an opportunity to discuss more general aspects of Emerald Network development in Ukraine. Results of this discussion were used to formulate recommendations for future improvement of the Emerald Network, protection of Emerald species and habitats, and management of Emerald sites. These recommendations are presented in Chapter 4; they summarize and synthesize the recommendations provided in the preceding chapter and discussed in the self-evaluation workshop.

We recognize that Ukraine and its Emerald Network are in a special situation due to Russia's invasion of Ukraine and the resulting damage to Emerald sites and linked habitats and species. As soon as conditions permit, a comprehensive assessment should be conducted to determine the extent of damage, the restoration potential, and the feasibility of recovery for individual sites and their associated habitats and species. These findings will be essential in deciding whether a site should be maintained within or excluded from the Emerald Network.

1. Вступ

Звіт є результатом діяльності «Регіональна співпраця у сфері охорони біорізноманіття та екосистем (Смарагдова мережа) у країнах Східного партнерства» у межах Програми EU4Environment. Документ має на меті допомогти Україні підготувати наступну версію бази даних Смарагдової мережі для подання до Секретаріату Бернської конвенції. Він має слугувати інструментом для українського уряду, органів влади, науковців, експертів, НУО та місцевих зацікавлених сторін для підготовки до наступного біогеографічного семінару та подальшого розвитку Смарагдової мережі в Україні.

У цьому документі наведено результати щодо прогресу, поточної ситуації та наявних прогалин у представленості видів і середовищ існування, що підпадають під дію Бернської конвенції, у Смарагдовій мережі в Україні. У звіті узагальнено аналітичну роботу, проведену з метою оцінки прогресу у знаннях про види і середовища існування Бернської конвенції в Україні. Він ґрунтується на інформації, викладеній у попередньому (pre-scoping) документі «Огляд прогресу в наукових знаннях про середовища існування Смарагдової мережі та поширення видів в Україні». Для підготовки цього попереднього документа ми проаналізували національні плани розвитку Смарагдової мережі та провели розширений огляд літератури, що охоплював наукові статті, звіти, національні природоохоронні переліки, бази даних і джерела громадянської науки. Ці матеріали було використано для узагальнення наявних знань про ті види та середовища існування Бернської конвенції, які під час останнього біогеографічного семінару було визначено як недостатньо представлені у Смарагдовій мережі в Україні, або щодо яких бракувало інформації та існувала потреба в подальшому вивченні. Джерела даних, що підтверджують ці рекомендації, наведено у відповідних розділах і в списку використаних джерел.

Попередній (pre-scoping) документ було передано органам влади та експертам в Україні. Його висновки згодом обговорили з місцевими експертами під час семінару з самооцінювання, що відбувся в Києві 9–10 жовтня 2025 року. Це обговорення надало додаткову інформацію, яку ми включили до розділу «Коментарі місцевих експертів» у таблицях Розділу 3. Ці напрацювання допомогли нам уточнити рекомендації щодо розвитку Смарагдової мережі в Україні та усунення/закриття наявних наукових прогалин.

Основна частина документа присвячена окремим видам та середовищам існування, які недостатньо представлені та/або охоплені охоронними заходами у Смарагдовій мережі. Їх визначення ґрунтується на висновках останніх біогеографічних семінарів, а саме: семінару щодо тварин, середовищ існування та рослин, що відбувся 18–19 червня 2019 року, і семінару щодо птахів, що відбувся 23–24 травня 2018 року. Ми зосередилися на видах і середовищах існування, щодо яких наявних знань недостатньо (висновок: SR), наявних знань недостатньо для підтвердження присутності або відсутності виду чи середовища існування в біогеографічних регіонах України (висновок: SR REF), рівень охорони у Смарагдовій мережі є недостатнім (висновок: IN MOD) або така охорона відсутня (висновок: IN MAJ). Ми перевірили поточний розподіл видів і середовищ існування у Смарагдовій мережі та, ґрунтуючись на висновках біогеографічного семінару і результатах нашого огляду літератури, надали рекомендації для кожного оціненого виду та середовища існування.

Окрім огляду стану та рівня знань щодо окремих видів і середовищ існування, семінар у Києві також надав можливість обговорити більш загальні аспекти розвитку Смарагдової мережі в Україні. Результати цього обговорення було використано для формулювання рекомендацій щодо подальшого вдосконалення Смарагдової мережі, охорони видів і середовищ існування Смарагдової мережі та управління територіями Смарагдової мережі. Ці рекомендації наведено в Розділі 4; вони узагальнюють і синтезують рекомендації, подані в попередніх розділах і обговорені під час семінару з самооцінювання.

Ми визнаємо, що Україна та її Смарагдова мережа перебувають в особливій ситуації через повномасштабне вторгнення Росії в Україну та спричинені ним пошкодження територій Смарагдової мережі і пов’язаних із ними середовищ існування та видів. Щойно дозволять умови, слід провести комплексну оцінку, щоб визначити масштаб пошкоджень, потенціал відновлення та здійсненність відновлення для окремих об’єктів і пов’язаних із ними середовищ існування та видів. Отримані результати матимуть вирішальне значення для ухвалення рішення про те, чи слід залишити територію у складі Смарагдової мережі, чи виключити її з неї.

2. Available scientific knowledge useful for Emerald Network development

Following the last biogeographical seminar, Ukraine submitted an updated Emerald Network database in 2021. This version included 161 newly proposed sites covering more than 4.3 million ha, representing a significant advancement in the protection of Emerald species and habitats. It is now necessary to proceed with formal designation of these sites to transition their status from “proposed” to “adopted.” For this analysis, proposed and adopted sites were treated equally. The current network comprises 538 sites, 93 habitats, and 300 species, with terrestrial sites covering approximately 15.8 percent of the national territory.

Ukraine has a substantial body of literature regarding vegetation and habitats, largely due to a long tradition of phytosociological research. In addition to numerous journal articles, several comprehensive publications are essential for identifying habitat and vegetation types. ‘Prodrome of the Vegetation of Ukraine’ (Dubyna and Dziuba 2019) provides a highly detailed phytosociological classification, including textual data on the distribution of individual units. ‘Important Plant Areas of Ukraine’ (IPAs; Onyshchenko et al. 2017) lists habitat types within specific IPAs, further contributing to distributional knowledge.

Ukraine has published at least three habitat catalogues, the most significant being the ‘National Habitat Catalogue of Ukraine’ (Kuzemko et al. 2018). This reference utilizes its own system but includes links to the European Nature Information System (EUNIS) habitat classification, Habitats Directive Annex 1, phytosociological classification, and refers to types included in the Green Book of Ukraine and Ukrainian biotope typology. While this publication is a vital basis for habitat mapping, distributional information is often general and lacks specific maps. In general, the bibliography on the distribution of habitat types is scarce, as most of the publications refer to the floristic composition, vegetation studies, or habitat typology, but less to habitat distribution, and usually distribution maps are missing. Notable exceptions include Kagalo and Prost (2012), who provide detailed maps for the Ukrainian Carpathians, and the *Green Book of Ukraine* (Didukh 2009, 448), which offers national maps for a subset of Emerald habitats using a different typology. Additionally, the Ramsar Sites Information Service (https://rsis.ramsar.org/) provides helpful data; despite being focused on wetlands, it also contains information about non-wetland habitat types.

Data quality for **mammals** varies significantly by species. The primary source is the *Red Data Book of Ukraine* (RDB; Akimov and Radchenko 2009), which provides distribution maps with historical and current records up to 2008. The RDB plays a crucial role in nature conservation. It is a key component of Ukraine’s national legislation for the protection of rare and threatened species of animals, plants, and fungi. Species listed in the RDB of Ukraine and in the international conservation agreements valid in the territory of Ukraine, such as the International Union for Conservation of Nature (IUCN) Red List or Appendices of the Bern Convention, might partly overlap. Although the RDB of Ukraine, as an edition, was issued for the last time in 2009, in 2021, the Ministry of Environmental Protection and Natural Resources of Ukraine issued two orders establishing lists of animal, plant, fungal, and algae species that must be included in the next edition of the RDB of Ukraine. Since then, the species on the list have acquired legal conservation statuses throughout the entire territory of Ukraine and are considered protected according to the Law of the Red Data Book of Ukraine (Order of the Ministry of Environmental Protection and Natural Resources of Ukraine № 29 as of January 19, 2021). Other important sources are the data of Chişamera et al. (2013) concerning the mole rat (*Spalax graecus*) distribution, where the authors present the results of their study with detailed locations of the mole rat’s individual populations and habitats. Regarding marine mammals, data are available via the Marine Mammal Protected Area Task Force.[1] Notably, marine mammal species are currently listed in the Steppic BGR and should be reassigned to the **Marine Black Sea** BGR.

The availability of information on **mollusc** species varied greatly. While data on their occurrence, ecological needs, and general ecology were well-supported and easily accessible for some taxa, finding relevant information for others proved to be extremely difficult. Species such as *Vertigo angustior* and *Vertigo geyeri* had limited information available, and their distribution could only be analyzed based on fragmentary and hard-to-access sources. Available data suggest the presence of *Vertigo geyeri* at two

[1] https://www.marinemammalhabitat.org/

locations; however, repeated surveys in these areas have found no evidence of its current occurrence, indicating possible regression or local extinction of the population, which requires deeper research.

The availability of distributional data for **insects** varies significantly across different taxa. For species lacking formal scientific records, occurrence data are often sourced from citizen science platforms such as Global Biodiversity Information Facility (GBIF) or iNaturalist. The presence of certain species, such as the bush-cricket *Isophya stysi*, remains a subject of debate; however, given confirmed populations in neighboring countries, its occurrence in Ukraine is highly probable. This pattern of 'assumed presence' applies to several other taxa as well. Overall, entomological research in Ukraine is insufficient relative to the country's vast territory and ecological diversity. There are only a few scientific publications, highlighting the need for more intensive research. These deficiencies are also evident in species distribution maps published by the IUCN; in some cases, vast areas covering the entire territory of Ukraine are shown but without sufficient scientific evidence. To achieve a more precise assessment of biodiversity status, it is essential to expand systematic field research and secure reliable, evidence-based data on species distribution.

Only one species of Agnatha (*Cyclostomata*) was assessed. For brook lamprey (*Lampetra planeri*), there is a lack of site-specific data on the occurrence in the area in question (Bracken 2014). The same lack of accurate occurrence data is also a problem for several **fish** species (Osteichthyes), namely the gudgeons *Romanogobio uranoscopus* and *Romanogobio albipinnatus*. For the golden spined loach (*Sabanejewia aurata*), it is possible that some or all of the populations in Ukraine probably belong to *S. baltica*. In the case of the European mudminnow (*Umbra krameri*), it is likely that the species is locally extinct, given the absence of recent records in the Alpine region (Movchan 1995). The occurrence of the Balon's ruffe (*Gymnocephalus baloni*) is poorly mapped; however, due to its distribution in neighbouring countries, it is assumed that it is also distributed in the Ukrainian part of the Tisza River (Harka 2006; Joint Danube Survey 2002; Tsyba and Kokodiy 2017). Some of the best information on the occurrence of most fish species in the Tisza basin is summarized in the publication 'Contribution to the knowledge of the ichthyofauna of streams of the Transcarpathian region in Ukraine' (Koščo et al. 2004). The Lake minnow (*Rhynchocypris percnurus*) is probably absent from the steppic region. Data on the occurrence of river shads (*Alosa maeotica*, *A. tanaica*) in new localities are limited, with most information coming from citizen science sources, primarily the GBIF database.

The **amphibian** fauna (*Amphibia*) is relatively well studied. However, for the yellow-bellied toad (*Bombina variegata*) in the southeastern part of the country and the Tisza basin, site-specific occurrence data are lacking. In the case of the two crested newt species *Triturus cristatus* and *Triturus dobrogicus*, it is important to consider the contact zone of both species (Transcarpathians: Vynohradiv, Irshava, Mukachevo, Serednie, Uzhorod), where hybridization between the two species occurs (Kurtyak and Mezhzherin 2005; Mikulíček et al. 2012; Morozov-Leonov 2003).

The distribution and requirements of the **reptile** fauna (Reptilia) representatives are relatively well studied. In the case of the meadow viper (*Vipera ursinii*), attention should be paid to taxonomic changes, as the populations occurring in Ukraine currently fall within the species *Vipera renardi* (The Reptile Database). An important source of information on the fauna is the 'Red Data Book of Ukraine' (Akimov and Radchenko 2009).

The distribution patterns of **birds** are well-documented. Ukraine, like other European countries, participated in the mapping for the European Breeding Bird Atlas. The European Breeding Bird Atlas 2 (2020) provides fundamental data on the distribution of breeding species, mapped at a resolution of 50 km squares. The data for this atlas were collected between 2013 and 2017. Background information on birds is available through the Important Bird Area (IBA) database, maintained by BirdLife International, which identifies key sites for avian biodiversity. There are 141 IBAs in 26 regions of Ukraine. Most IBAs are covered by the Emerald Network, though for several, the coverage is only partial. There are differences in area for sites (IBAs being larger): Ikva river valley, Berdyans'ka peninsula, Molochna river valley, Pivdennyj Bug river valley (Goloskiv village), Burshtyns'ke reservoir, Sosyns'kyj protected area, Klivodyns'kyj protected locality, Kakhovs'ke reservoir (Energodar), Fishponds near Kukil'nyky village, Elanchyk river valley, Konka river mouth, Udaj river valley, Tarkhankuts'kyj peninsula, and Dnestr valley between Staryj Martyniv and Marynopil' villages. For several IBAs, these are so far considered Emerald proposed sites. Important sites have been mapped for many years under the auspices of the Ukrainian Society for the Protection of Birds (USPB). More up-to-date records can be obtained from online sources, including GBIF, iNaturalist, TrekTellen, Xeno-canto, and Observation.org, which aggregate global observations from both researchers and citizen scientists.

Out of the 19 **plant species** assessed, 8 are found across various BGRs. Key sources included research articles published in both international and Ukrainian journals, along with the Red Book of Ukraine, which offers an official overview of endangered species in the country, including distribution maps. Additionally, the Ukrainian Biodiversity Information Network (Ukrbin) [https://ukrbin.com/] was used, providing species records, distribution maps, and ecological information. This online platform includes information on Red Book plant species, helping to track their distribution across Ukraine and supporting biodiversity research efforts. For some species, particularly those classified as SR, there were limited or no available sources to assess their distribution. This lack of information could be due to factors such as insufficient research, underreporting, or the species not having a defined distribution range in the area. As a result, it was challenging to obtain accurate data on these species, and further investigation and documentation are needed to fill these gaps in knowledge about the species. The 14 species assessed as IN MOD, IN MOD CD, and IN MOD/IN MIN have been added to sites in Emerald database 2025, with many now considered SUF.

Additional data sources were identified during the self-evaluation workshop. Many datasets on individual species groups are held in databases managed by specific institutions or experts. These data are not fully publicly accessible, and it is necessary to contact the respective experts or institutions to obtain them. The workshop participants also identified several Ukrainian publications on species and habitat distribution: Theriologia Ukrainica,[2] the collection of scientific papers of the Azov-Black Sea Ornithological Station 'Branta',[3] Berkut,[4] and Авіфауна України.[5] The participants identified the Marine Mammal Protected Area Task Force[6] as a source of data on protected marine mammal species. A valuable data source regarding the rare animal species in Ukraine is the web portal 'Finds of rare species of animals in Ukraine'.[7]

[2] https://www.scopus.com/sourceid/21101290845

[3] http://branta.org.ua/ua/

[4] https://www.aetos.kiev.ua/berkut/contu.htm

[5] https://www.aetos.kiev.ua/contavi.htm

[6] https://www.marinemammalhabitat.org/

[7] https://ukraine.ipt.gbif.no/resource?r=redbookua2022&v=1.11

3. Progress, current situation, gaps, and recommendations for the next round of biogeographical seminars

This chapter focuses on individual species and habitats that, according to conclusions from the last biogeographical seminar, have been classified as poorly known or insufficiently protected within the Emerald Network. For Ukraine, we considered 322 cases:

- Present habitat or species but is not protected by the Emerald Network (conclusion **IN MAJ**): 23 cases.
- Habitat or species is protected by Emerald site(s). Protection is not sufficient, and more sites for the protection of habitats or species need to be declared (conclusion **IN MOD**): 162 cases.
- More sites for the protection of habitats or species need to be declared and the presence is known in a specific Emerald site (conclusion **IN MOD/IN MIN**): 64 cases.
- Insufficient knowledge about habitats or species, additional research is needed (conclusion **SR**): 55 cases.
- Insufficient knowledge about the presence of habitats or species in the respective BGR of the country (conclusion **SR REF**): 18 cases.

Each habitat or species is presented in a table containing the following fields:

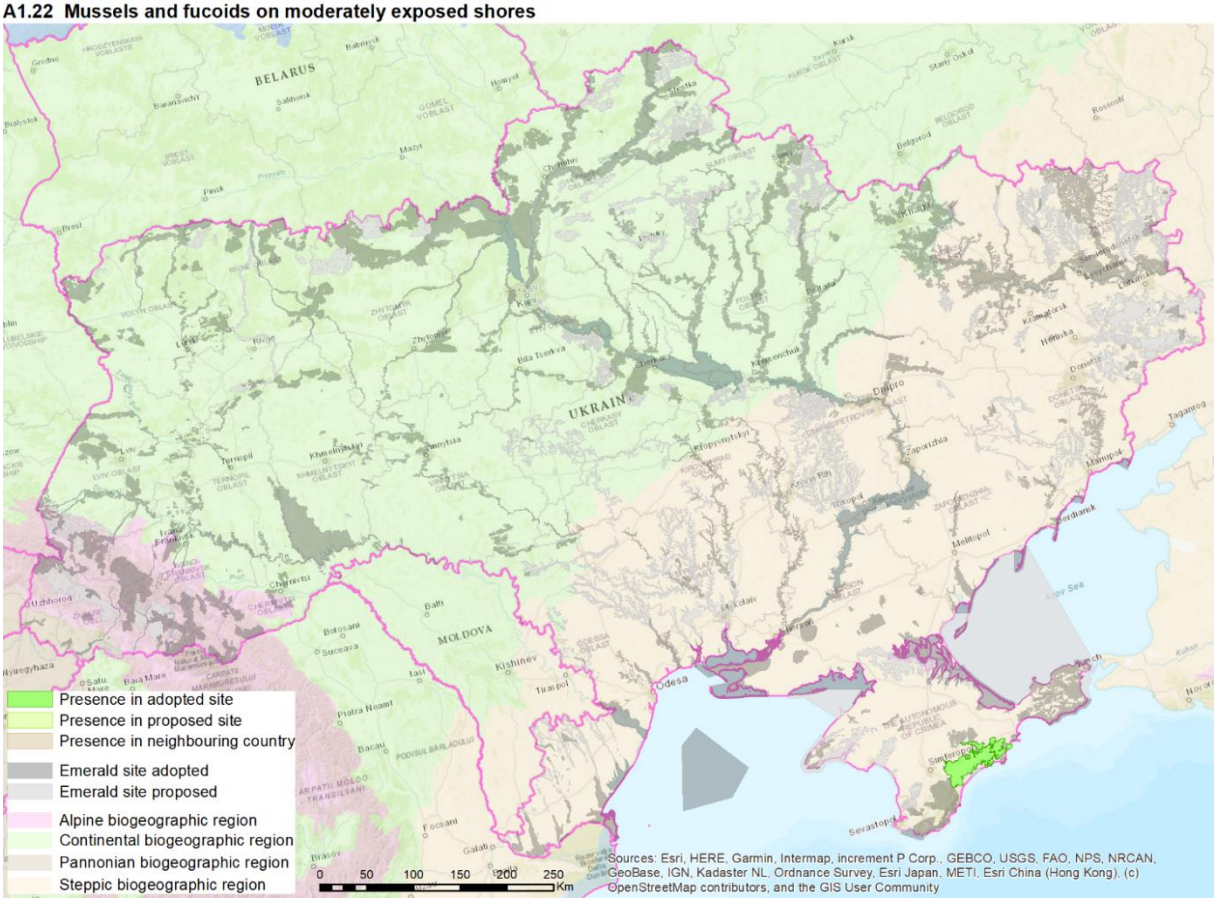
- **Num. of sites:** The number of Emerald sites where the presence of the habitat or species is recorded in the Emerald database. The information in brackets indicates the category of the site based on the habitat area or species population in the site (see *Acronyms and Definitions*).
- **BGR seminar 2018/2019 conclusion:** The conclusion from the latest biogeographical seminar (see *Acronyms and Definitions*).
- **Recommendation 2025:** Recommendations for further steps in developing the Emerald Network, based on a synthesis of comments from external and local experts.
- **Comments from external experts:** Based on the review conducted by external experts, presented in the pre-scoping document 'Review of Progress in Scientific Knowledge of Emerald Habitats and Species Distribution in Ukraine' (see Introduction).
- **Comments from local experts:** Based on the input of local experts during the self-evaluation workshop (see Introduction).
- **References:** Data sources or literature supporting the comments and conclusions.

Each table is accompanied by a map showing the distribution of the habitat or species within the Emerald Network. **These maps include data for all site categories (Adopted, Proposed, Candidate).** The assessment for Ukraine integrated both **adopted and proposed sites** into the visualization and evaluation stages.

Habitats

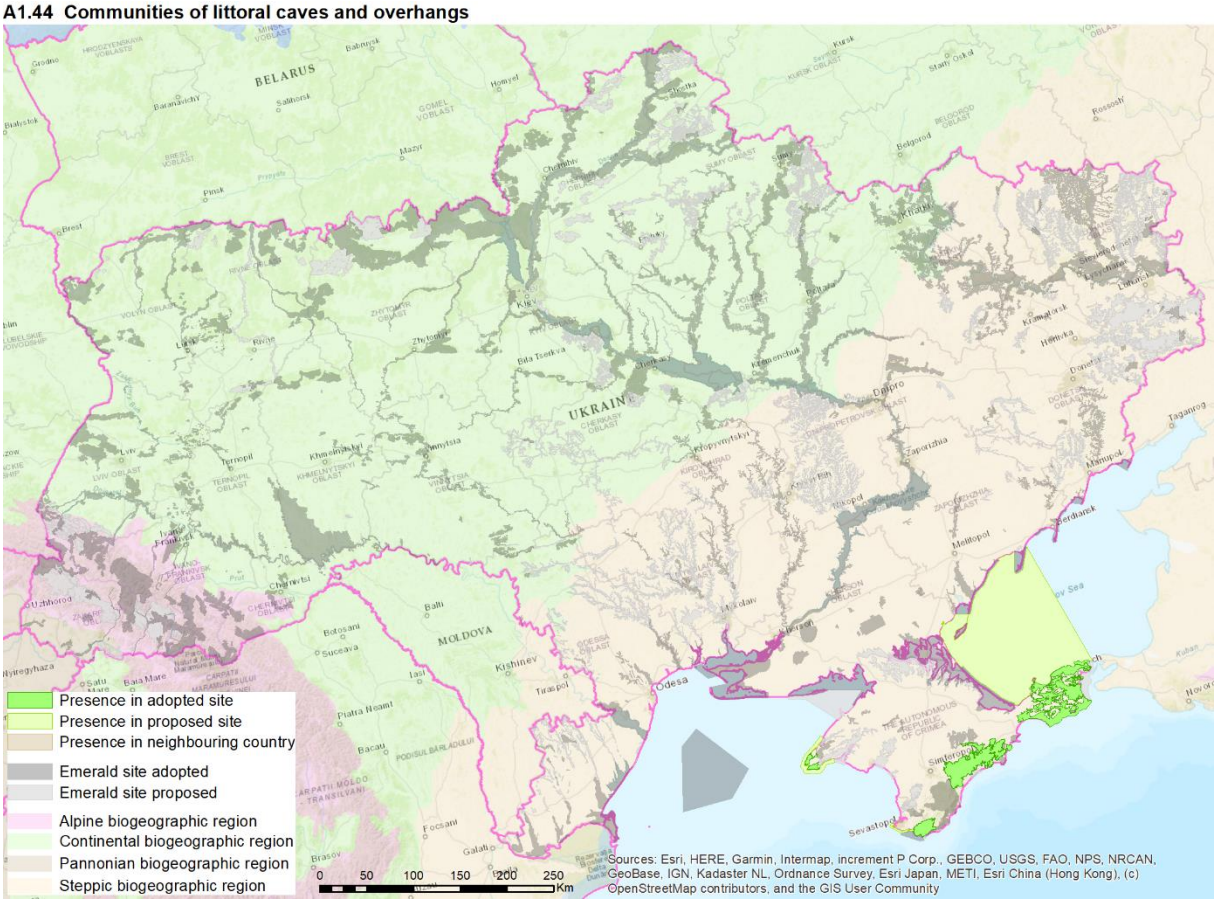
BGR	A1.22 Mussels and fucoids on moderately exposed shores	
STE	Num. of sites:	Adopted: 2 (B:1, C:1)
	BGR seminar 2019 conclusion:	IN MOD marine part of the sites
	Recommendation 2025:	Check correspondence of the habitat with the habitat type A1.22 description in existing sites; consider also sites Zmijnyj island and Berezan island. Correct BGR name—it should be Marine Black Sea (MBLS) (see https://rm.coe.int/delineation-of-marine-regions-in-the-framework-of-the-bern-convention-/16808fe2cf).
	Comments from external experts:	Two sites: 1B and 1C, both in Crimea. The Red List of Marine Habitat cites A1.21 in MBLS_UA but not A1.22. The BGR for these habitats is the MBLS. It should be corrected. There are two sites in Crimea. Check for some biogenic reefs in front of Primorsky, south of Odesa (EMODnet Seabed habitats map). However, biogenic reefs are not coastal and are rare outside Crimea.
	Comments from local experts:	Zmijnyj Island, Berezan Island. This is ocean type; it occurs in ATL but not in MBLS.
	References:	EMODnet Map Viewer https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010,8019#level_8019

A1.22 Mussels and fucoids on moderately exposed shores



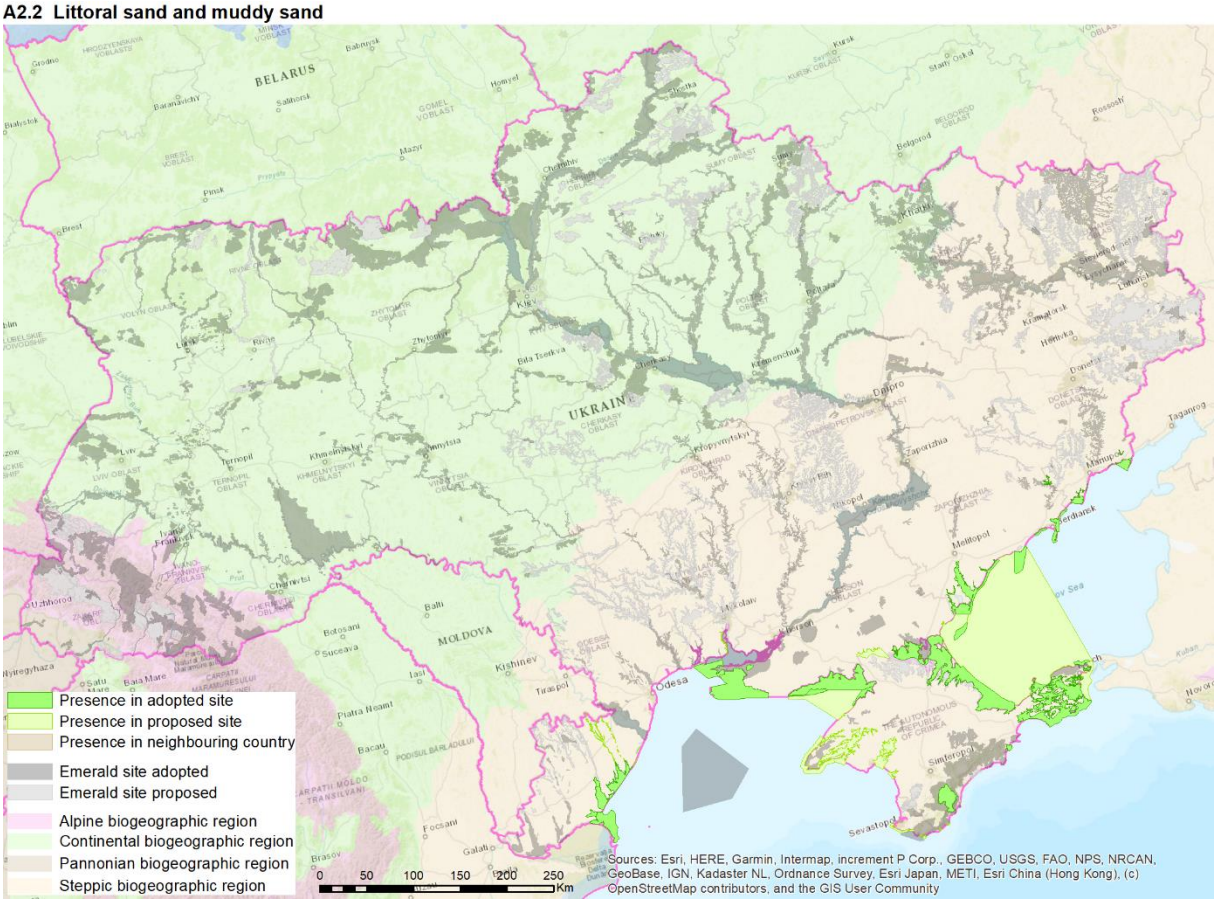
BGR	A1.44 Communities of littoral caves and overhangs	
STE	Num. of sites:	Adopted: 6 (A:1, B:2, C:3), Proposed: 3 (B:1, C:2)
	BGR seminar 2019 conclusion:	IN MOD marine part in sites
	Recommendation 2025:	Consider Zmijnyj and Berezan Islands. Correct BGR name—it should be MBLS.
	Comments from external experts:	Nine sites: 1A, 3B, and 5C, all in Crimea. 1C site is the proposed marine Area of Special Conservation Interest (ASCI): UA0000460 Western Azov. No information in the literature indicates this habitat outside Crimea (there is a bug for the European Red List of Marine Habitats Factsheets at the The European Environment Agency (EEA) website).
	Comments from local experts:	At least two other sites. Zmijnyj island (10 caves), Berezan Island (20 caves), Biloberizhzhia Sviatoslava, Cape Adzhyiask
	References:	EMODnet Map Viewer https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010,8019#level_8019

A1.44 Communities of littoral caves and overhangs



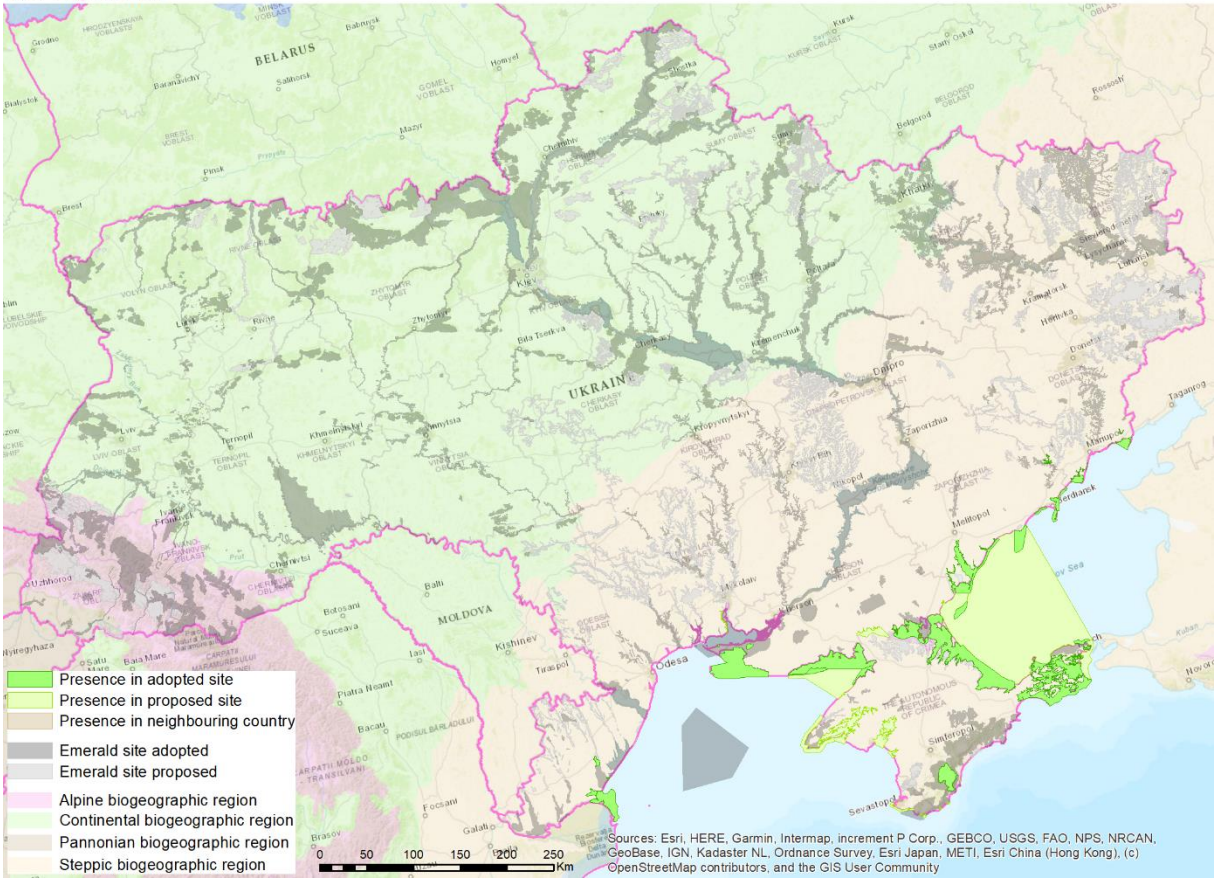
BGR	A2.2 Littoral sand and muddy sand	
STE	Num. of sites:	Adopted: 15 (A:1, B:11, C:3), Proposed: 17 (B:4, C:13)
	BGR seminar 2019 conclusion:	IN MOD marine part of the sites
	Recommendation 2025:	Consider the addition of the habitat to the marine part of the estuaries of Dniester, Southern Bug, Tylihul, and Berezan. Correct the BGR name to MBLS.
	Comments from external experts:	In the microtidal Black Sea (tidal range of about 0.3 m), this habitat is limited to a narrow beach strip covered by the swash. However, littoral sand and muddy sand. 32 sites: 1A, 11 B, and 16C, covering the sandy coasts quite well. The habitat is quite well covered by 32 sites (considering the proposed sites). The only gaps are in the marine part of the estuaries of Dniester, Southern Bug, Tylihul, and Berezan. Some areas could be covered by the extension of existing sites. This habitat could be sufficient with the adoption of the proposed sites and some of the proposed estuaries.
	Comments from local experts:	Dniester Lyman, Kalamita Gulf, Budak beech
	References:	EMODnet Map Viewer https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010,8019#level_8019

A2.2 Littoral sand and muddy sand



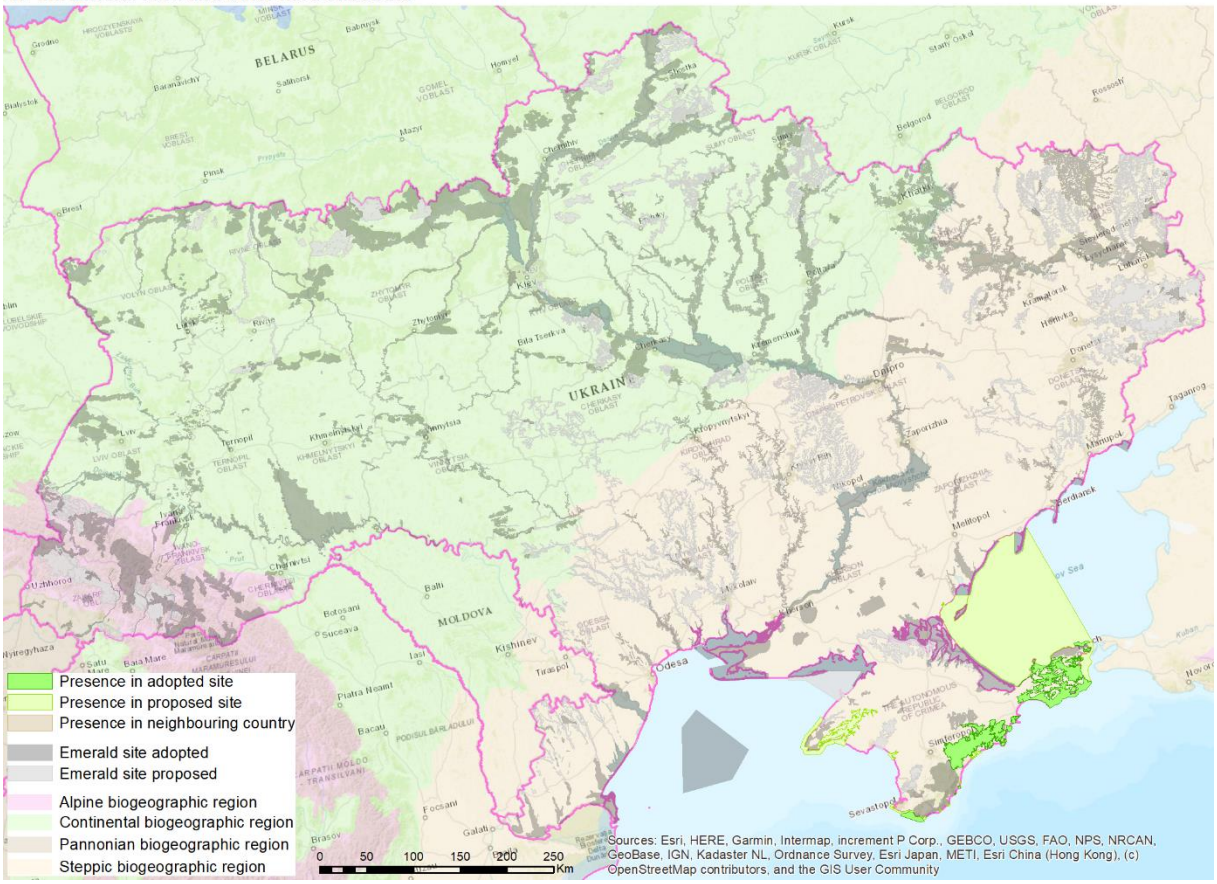
BGR	A2.3 Littoral mud	
STE	Num. of sites:	Adopted: 11 (A:2, B:4, C:5), Proposed: 15 (B:4, C:11)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Consider the estuaries of the Dniester, Southern Bug, Tylihul, and Berezan as well as sites specified by local experts. Correct the BGR name to MBLS.
	Comments from external experts:	26 sites: 2A, 8B, and 16C. Upper estuarine sandy mud and mud shores are in areas with significant freshwater influence, so some estuaries should be covered. For instance, the estuaries of Dniester, Southern Bug, Tylihul, and Berezan. Some areas could be covered by the extension of existing sites.
	Comments from local experts:	Suchyj Lyman, Perekop, Berezanski Lyman, Černomorsk, Syvaš, Western Azov, Karkinitska zatoka (UA0000398 - already in the network)
	References:	EMODnet Map Viewer https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010,8019#level_8019

A2.3 Littoral mud



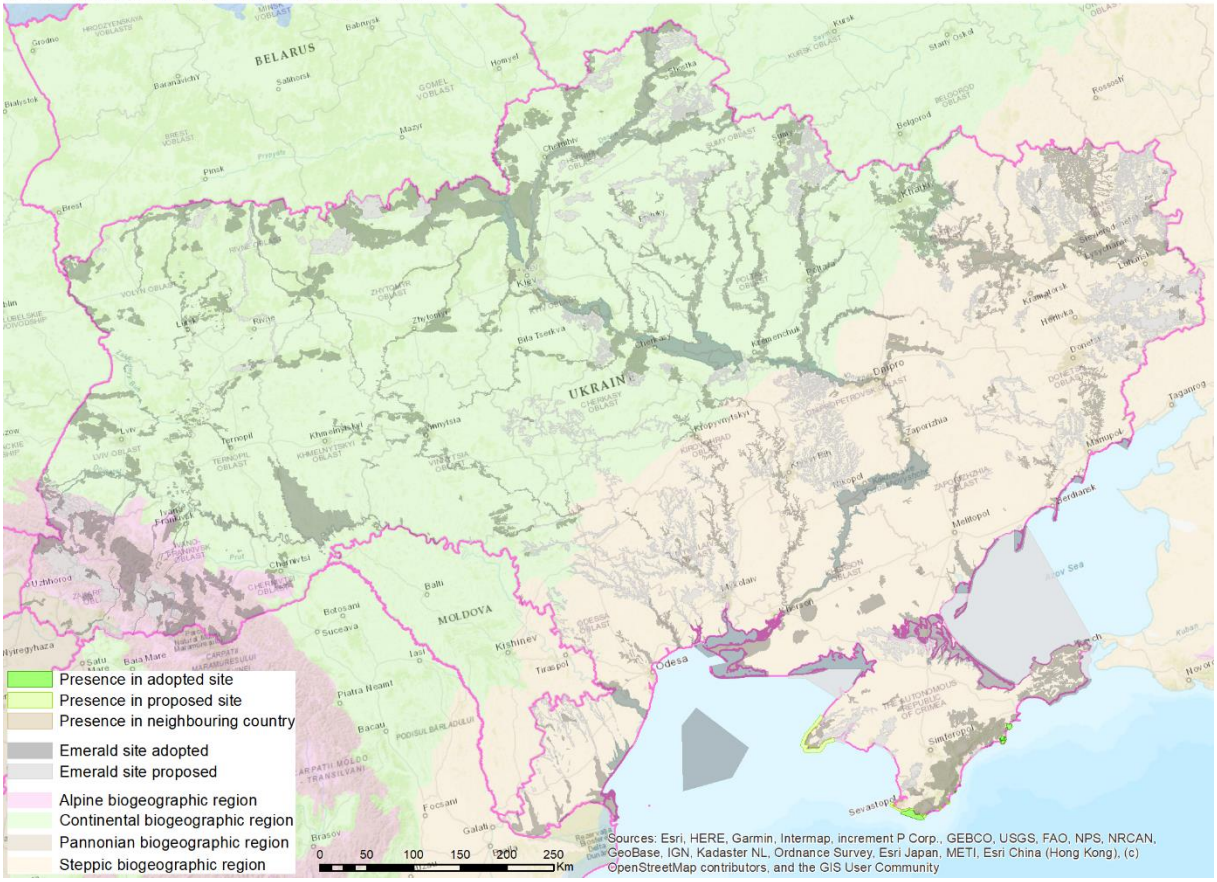
BGR	A3 Infralittoral rock and other hard substrata	
STE	Num. of sites:	Adopted: 9 (B:4, C:5), Proposed: 13 (B:3, C:10)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN/CD
	Recommendation 2025:	Check suitable sites between Hrybivka and Primorsky. Consider sites specified by local experts. Correct the BGR name to MBLS.
	Comments from external experts:	22 sites: 7B and 15C, all of them located on the Crimean peninsula. This habitat type includes a wide range of habitat types, from rocks with Corallinales to rock borers or Mytilid-dominated rocks. These habitats occur on exposed rocky coasts, from low water to 5–10 m depths. Infralittoral rock and biogenic reefs are mapped by EMODnet between Hrybivka and Primorsky.
	Comments from local experts:	Zmyjnij and Berezan islands; Areas of Odesa, Tylihul Estuary
	References:	EMODnet Map Viewer https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010,8019#level_8019

A3 Infralittoral rock and other hard substrata



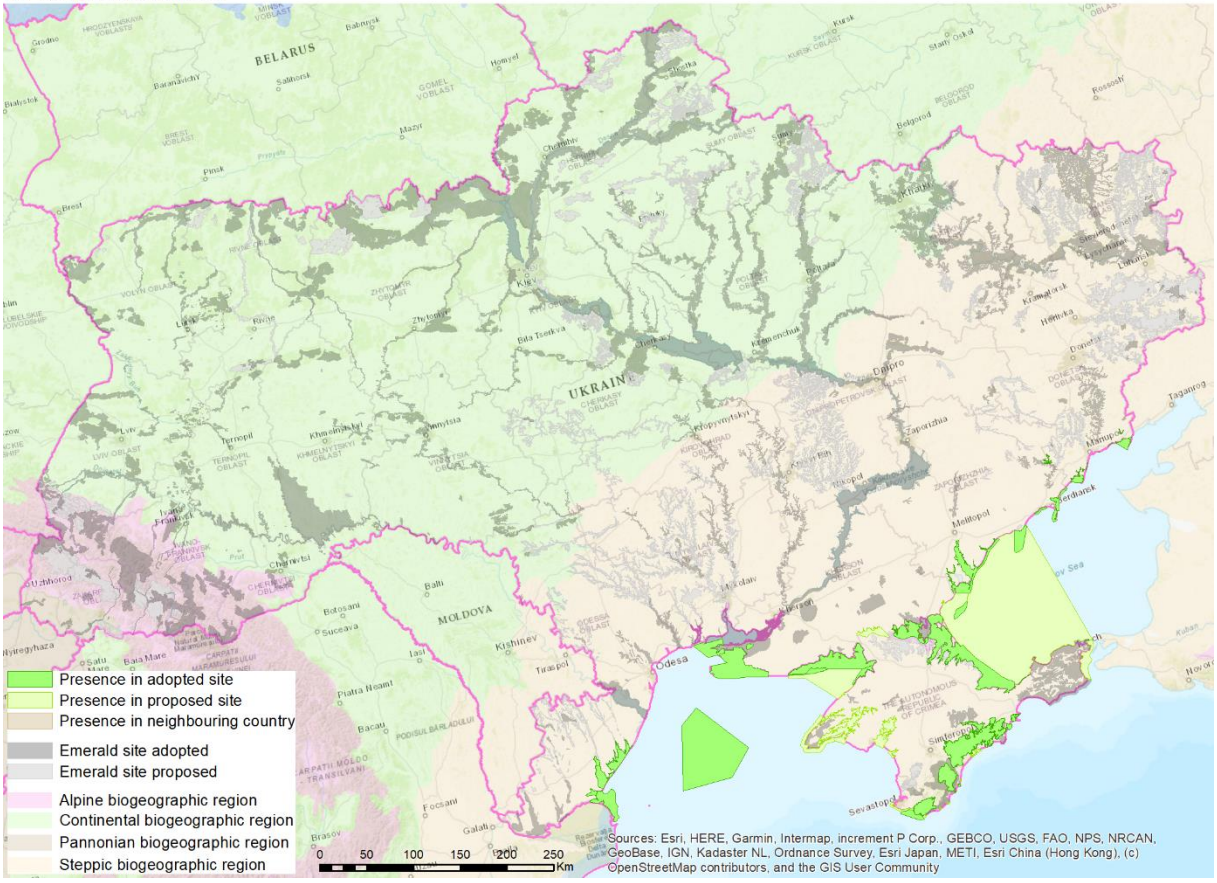
BGR	A4 Circalittoral rock and other hard substrata	
STE	Num. of sites:	Adopted: 4 (C:4), Proposed: 7 (C:7)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Consider addition to site UA0000139 Zernov Phyllophora Field Zakaznyk and UA0000140 Tuzlovski Lymany NNP (NNP), and other sites specified by local experts. Correct the BGR name to MBLS.
	Comments from external experts:	11C sites are located in Crimea. Most of these sites also contain A4; however, the marine component is low, around 100 m from the beach. This small marine area raises questions about the site's circalittoral component. EMODnet mapped circalittoral rock and biogenic reefs between the estuary of the Dniester and the site UA0000139 Zernov Phyllophora Field Zakaznyk. The habitat is also mapped in the site UA0000139 Zernov Phyllophora Field Zakaznyk, although it is not included in the SDF (IN MIN?). The bay of Odesa seems to have patches of circalittoral coarse sediment.
	Comments from local experts:	All marine Emerald sites have sublittoral parts. Zmyjnij and Berezan islands, Tylihul Estuary, Odessa estuary, Čornomorskyj National Park, Tuzlovski Lyman (UA0000140)
	References:	EMODnet Map Viewer https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010,8019#level_8019

A4 Circalittoral rock and other hard substrata



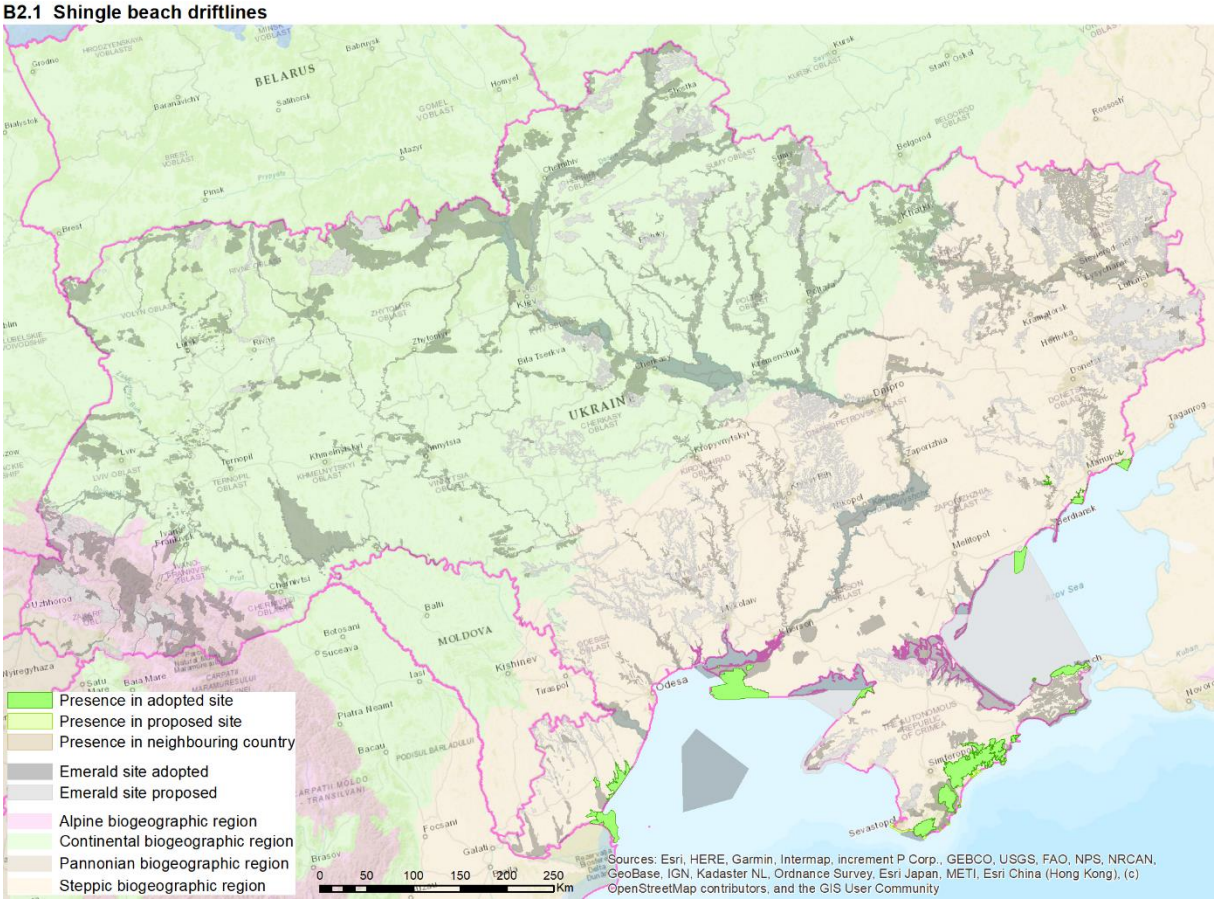
BGR	A5 Sublittoral sediment	
STE	Num. of sites:	Adopted: 22 (B:3, C:19), Proposed: 17 (B:3, C:14)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN marine part of the sites
	Recommendation 2025:	In the Azov Sea, check UA0000092 Pryazovskyi NNP and also the estuaries of Dniester, Southern Bug, Tylihul, and Berezan. Where suitable, consider extension of existing sites. Correct the BGR name to MBLS.
	Comments from external experts:	39 sites: 6B, 33C. This habitat refers to a wide variety of sediments, from boulders and cobbles to pebbles and shingle, coarse sands, sands, fine sands, and mixed sediments. As a result, it can be found all around the BLS and the Azov Sea coast. The sand banks of the bay of Odesa are not covered. In the Azov Sea, check UA0000092 Pryazovskyi NNP (IN MIN?). Estuaries of Dniester, Southern Bug, Tylihul, and Berezan. Some areas could be covered by the extension of existing sites.
	Comments from local experts:	Sands in the southeast part of the Crimean Peninsula are critical for mammals.
	References:	EMODnet Map Viewer https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010,8019#level_8019

A5 Sublittoral sediment



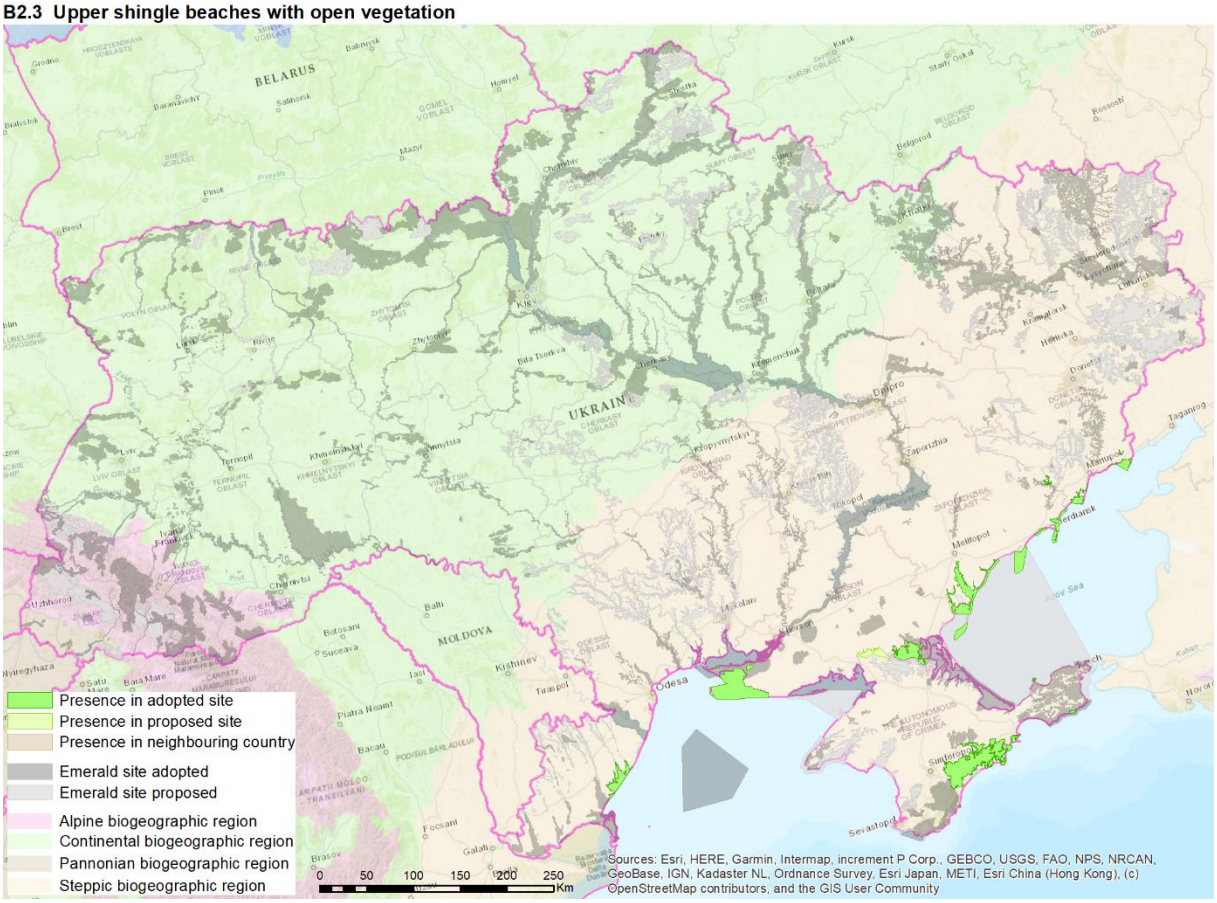
BGR	B2.1 Shingle beach driftlines	
STE	Num. of sites:	Adopted: 15 (C:15), Proposed: 15 (C:15)
	BGR seminar 2019 conclusion:	IN MOD/CD delete from several sites
	Recommendation 2025:	Consider sites specified by local experts. Correct BGR name—it should be MBLS.
	Comments from external experts:	23C sites designated in the Azov Sea, Crimea, and the Western Blsck Sea coast. Review this habitat type when the European Red List of Marine Habitats is available on the EEA's website. Information to support the designation of Odesa Bay was not found.
	Comments from local experts:	In the western part, only Zyjnij island. Beaches with gravel. Crimea, close to Sevastopol, Tarkhankut. Key area is south, southeast, and eastern Crimea, including the Kerch peninsula, the Kerch strait, and the Azov.
	References:	https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010,8011#level_8011

B2.1 Shingle beach driftlines



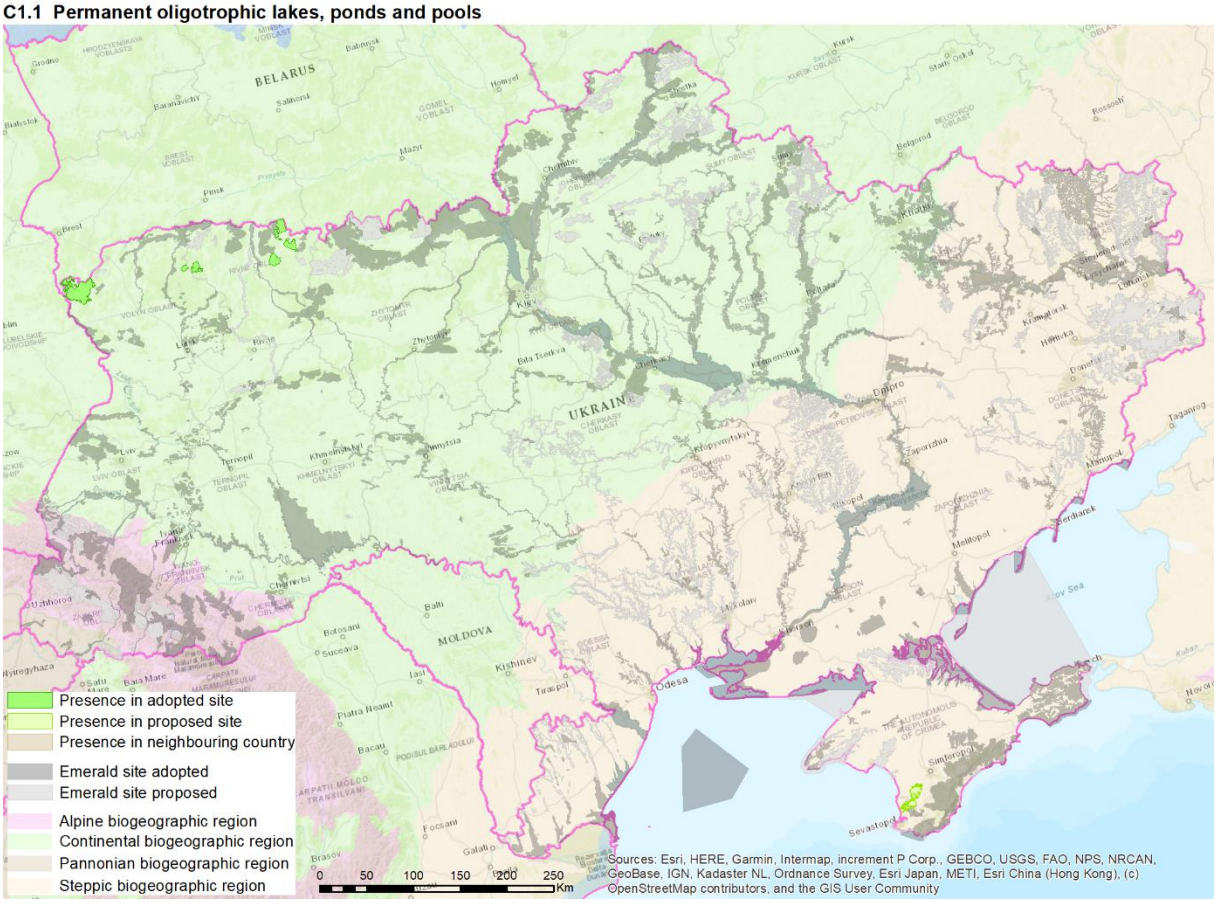
BGR	B2.3 Upper shingle beaches with open vegetation	
STE	Num. of sites:	Adopted: 12 (A:2, B:4, C:6), Proposed: 1 (B:1)
	BGR seminar 2019 conclusion:	IN MOD/CD delete from several sites
	Recommendation 2025:	Consider sites specified by local experts: Zmijnyj island, Jevpatorija; western, southern, and southeastern Crimea. Correct the BGR name to MBLS.
	Comments from external experts:	13 sites (2A, 5B, 6C) were designated in the Azov Sea, Crimea, and the Western BLS coast. Information to support the designation of Odesa Bay was not found. Review this habitat type when the European Red List of Marine Habitats is available on the EEA's website.
	Comments from local experts:	Zmijnyj Island, western Crimea, Jevpatorija. Key areas are the eastern and southeastern parts of Crimea; the southeastern part is not included in the Emerald Network.
	References:	https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010,8011#level_8011

B2.3 Upper shingle beaches with open vegetation



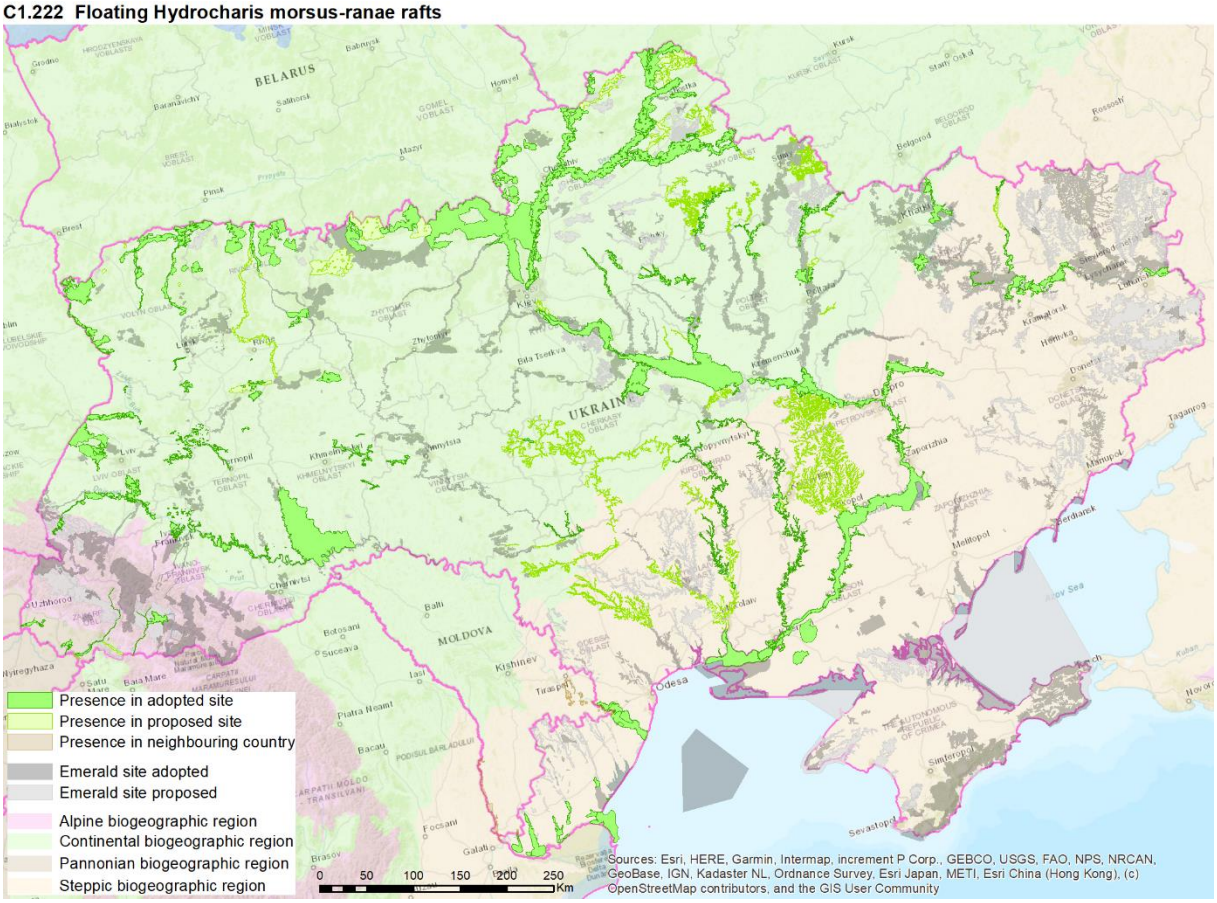
BGR	C1.1 Permanent oligotrophic lakes, ponds and pools	
CON	Num. of sites:	Adopted: 3 (A:1, B:1, C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Revise occurrence in site UA0000025 Shatskyi. Check for new sites in Polissya—eventually in the central and possibly eastern part of the CON region.
	Comments from external experts:	Deleted from 4C sites, added to 1C site (change +191 ha). Now three sites (1A, 1B, 1C). All sites are in the very northwest of CON, but oligotrophic waters also occur in the central part of CON, possibly in the eastern part as well.
	Comments from local experts:	Extremely rare, only in the Carpathians and in the Polissya. It does not occur in Shatsky Nature Reserve. W Polissya - Bele lake.
	References:	Afanasyev and Manturova 2021

C1.1 Permanent oligotrophic lakes, ponds and pools



BGR	C1.222 Floating Hydrocharis morsus-ranae rafts	
PAN	Num. of sites:	Adopted: 3 (C:3), Proposed: 2 (C:2)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Probably SUF
	Comments from external experts:	Added to 2C sites; now 5C sites
	Comments from local experts:	No further information
	References:	n/a

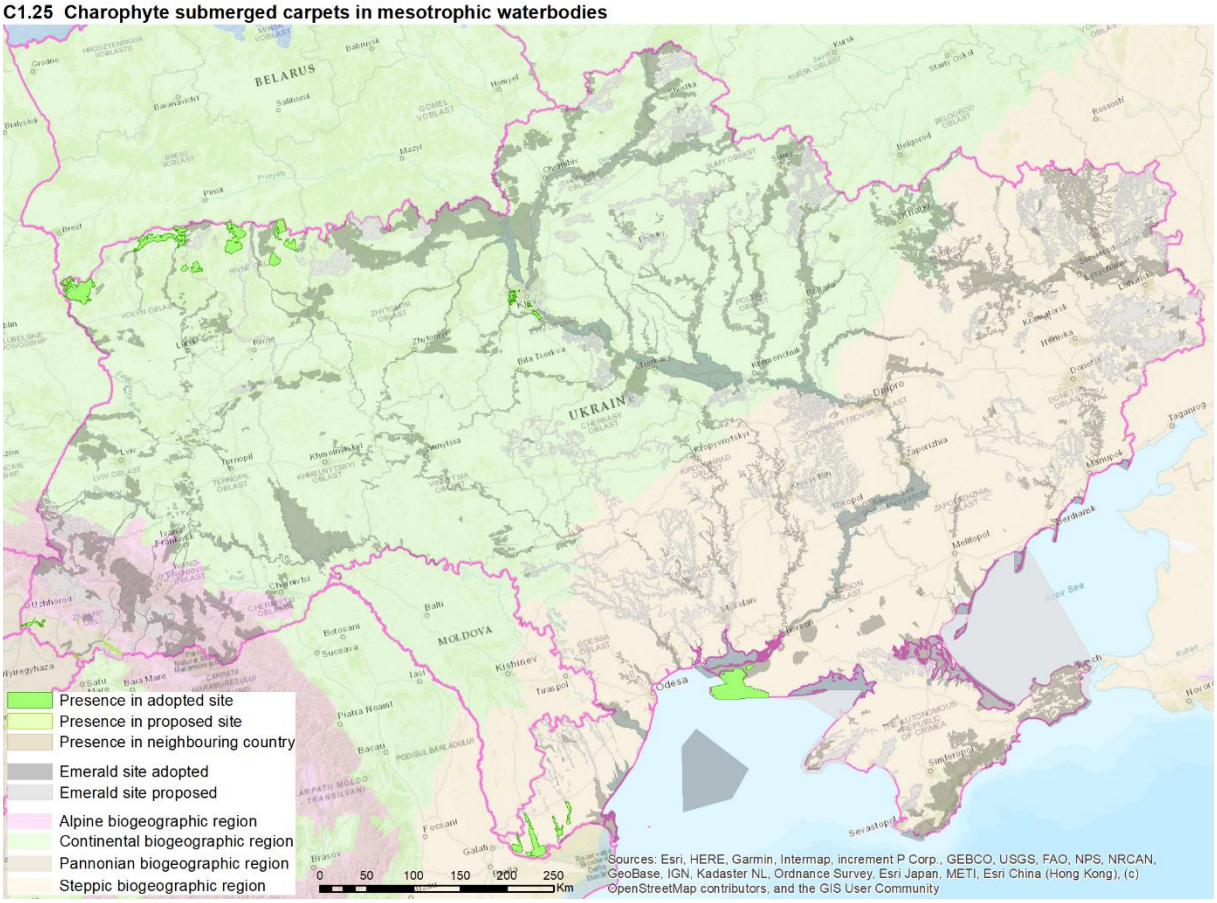
C1.222 Floating Hydrocharis morsus-ranae rafts



BGR	C1.25 Charophyte submerged carpets in mesotrophic waterbodies	
ALP	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Use knowledge from literature to propose new sites.
	Comments from external experts:	No site. Afanasyev and Manturova (2021) reported species of the genus *Chara* from the Carpathian ecoregion (UA) and rivers in the Dniester river basin. Borysova and Jakušenko (2015) reported a new finding of Chara rudis from Knyazhdvir near Kolomyia, which lies on the border of the CON and ALP regions.
	Comments from local experts:	Pretty rare, very small sites; Stojanov
	References:	Afanasyev and Manturova 2021; Borisova and Jakušenko 2015
CON	Num. of sites:	Adopted: 6 (B:3, C:3)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check the national literature and select suitable sites. It is necessary to consider the habitat diversity and to include different communities. The knowledge exists.
	Comments from external experts:	Six sites (3B, 3C). Current sites are in northwest Ukraine (Volyn region, one in Rivenska region) and one near Kyiv. However, Borisova (2016) indicated much boader distribution: "Several centres of species diversity in Charales have been identified in Ukraine. These are mainly the Shatsk Lakes in Volyn Polesia, the Zadunaisk and Transnistrian lakes in the Right-

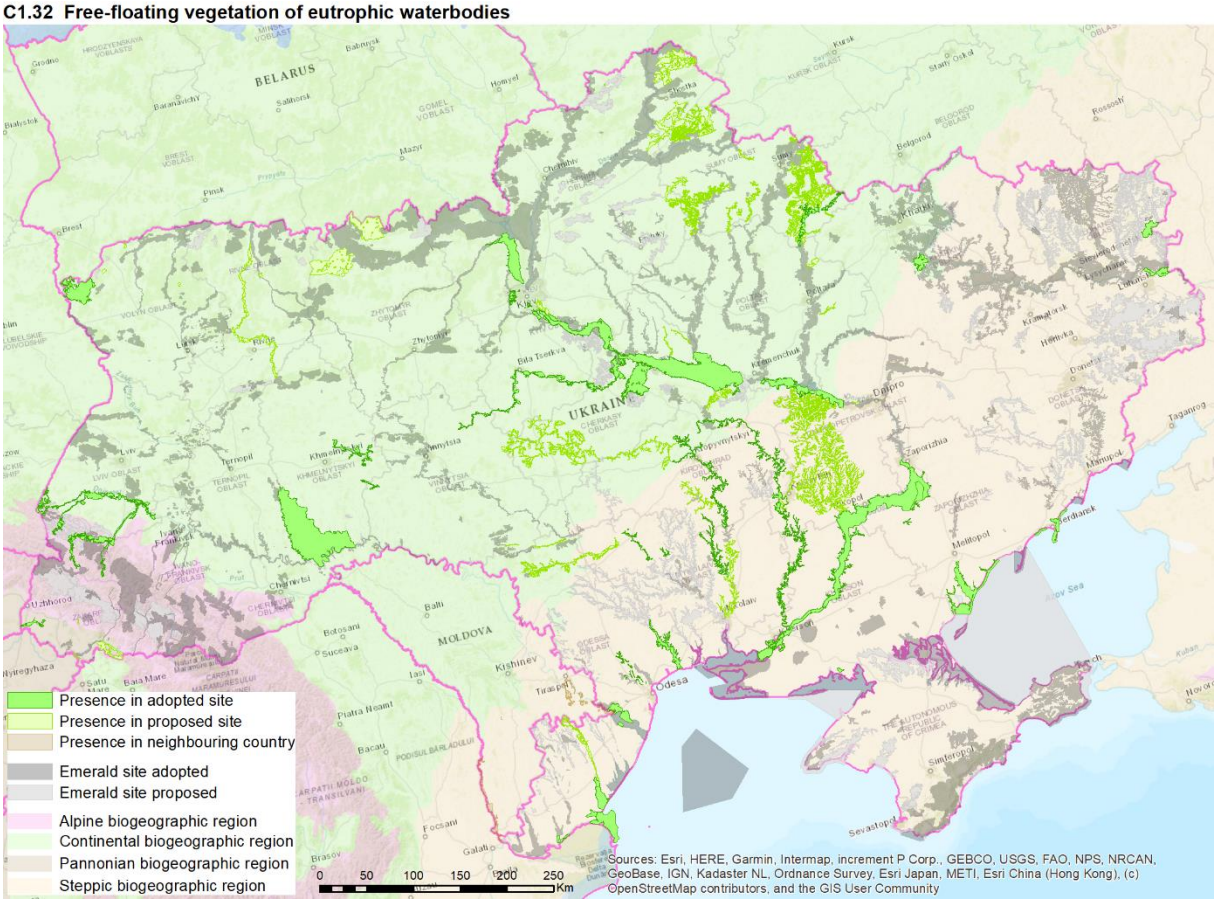
		Bank Steppe, carbonate bogs in the zone of broadleaved forests, small coastal water bodies of the Crimean Peninsula, and shallow bays and limans of the Black and Azov Seas. These also include floodplain water bodies in the valleys of the Dnieper, Southern Bug, Seversky Donets, and their tributaries". The habitat is well studied in Ukraine. Many papers have been published, and they contain sites that should be considered. The habitat diversity should be considered when selecting sites to represent rare species.
	Comments from local experts:	No further information
	References:	Borisova 2016; Iakushenko and Borysova 2012
PAN	Num. of sites:	Adopted: 1 (B:1), Proposed: 3 (C:3)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN IN MOD 2 sites/IN MIN 1 site
	Recommendation 2025:	Probably SUF
	Comments from external experts:	Added to 2C sites, now 5C sites
	Comments from local experts:	No further information
	References:	n/a
STE	Num. of sites:	2
	BGR seminar 2019 conclusion:	IN MIN. Several sites
	Recommendation 2025:	Revise habitat occurrence in sites UA0000017 Black Sea Biosphere Reserve and UA0000142 Systema Dunaiskykh Ozer.
	Comments from external experts:	Not assessed
	Comments from local experts:	The occurrence of C1.25 in STE is a mistake.

C1.25 Charophyte submerged carpets in mesotrophic waterbodies



BGR	C1.32 Free-floating vegetation of eutrophic waterbodies	
ALP	Num. of sites:	Adopted: 3 (C:3), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	SR REF is removed. Correct database for UA0000323 (BGR). Consider sites specified by Kagalo and Prost (2012).
	Comments from external experts:	Added to one C site, now 4C sites. Afanasyev and Manturova (2021) reported Spirodella polyrhiza from the Carpathian ecoregion (UA) from rivers in the Dniester river basin, namely from the Strviazh river. This is probably related to the site UA0000323, which has already been reported as a habitat. However, the site is assigned to CON (100%) only, while the map shows that part of the site is in the ALP. The database should be corrected (Kagalo and Prost 2012). Occasionally, in small fragments, it occurs in the foothills of the southern Carpathian macroslope and some mountain lakes of the forest and subalpine zones (particularly in Lake Synevyr and Lake Hereshaska).
	Comments from local experts:	Information about the occurrence in Sinevyr Lake is a mistake; the lake is mesotrophic.
	References:	Afanasyev and Manturova 2021; Kagalo and Prost 2012
CON	Num. of sites:	Adopted: 19 (B:1, C:18), Proposed: 32 (B:1, C:31)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Now well covered, SUF
	Comments from external experts:	Added to 9 C sites, now in 51 sites (2B49C)
	Comments from local experts:	No further information
STE	Num. of sites:	Adopted: 22 (C:22), Proposed: 9 (C:9)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Now well covered, SUF
	Comments from external experts:	Added to 32 new sites (1B31C); now in 32 C sites
	Comments from local experts:	Occurs in many sites

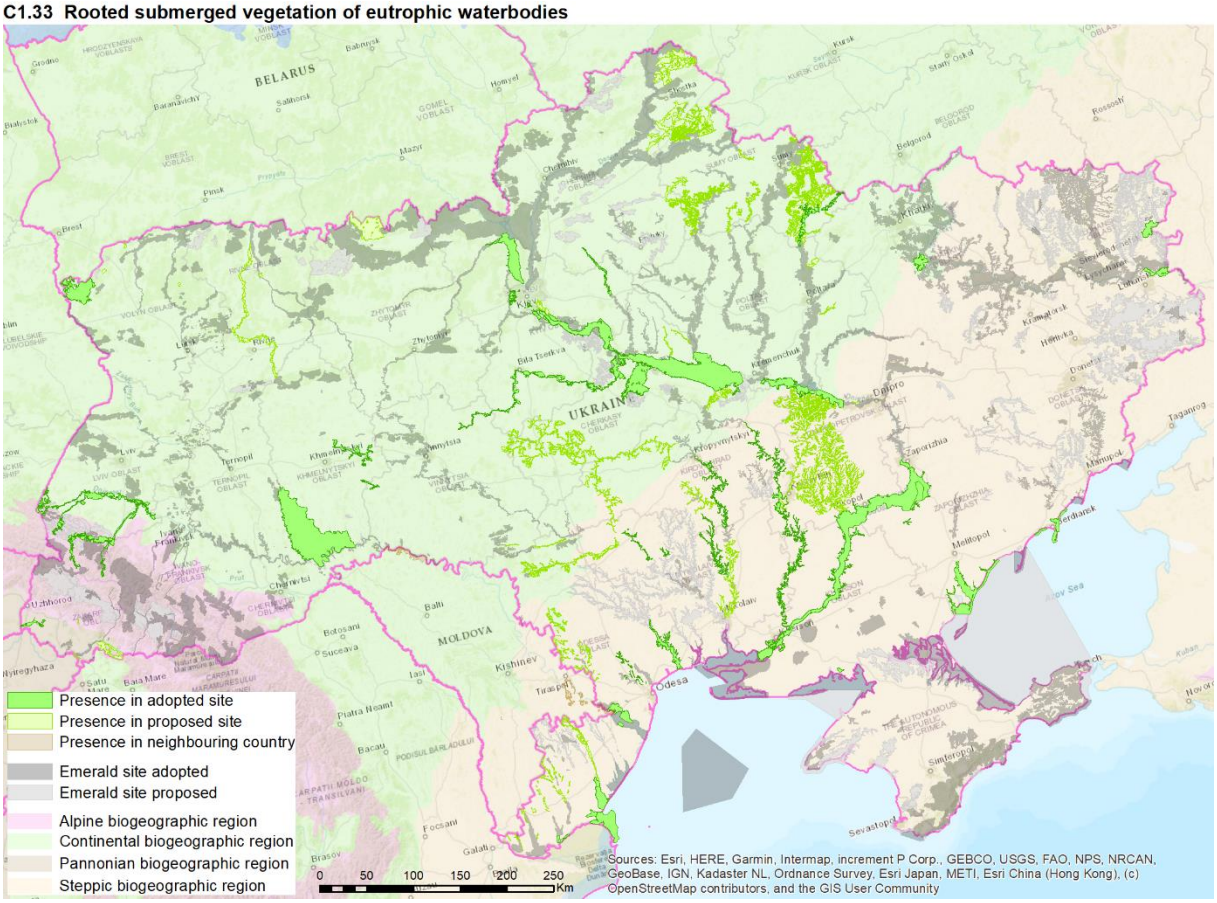
C1.32 Free-floating vegetation of eutrophic waterbodies



BGR	C1.33 Rooted submerged vegetation of eutrophic waterbodies	
ALP	Num. of sites:	Adopted: 3 (C:3), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Consider site UA0000013 Skolivski Beskydy NNP. SR is probably not resolved; more information about habitat distribution in UA/ALP is needed.
	Comments from external experts:	Added to 1C site. Now 4C sites. Afanasyev and Manturova (2021) reported Myriophyllum spicatum and Potamogeton natans from the Carpathian ecoregion (UA) from rivers in the Dniester river basin, namely from the Stryi and Strviazh rivers. Kagalo et al. (2013): UA0000013 Skolivski Beskydy NNP. Kagalo and Prost (2012): Occasionally, in small fragments, it occurs in the foothills of the southern Carpathian macroslope and some mountain lakes of the forest and subalpine zones (particularly in Lake Synevyr and Lake Hereshaska).
	Comments from local experts:	Well represented: Skolivsky Beskydy, Sinevyr National Park (NP)
	References:	Afanasyev and Manturova 2021; Karaлo et al. 2013; Kagalo and Prost 2012
CON	Num. of sites:	Adopted: 20 (B:3, C:17), Proposed: 32 (B:1, C:31)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Significant improvement, probably SUF
	Comments from external experts:	Added to 33 sites (1B32C). Now 52 sites (4B48C).
	Comments from local experts:	No further information
	References:	Afanasyev and Manturova 2021
PAN	Num. of sites:	Adopted: 1 (C:1), Proposed:3 (C:3)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Improved, IN MOD probably removed. Check the BGR for UA0000605.

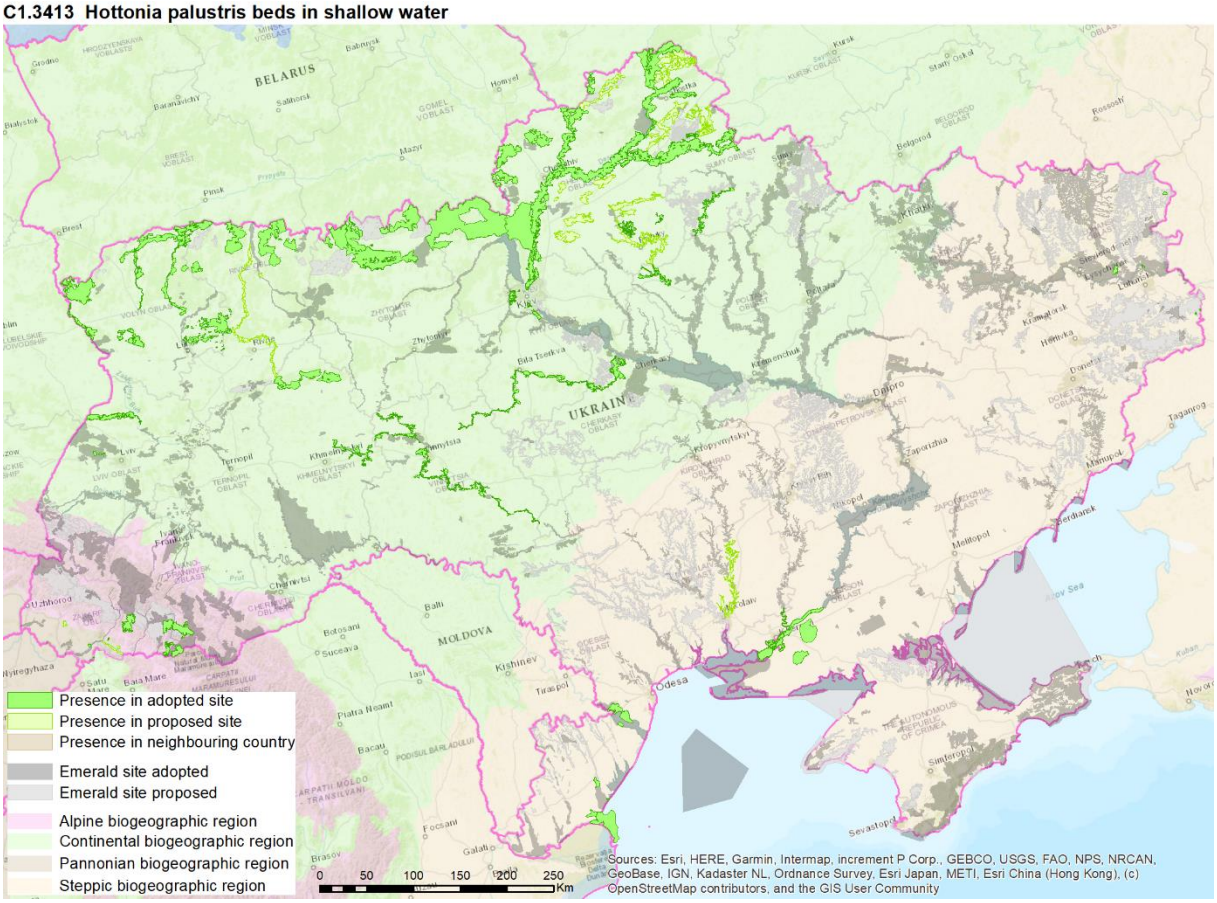
	Comments from external experts:	Added to 3 C sites. Now 4 C sites. Habitat is reported for site UA0000605, the Irshavka river floodplain, which, according to the map, lies in ALP. It is necessary to check and eventually correct the database.
	Comments from local experts:	No further information
	References:	Afanasyev and Manturova 2021

C1.33 Rooted submerged vegetation of eutrophic waterbodies



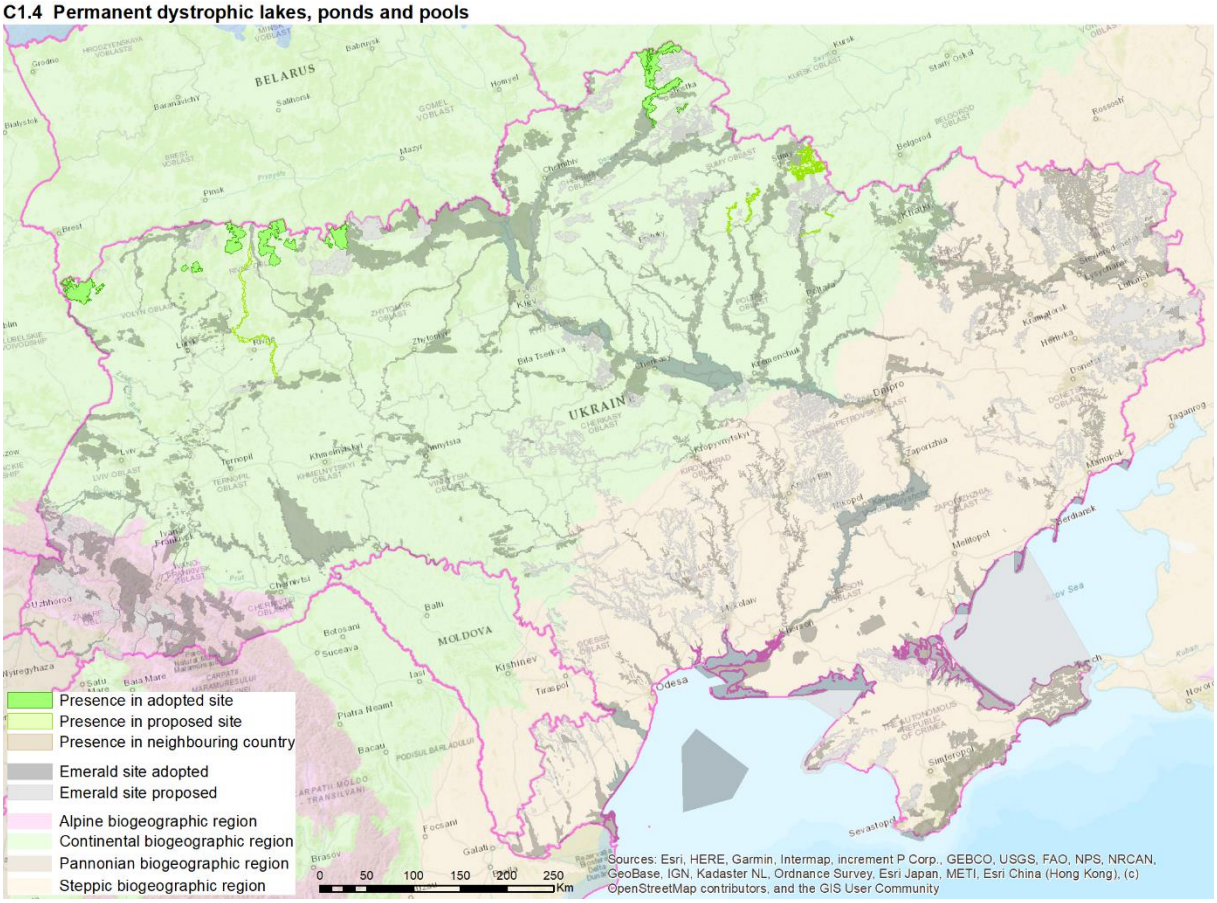
BGR	C1.3413 Hottonia palustris beds in shallow water	
PAN	Num. of sites:	Adopted: 1 (C:1), Proposed: 4 (C:4)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Probably SUF
	Comments from external experts:	Added to 4C sites; now in 5C sites.
	Comments from local experts:	No further information
	References:	n/a
STE	Num. of sites:	Adopted: 5 (C:5), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	The middle and (north-)eastern part of UA/STE. Check sites UA0000106 Kakhovske Reservoir and UA0000192 Lower Dnipro.
	Comments from external experts:	Added to 2C sites, now in 6C sites
	Comments from local experts:	Islands of the Dnipro River (covered by Dnipro NP). The situation after the Kachovka reservoir catastrophe needs to be checked.
	References:	n/a

C1.3413 Hottonia palustris beds in shallow water



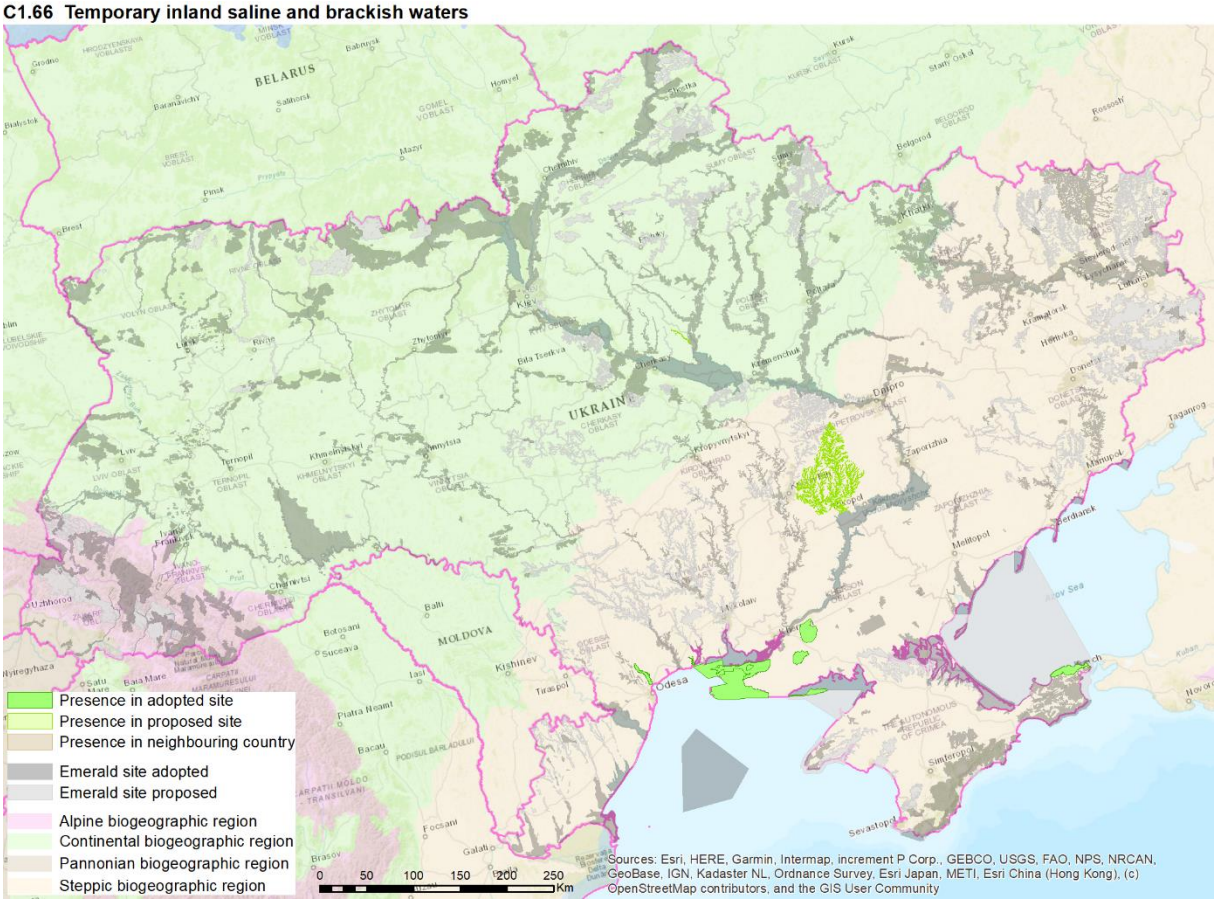
BGR	C1.4 Permanent dystrophic lakes, ponds and pools	
ALP	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	SR REF is maintained, and the habitat occurrence is probable.
	Comments from external experts:	No site. Not reported by Kuzemko et al. (2018), not included in the Red list of the Carpathian non-forest biotopes (Barančok et al. 2014). But the habitat consists of C1.44 habitat (Charophytes) and Charetum rudis is reported by Iakushenko and Borysova (2012) from Kniazhdvir village (Ivano-Frankivsk Region) at the CON/ALP border.
	Comments from local experts:	No sufficient information; to maintain SR REF
	References:	Iakushenko and Borysova 2012
CON	Num. of sites:	Adopted: 11 (A:1, C:10), Proposed: 7 (C:7)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Further research to be undertaken. Better coverage is needed; now all sites are in the north part, with a gap between the Zhytomyr and Sumy regions. Data on distribution exist.
	Comments from external experts:	Added to 7C sites, now in 18 sites (1A17C)
	Comments from local experts:	Not sufficient information; further research is needed. Kirovograd and Čerkasy regions (Čornyj Lis, Irdinski bolota).
	References:	Borisova 2016; Iakushenko and Borysova 2012
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	Probably does not occur
	Comments from external experts:	No site. Not reported by Kuzemko et al. (2018) for UA/PAN.
	Comments from local experts:	To keep SR REF
	References:	n/a

C1.4 Permanent dystrophic lakes, ponds and pools



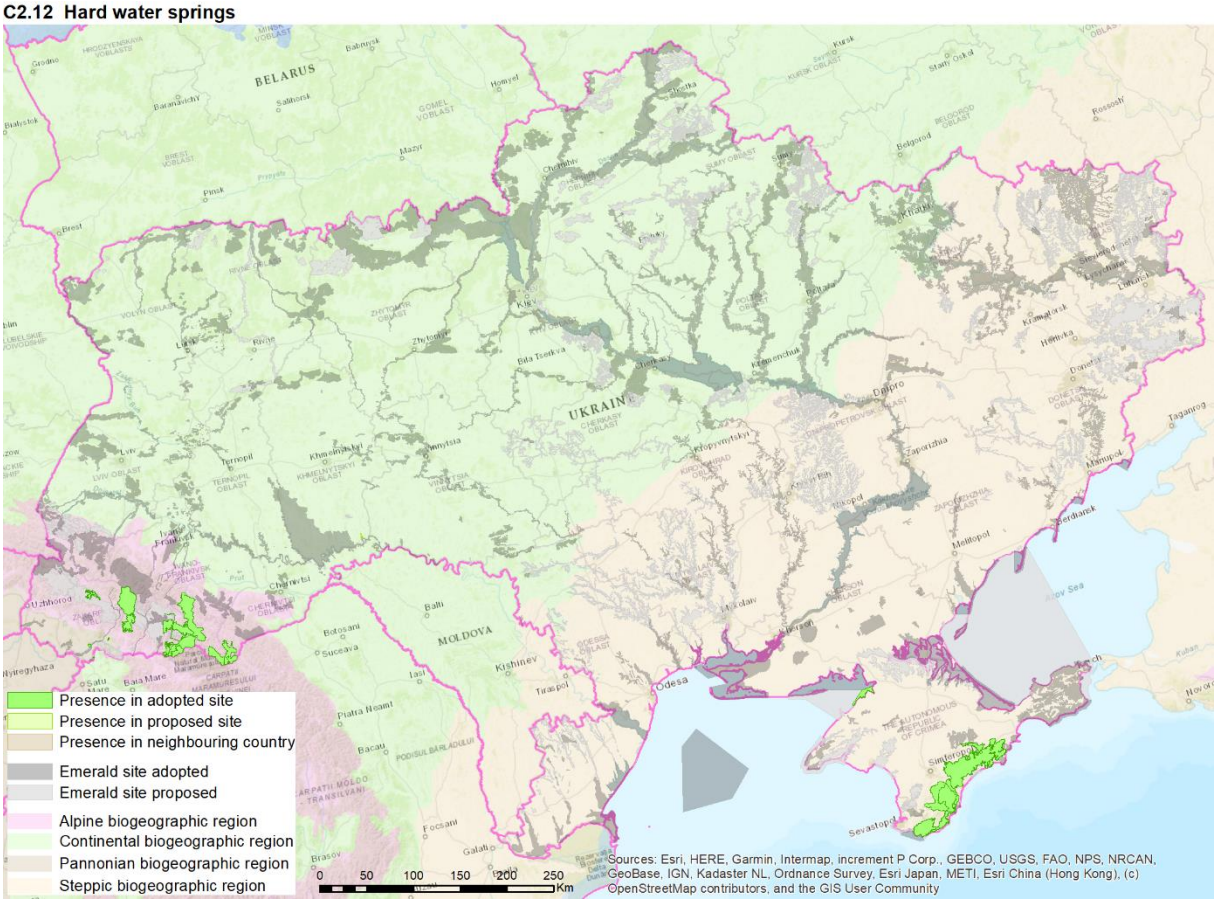
BGR	C1.66 Temporary inland saline and brackish waters	
STE	Num. of sites:	Adopted: 8 (A:1, B:3, C:4), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	To be added to the site UA0000140 Tuzlovski Lymany NNP. Check site UA0000151 Sasyk Lyman.
	Comments from external experts:	Added to 1 C site, now in 9 sites (1A, 3B, 5C). Habitat is reported from Ramsar site Shagany-Alibei-Burnas Lakes System (= Emerald site UA0000140 Tuzlovski Lymany NNP)—to be added. Similar habitats are in Ramsar site Sasyk lake (= Emerald site UA0000151 Sasyk Lyman)—to be checked for presence of C1.66. It is also reported from Kryva Bay and Kryva Spit, Bilosaraiska Bay and Bilosaraiska Spit (both in the occupied shore of the Azov Sea), and Karkinitska and Dzharylgatska Bays (occupied Crimean shore).
	Comments from local experts:	Broader distribution. All territories of the Azov coast, Berezovski, Nižne Dnipro, around Sevastopol, Tarkhankut, West Crimea, Syvaš.
	References:	https://rsis.ramsar.org/

C1.66 Temporary inland saline and brackish waters



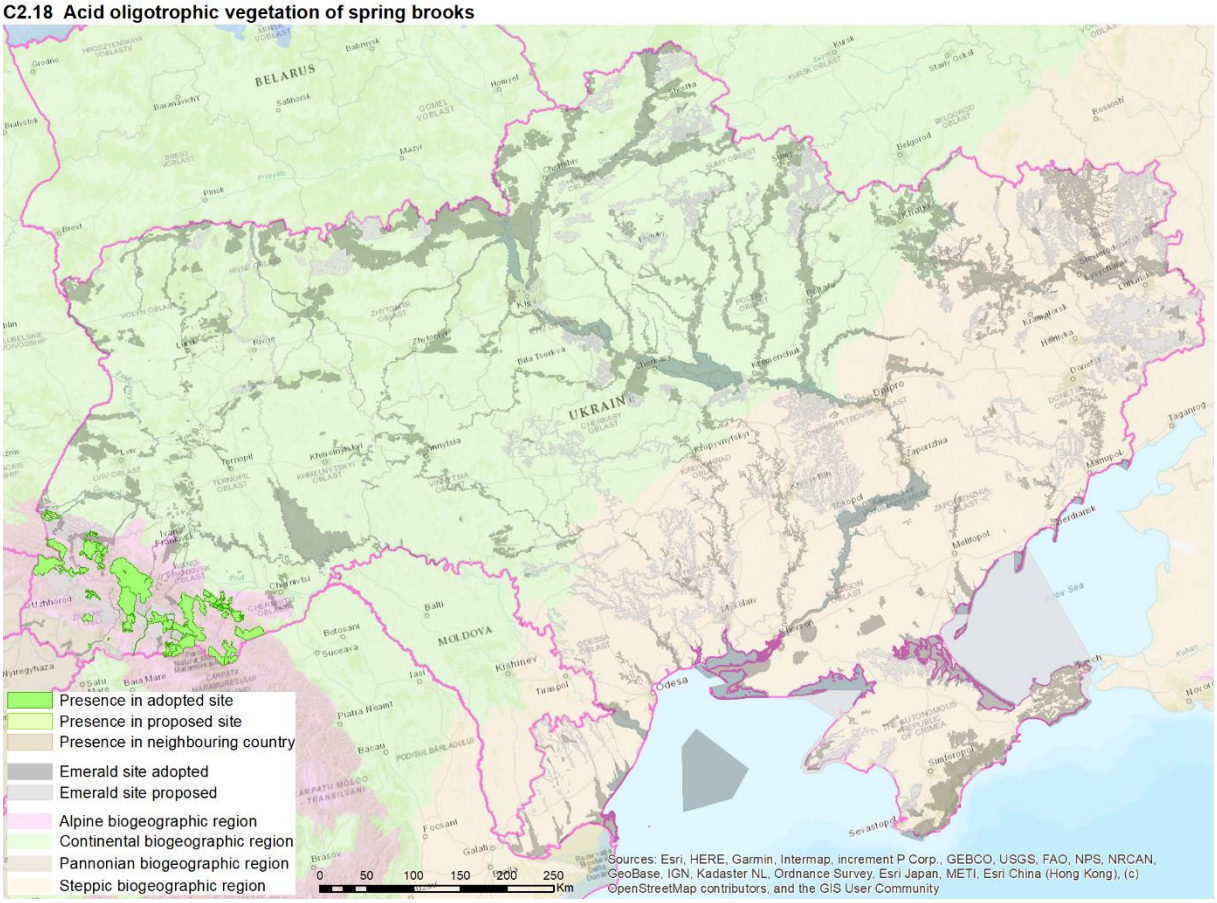
BGR	C2.12 Hard water springs	
CON	Num. of sites:	Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Consider addition to UA0000011 Podilski Tovtry NNP. Check Dniester Regional Landscape Park and other regions specified by local experts.
	Comments from external experts:	Added to the 1C site; now in the 1C site. Reported from Ramsar sites Bakotska Bay and Lower Smotrych River (= Emerald site UA0000011 Podilski Tovtry NNP). It is also listed on the website of the Dniester Regional Landscape Park.
	Comments from local experts:	Dniester Canyon, all basins of Strednyj Bug, Derman–Ostroh NNP, Khotyn NNP, Medobory Nature Reserve, Northern Podillia, Pivdennyj Bug
	References:	https://www.dnisterpark.if.ua/; https://rsis.ramsar.org/

C2.12 Hard water springs



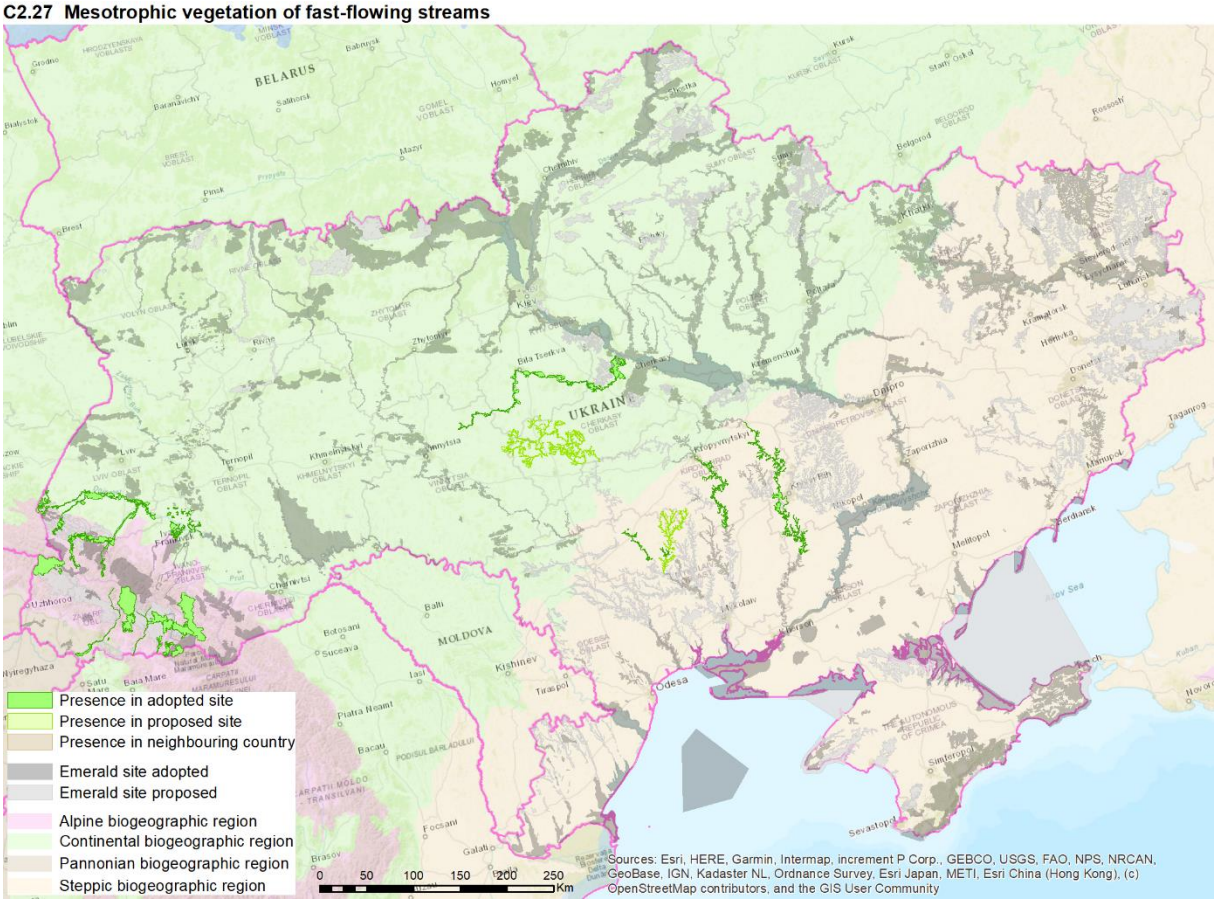
BGR	C2.18 Acid oligotrophic vegetation of spring brooks	
CON	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	Further research is needed.
	Comments from external experts:	1C site. No information.
	Comments from local experts:	No further information
	References:	n/a

C2.18 Acid oligotrophic vegetation of spring brooks



BGR	C2.27 Mesotrophic vegetation of fast-flowing streams	
PAN	Num. of sites:	Adopted: 2 (C:2)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	One site
	Comments from external experts:	No change. Now 2C sites.
	Comments from local experts:	No further information
	References:	Kuzemko et al. 2018, 442
STE	Num. of sites:	Adopted: 4 (C:4), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Habitat should be more distributed. More sites are needed.
	Comments from external experts:	Added to 1C site. Now 5C sites. Kuzmenko et al. (2018): occasionally in the Forest-Steppe Subregion of the Eurasian Steppe Region and the Euxine Province.
	Comments from local experts:	In the mountain rivers of Crimea. Pivdennyj Bug basin, in the highlands of Luhansk and Donetsk regions, Kamianka river.
	References:	Kuzemko et al. 2018, 442

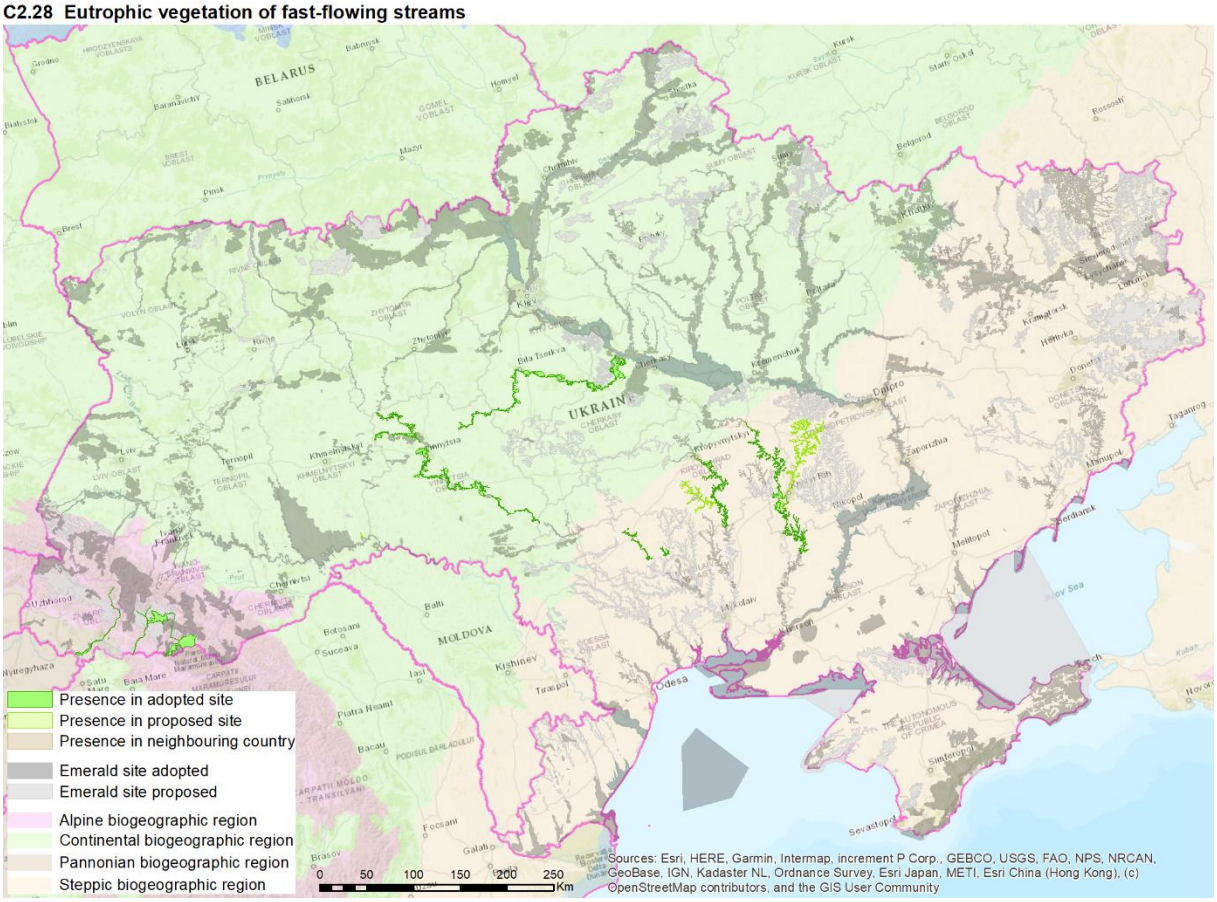
C2.27 Mesotrophic vegetation of fast-flowing streams



BGR	C2.28 Eutrophic vegetation of fast-flowing streams	
ALP	Num. of sites:	Adopted: 3 (C:3)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Sites in regions indicated by Šeffer et al. (2014)
	Comments from external experts:	3C sites. Šeffer et al. (2014) indicated habitat occurrence in several geomorphological units in UA/ALP.
	Comments from local experts:	Low probability of occurrence; in BGR, it usually occurs in meso- or oligotrophic waters.
	References:	Šeffer et al. 2014, 57
CON	Num. of sites:	Adopted: 2 (B:1, C:1), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Check floodplains of Desnam Dnipro, Pivdennyj Bug, and Sozh. Probably a much broader distribution; sites to be added.
	Comments from external experts:	Added to 1 C site, now in 3 sites (1B, 2C). Kuzemko et al. (2018): sporadically in the European Broad-leaved Forest Region. Onyshchenko et al. (2017): Floodplains of Desna, Dnipro and Sozh.
	Comments from local experts:	A more detailed study is needed. Desna is probably a mistake (mesotrophic). Pivdennyj Bug and its tributaries.
	References:	Kuzemko et al. 2018, 442; Onyshchenko et al. 2017
PAN	Num. of sites:	Adopted: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Further research is needed. Tisza foodplain.
	Comments from external experts:	1C site. Onyshchenko et al. (2017) informed about habitat occurrence in the Tisza foodplain in UA/PAN.
	Comments from local experts:	To be checked, not enough information
	References:	Onyshchenko et al. 2017
STE	Num. of sites:	Adopted: 4 (B:1, C:3), Proposed: 2 (C:2)

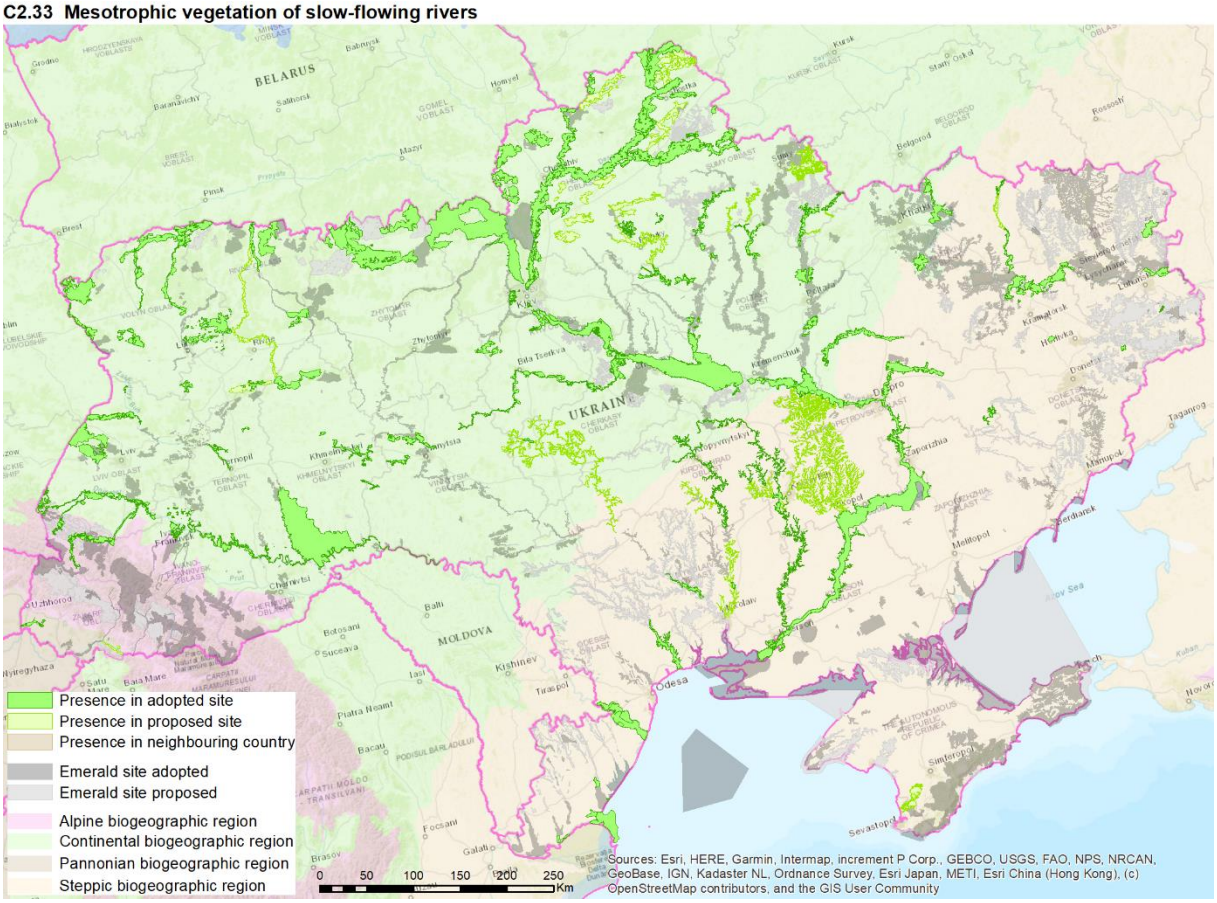
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Sites in the western and eastern parts of UA/STE. Check Psel and Vorskla rivers.
	Comments from external experts:	Added to 2C sites, now in 6 sites (1B, 5C). Kuzemko et al. (2018): “occasionally in the Forest-Steppe Subregion of the Eurasian Steppe Region and the Euxine Province.” All sites in the middle part of UA/CON; sites in the remaining parts to be added.
	Comments from local experts:	To be checked—probably Psel and Vorskla rivers
	References:	Kuzemko et al. 2018, 442

C2.28 Eutrophic vegetation of fast-flowing streams



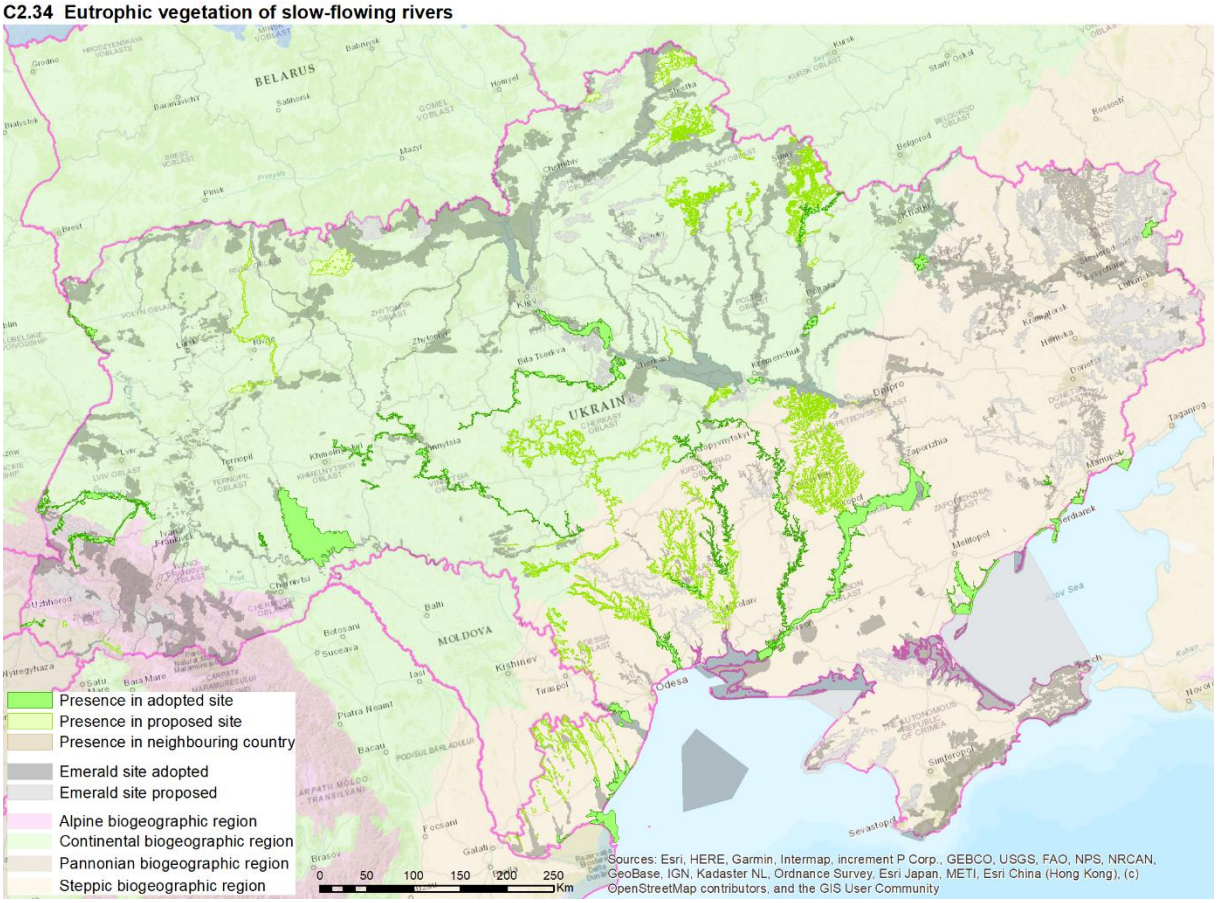
BGR	C2.33 Mesotrophic vegetation of slow-flowing rivers	
PAN	Num. of sites:	Adopted: 1 (C:1), Proposed: 2 (C:2)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Added to 2 sites, probably SUF.
	Comments from external experts:	Added to 2C sites, now 3C sites. Kuzemko et al. (2018): throughout the territory
	Comments from local experts:	No further information
	References:	Kuzemko et al. 2018, 442

C2.33 Mesotrophic vegetation of slow-flowing rivers



BGR	C2.34 Eutrophic vegetation of slow-flowing rivers	
PAN	Num. of sites:	Adopted: 1 (C:1), Proposed: 3 (C:3)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Added to 3 sites, probably SUF
	Comments from external experts:	Added to 3C sites, now 4C sites
	Comments from local experts:	No further information
	References:	Kuzemko et al. 2018, 442
STE	Num. of sites:	Adopted: 20 (B:3, C:17), Proposed: 21 (B:1, C:20)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Check suitable sites in the rivers specified by local experts.
	Comments from external experts:	Added to 21 sites (1B, 20C), now 41 sites (4B, 37C).
	Comments from local experts:	All major rivers—branches, deltas. Dnipro. Lower Dniter, Danube, Azov Rivers, close to sea. Moločna River, Kalmius River, middle part of Siverskyi Donets, maybe Samara River.
	References:	n/a

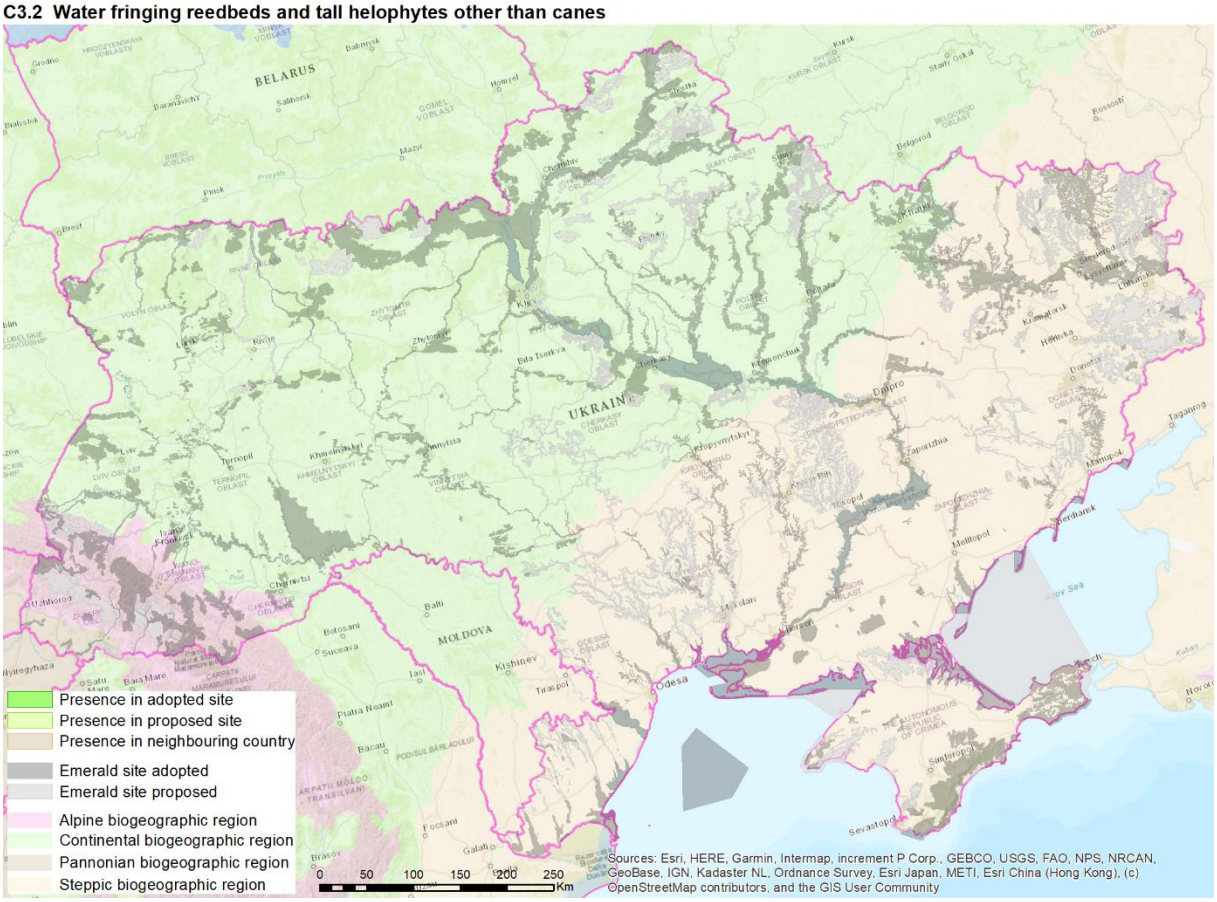
C2.34 Eutrophic vegetation of slow-flowing rivers



BGR	C3.2 Water fringing reedbeds and tall helophytes other than canes	
ALP	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Consider Polonyna Borzhava and UA0000013 Skolivski Beskydy NNP; check other existing Emerald sites. These sites are in regions indicated by Kagalo and Prost (2012). Check also areas specified by local experts.
	Comments from external experts:	There is no site. Kuzemko et al. (2018): One of the most common biotopes occurs throughout the territory. Onyshchenko et al. (2017): IPA sites Polonyna Borzhava. Kagalo et al. (2013): UA0000013 Skolivski Beskydy NNP. Kagalo and Prost (2012): Habitat is widespread in the lower mountain belts, mainly in the Transcarpathian Lowland.
	Comments from local experts:	Skolskye Beskydy, Carpathian NP, Carpathian Biosphere Reserve, possibly the lower part of Sinevyr NP
CON	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Check existing Emerald sites. Sites indicated by Onyshchenko et al. (2017) and other sites.
	Comments from external experts:	No site. Kuzemko et al. (2018): One of the most common biotopes occurs throughout the territory. Onyshchenko et al. (2017): IPA sites Bir na Merli, Cheremske Boloto, Hadiatski Luky, Hrakove, Kanivski Ostrovy, Kremenchutski Plavni, Morochno-2, Shatski Ozera, Somyno, Ubort - Bolotnytsia, Zaplava Desny, Zaplava Prypiati, Zaplava Desny, Zaplavy Dnipra i Sozha, Bereh Syvashyka, Shatski Ozera. Habitat should be relatively abundant in UA/CON.
	Comments from local experts:	No further information
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Check existing Emerald sites. IPA sites Dolyna Nartsysiv, Zaplava Latorytsi, and other sites.

	Comments from external experts:	No site. Kuzemko et al. (2018): One of the most common biotopes occurs throughout the territory. Onyshchenko et al. (2017) indicated habitat from IPA sites Dolyna Nartsysiv, Zaplava Latorytsi.
	Comments from local experts:	No further information
STE	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Check existing Emerald sites. IPA sites indicated by Onyshchenko et al. (2017) and other sites.
	Comments from external experts:	No site. Kuzemko et al. (2018): One of the most common biotopes occurs throughout the territory. Onyshchenko et al. (2017): IPA sites Bereh Syvashyka, Dnipro - Oril, Dunaiski Plavni, Molochnyi Lyman, Nyzhnii Dnipro, Samarskyi Lis, Zelena Balka. Ramsar sites Big Chapelsk Depression and Karkinitska and Dzharylgatska Bays in the occupied part of the Cherson region.
	Comments from local experts:	Practically all Emerald sites have water bodies.
	References:	Karaпo et al. 2013; Kagalo and Prost 2012; Kuzemko et al. 2018, 442; Onyshchenko et al. 2017; Šeffer et al. 2014, 57

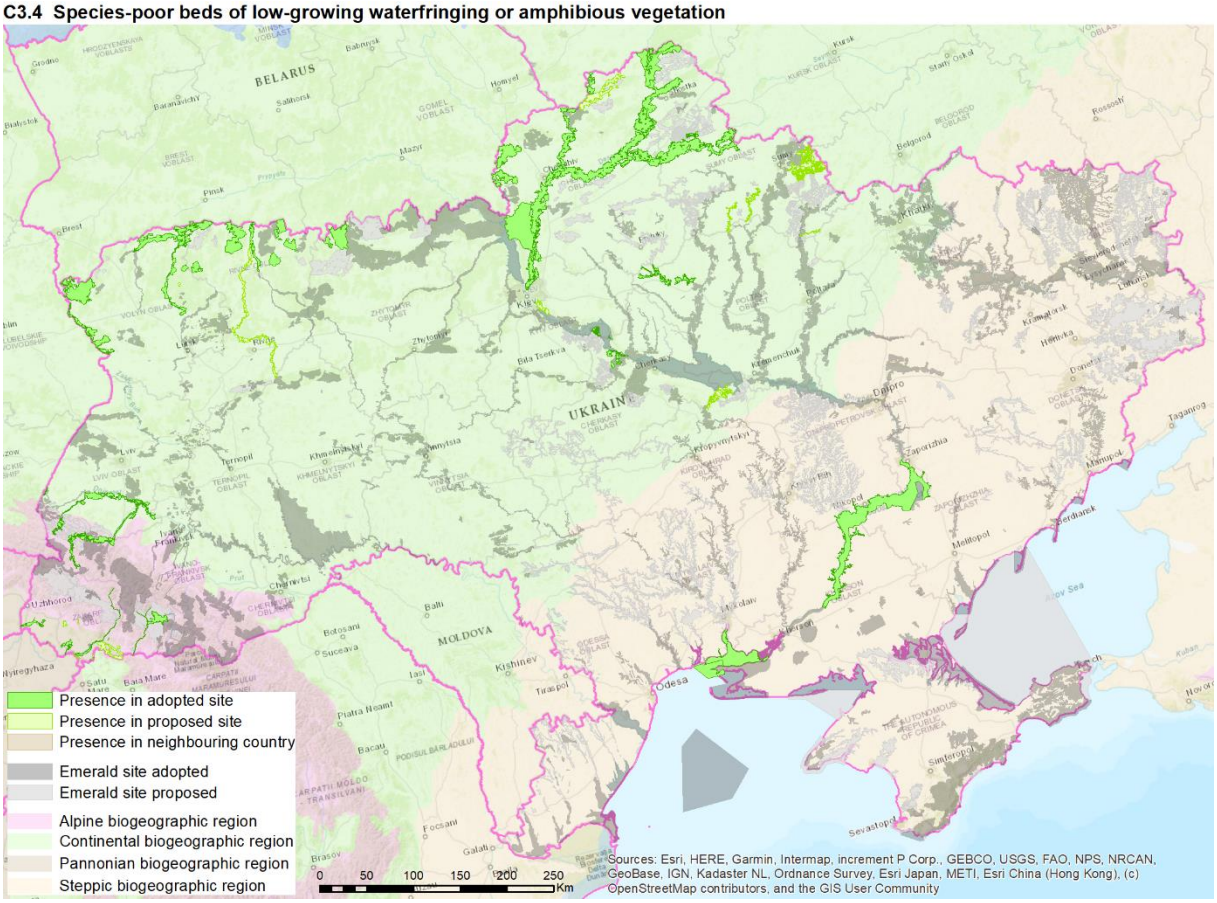
C3.2 Water fringing reedbeds and tall helophytes other than canes



BGR	C3.4 Species-poor beds of low-growing waterfringing or amphibious vegetation	
ALP	Num. of sites:	Adopted: 4 (C:4), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN SR
	Recommendation 2025:	Distribution still unclear; further study is needed. Check sites indicated by Kagalo and Prost (2012).
	Comments from external experts:	Added to the 1C site; now 5C sites. Šeffer et al. (2014) reported *Literellion uniflorae* from ALP. Dubyna and Dzyuba (2019) mentioned the Peredkaraptia region. Kagalo and Prost (2012) characterized distribution and provided a map of groups of habitats (C1.1, C1.2, C3.41, and

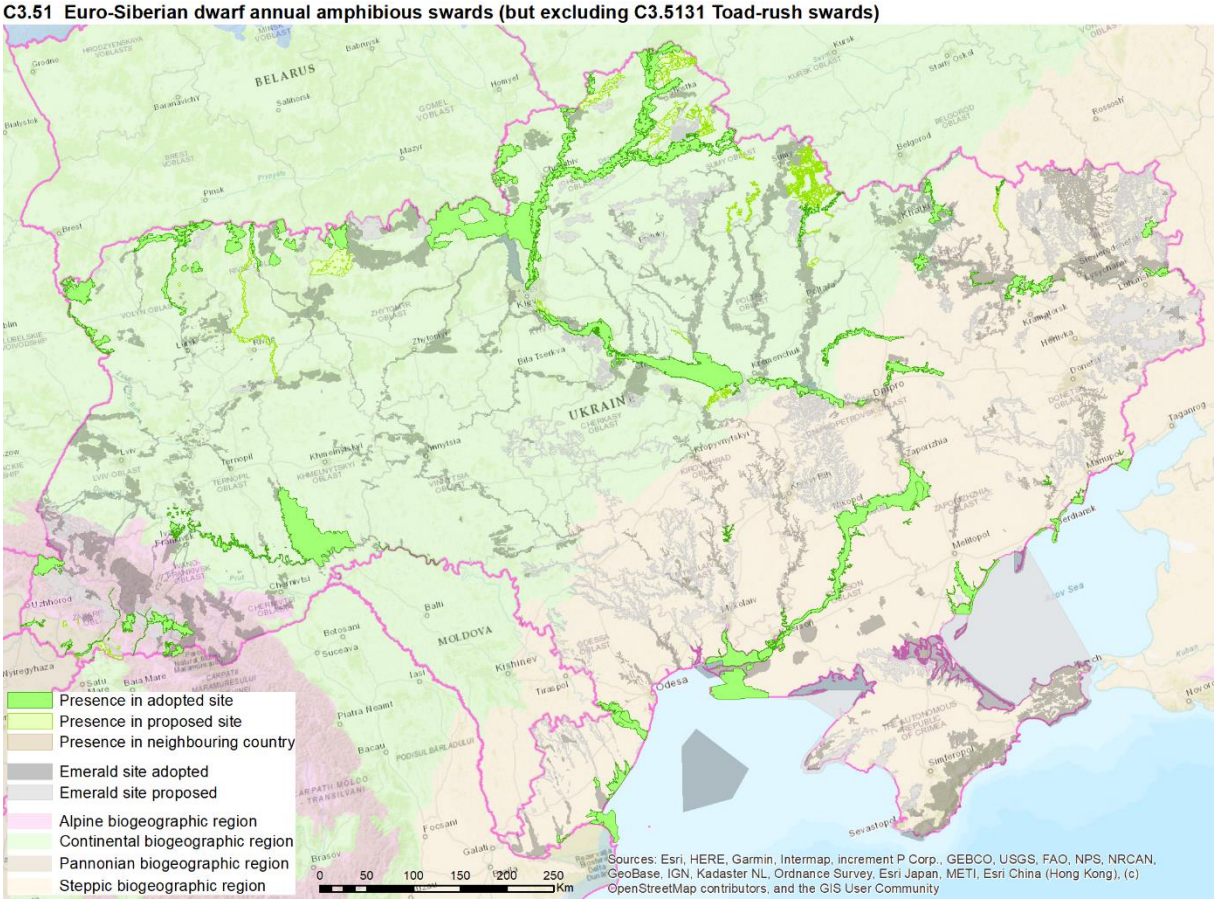
		C3.51): Along the valleys of the Uzh, Latorytsia, and Borzhava rivers, the habitat can be recorded in the foothills of the southern macroslope. The habitat is insufficiently studied.
	Comments from local experts:	A couple of sites in the Latorica and Uh rivers, probably the Tisza and Borzhava rivers. It should be studied; the inventory is needed.
	References:	Dubyna and Dziuba 2019; Kagalo and Prost 2012; Šeffer et al. 2014, 57
PAN	Num. of sites:	Adopted: 3 (C:3), Proposed: 7 (C:7)
	BGR seminar 2019 conclusion:	IN MOD at least one site
	Recommendation 2025:	Added to 7 sites, probably SUF
	Comments from external experts:	Added to 7C sites; now 10C sites
	Comments from local experts:	No further information
	References:	n/a

C3.4 Species-poor beds of low-growing waterfringing or amphibious vegetation



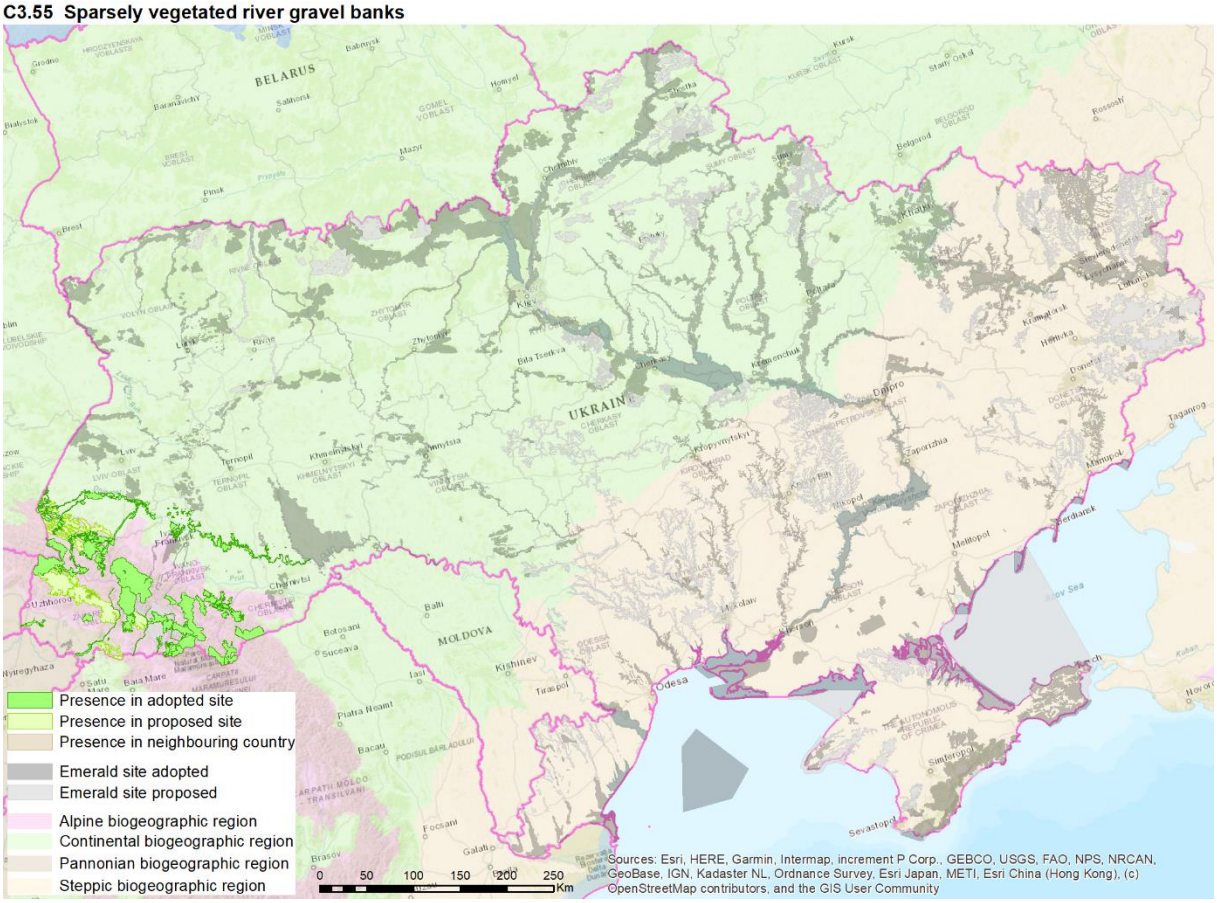
BGR	C3.51 Euro-Siberian dwarf annual amphibious swards (but excluding C3.5131 Toad-rush swards)	
PAN	Num. of sites:	Adopted: 4 (C:4), Proposed: 5 (C:5)
	BGR seminar 2019 conclusion:	IN MOD at least one site
	Recommendation 2025:	Added to 5 sites, probably SUF
	Comments from external experts:	Added to 5C sites; now 9C sites
	Comments from local experts:	No further information
	References:	n/a

C3.51 Euro-Siberian dwarf annual amphibious swards (but excluding C3.5131 Toad-rush swards)



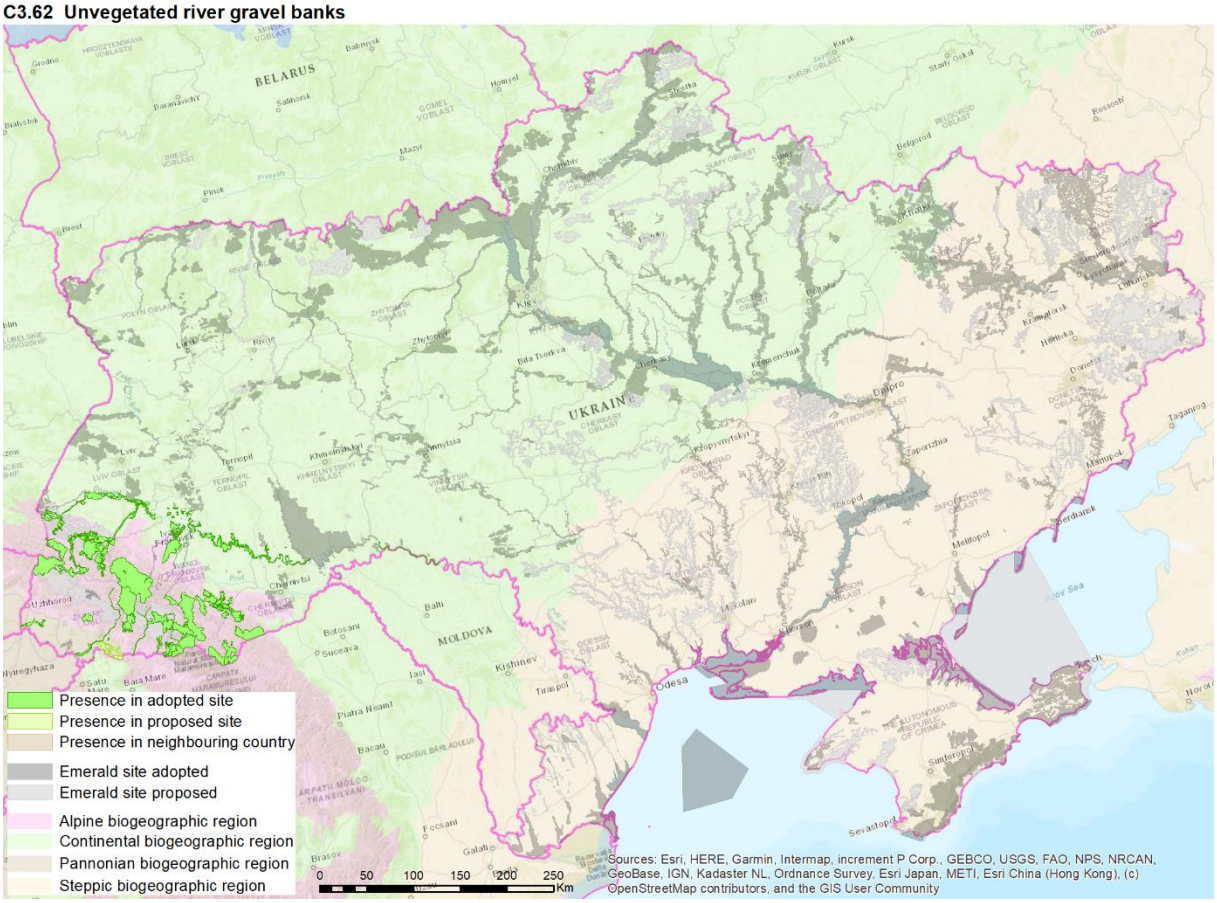
BGR	C3.55 Sparsely vegetated river gravel banks	
PAN	Num. of sites:	Adopted: 3 (B:1, C:2), Proposed: 2 (C:2)
	BGR seminar 2019 conclusion:	IN MOD/CD check presence in lowland
	Recommendation 2025:	Two sites added, probably SUF
	Comments from external experts:	Added to 2C sites; now 5 sites (1B, 4C). It looks like the most important sites are now in the Emerald Network.
	Comments from local experts:	No further information; the habitat is characteristic rather for ALP.
	References:	n/a

C3.55 Sparsely vegetated river gravel banks



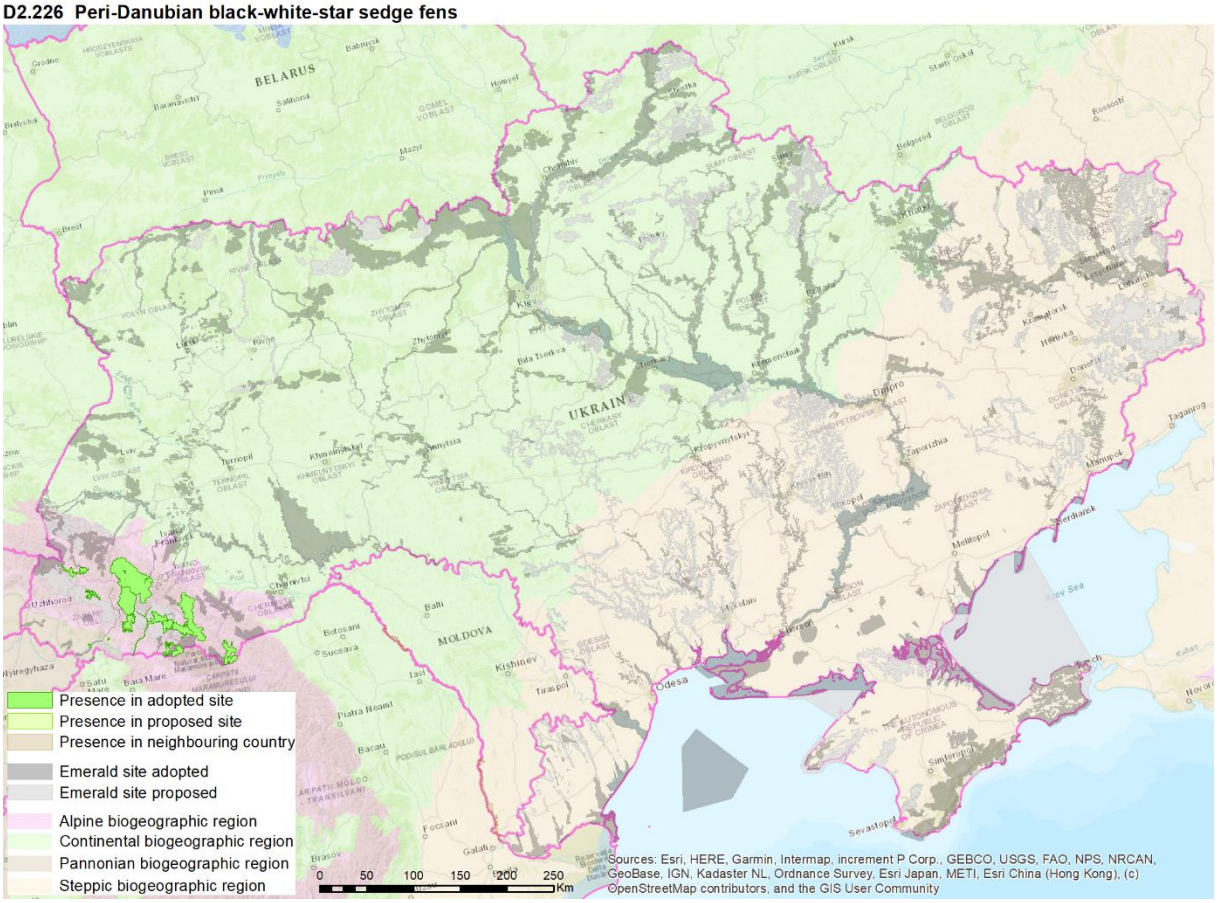
BGR	C3.62 Unvegetated river gravel banks	
PAN	Num. of sites:	Adopted: 3 (B:1, C:2), Proposed: 2 (C:2)
	BGR seminar 2019 conclusion:	IN MOD/CD check presence in lowland
	Recommendation 2025:	Two sites added, probably SUF
	Comments from external experts:	It was added to 2C sites and is now in 5 sites (1B, 4C). It looks like the most important sites are now in the Emerald Network.
	Comments from local experts:	Sufficient
	References:	n/a

C3.62 Unvegetated river gravel banks



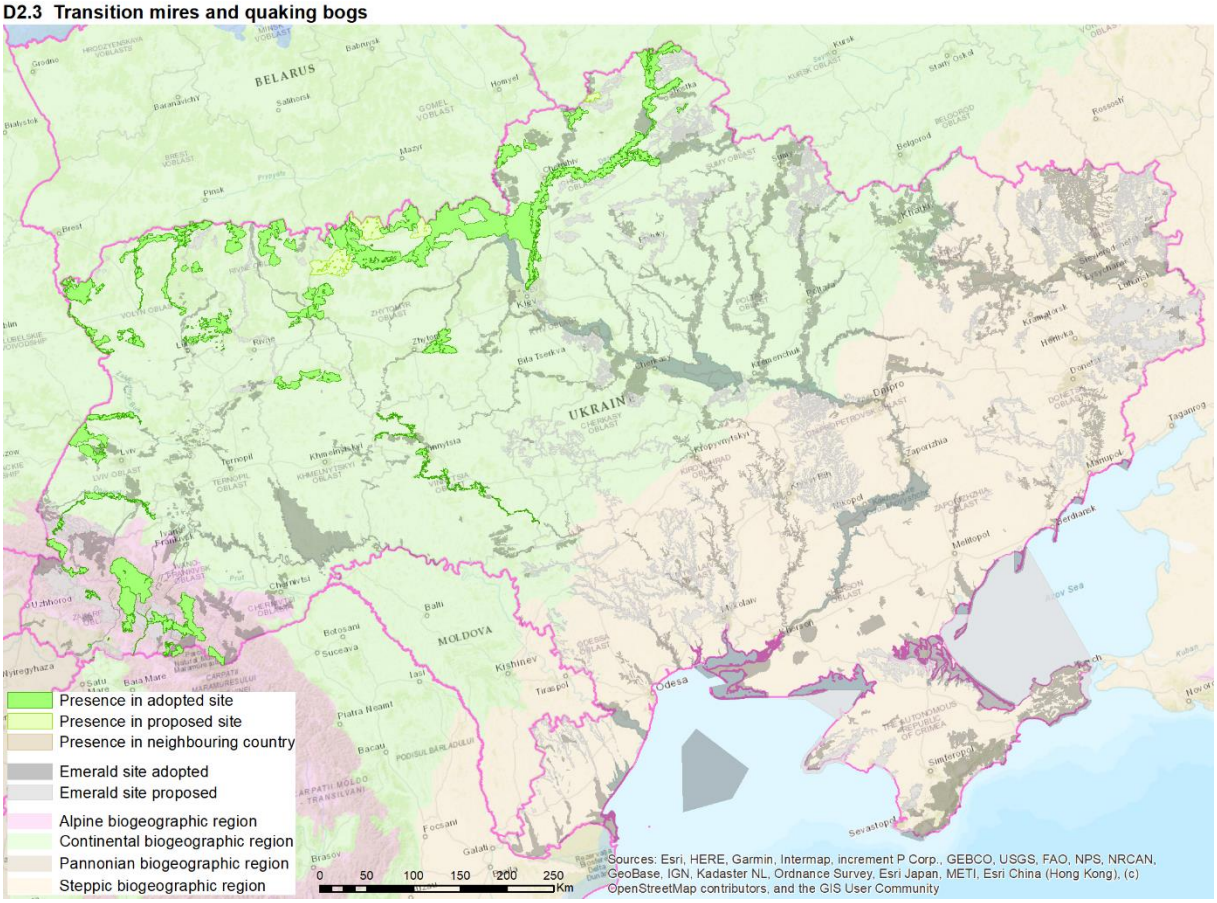
BGR	D2.226 Peri-Danubian black-white-star sedge fens	
ALP	Num. of sites:	Adopted: 8 (B:5, C:3)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN more sites
	Recommendation 2025:	Check sites UA0000117 Marmaroski ta Chyvchyno-Hryniavski Hory and UA0000041 Zacharovanyi Krai NNP. Further study is needed.
	Comments from external experts:	Eight sites (5B, 3C). Onyshchenko et al. (2017): IPA sites Chyvchyny, Chornohora; Svydovets; Marmaroski Hory. Reported from Ramsar site Black Bog (part of Emerald site UA0000041 Zacharovanyi Krai NNP)
	Comments from local experts:	No further information
	References:	Onyshchenko et al. 2017

D2.226 Peri-Danubian black-white-star sedge fens



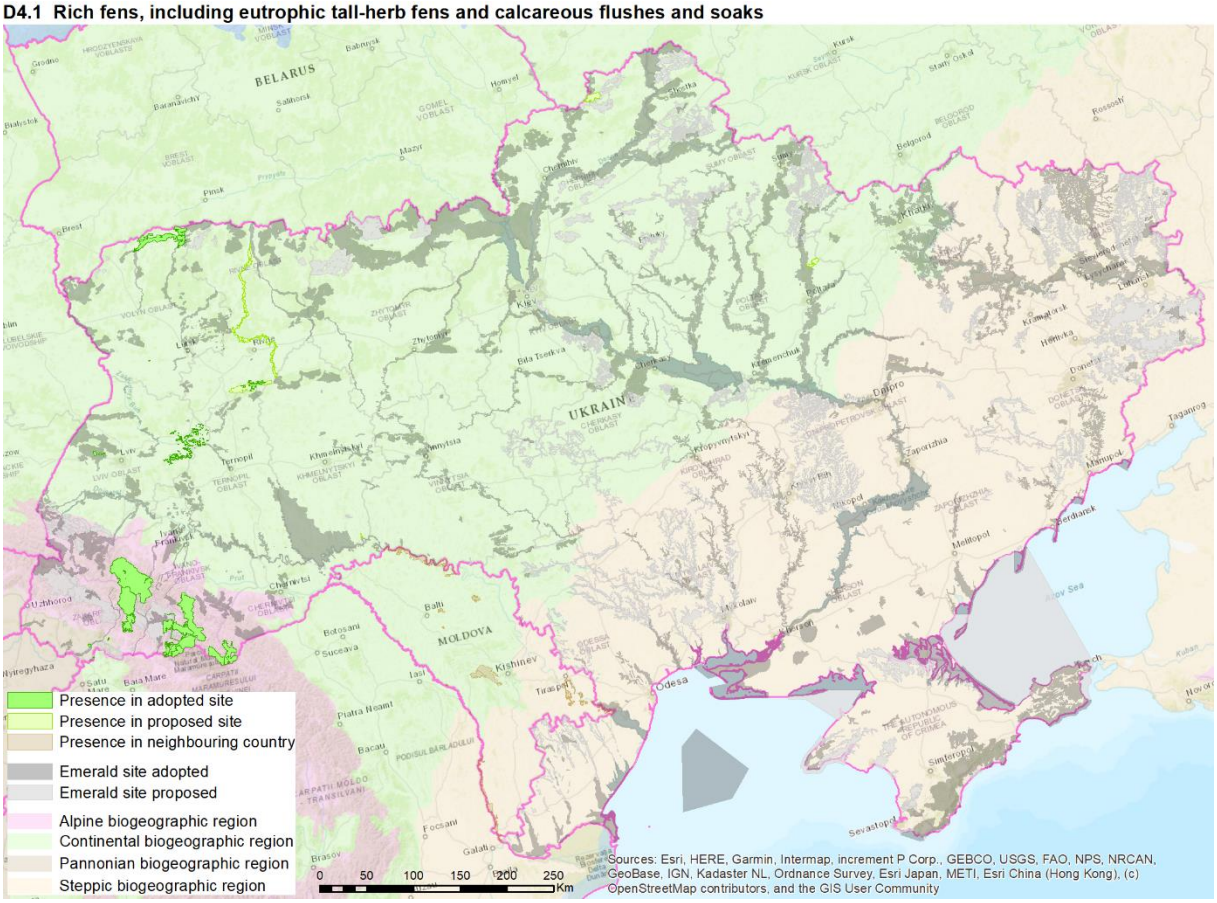
BGR	D2.3 Transition mires and quaking bogs	
ALP	Num. of sites:	Adopted: 10 (C:10)
	BGR seminar 2019 conclusion:	IN MOD at least one site
	Recommendation 2025:	Further study is needed. Also check UA0000117 Marmaroski ta Chyvchyno-Hryniavski Hory, UA0000013 Skolivski Beskydy NNP, UA0000041 Zacharovanyi Krai NNP, and other sites.
	Comments from external experts:	10 C sites. No site was added; therefore, the request is maintained. Dubyna and Dziuba (2020) reported Caricetum chordorrhizae from Chornogora, Chyvchyno-Hryniavski Mountains. Kagalo et al. (2013): very rare in UA0000013 Skolivski Beskydy NNP. Reported from Ramsar site Black Bog (part of Emerald site UA0000041 Zacharovanyi Krai NNP). Kagalo and Prost (2012): Habitat is widespread in all altitudinal vegetation zones of the Ukrainian Carpathians but is rare in the alpine zone.
	Comments from local experts:	There are doubts about the occurrence in the UA part of the Carpathians. Probably not occurring in Zacharovanyi Krai and Marmarosh. Requires serious study.
	References:	Dubyna and Dziuba 2020; Kagalo and Prost 2012; Karaло et al. 2013

D2.3 Transition mires and quaking bogs



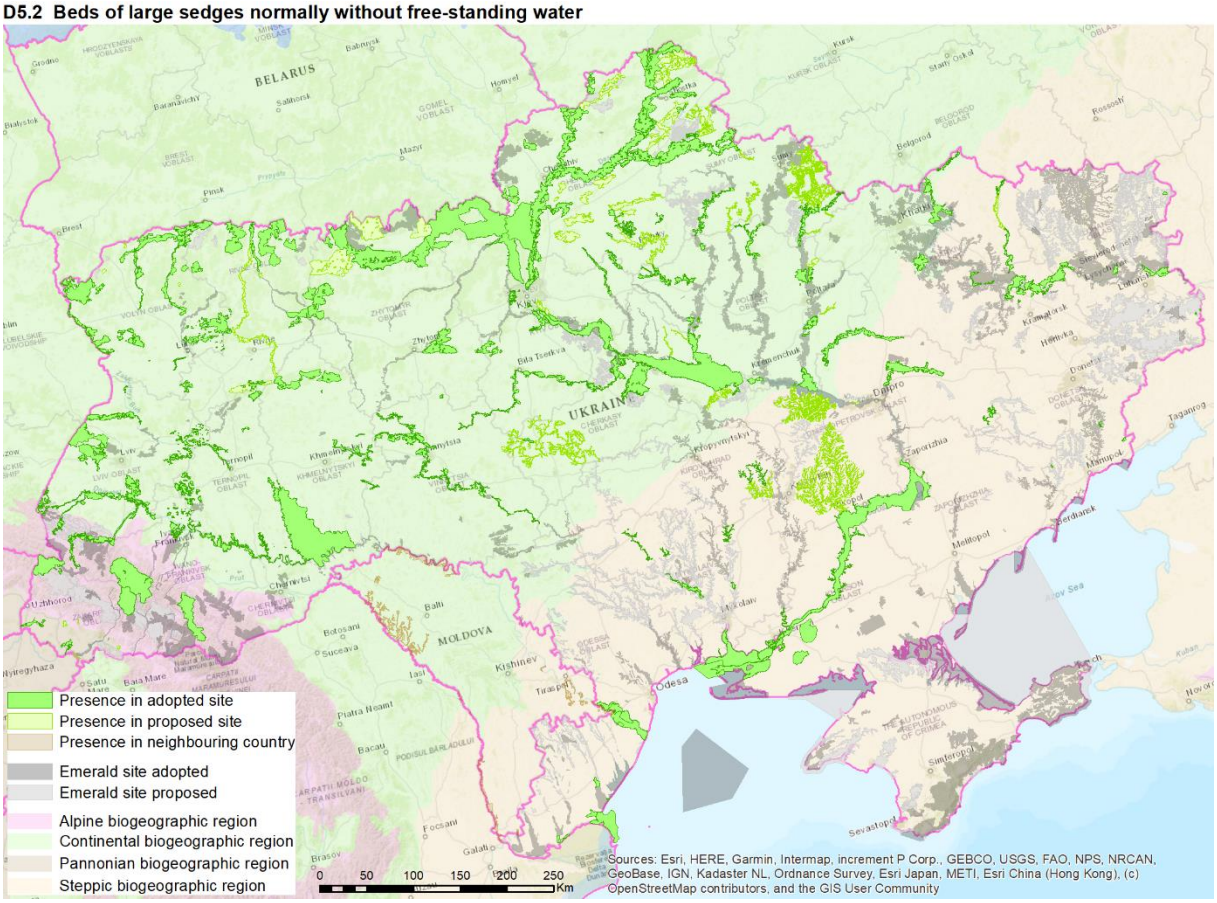
BGR	D4.1 Rich fens, including eutrophic tall-herb fens and calcareous flushes and soaks	
ALP	Num. of sites:	Adopted: 7 (B:4, C:3)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check sites reported by Didukh (2009, 274); Eastern Beskydy Mountains, low valleys, and sites indicated by Kagalo and Prost (2012) and those indicated by local experts: Skolivski Beskydy, Zacharovanyi Krai, Verchovina,
	Comments from external experts:	7 sites (3B, 4C). Onyshchenko et al. (2017). Didukh (2009) published a map of this habitat's community in UA/ALP on page 274. Dubyna and Dziuba (2020): Карпати (Ґорґани, Східні Бескиди й низькі полонини, нижній лісовий пояс (500—800 м над р. м.). Kagalo and Prost (2012): A rare habitat type, common in the forest high-altitude vegetation zones of the Ukrainian Carpathians.
	Comments from local experts:	Skolivski Beskydy, Zacharovanyi Krai, Verchovina, Carpathians Biosphere Reserve
	References:	Dubyna and Dziuba 2020; Kagalo and Prost 2012; Onyshchenko et al. 2017; Didukh 2009, 448
CON	Num. of sites:	Adopted: 5 (B:1, C:4), Proposed: 5 (B:1, C:4)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check UA0000025 Shatskyi and IPA site Pecheniiske Boloto. Western UA/CON: sites reported by Didukh (2009) in pages 270, 272, 274. Consider areas specified by local experts.
	Comments from external experts:	Added to 5 sites (1B, 4C), now 10 sites (2B, 8C). Onyshchenko et al. (2017): Pecheniiske Boloto; Zolochivka; Bushchanske Boloto; Koltivska Ulohovyna; Markovychi. Didukh (2009) published maps of three communities of this habitat (pages 270, 272, 274). Reported from Ramsar site Shatsk Lakes (Emerald site UA0000025 Shatskyi).
	Comments from local experts:	Pivnične Podilja, Dermansko-Ostrozkyi NNP, Rivne, Uzhanskyi NP
	References:	Onyshchenko et al. 2017; Didukh, 2009

D4.1 Rich fens, including eutrophic tall-herb fens and calcareous flushes and soaks



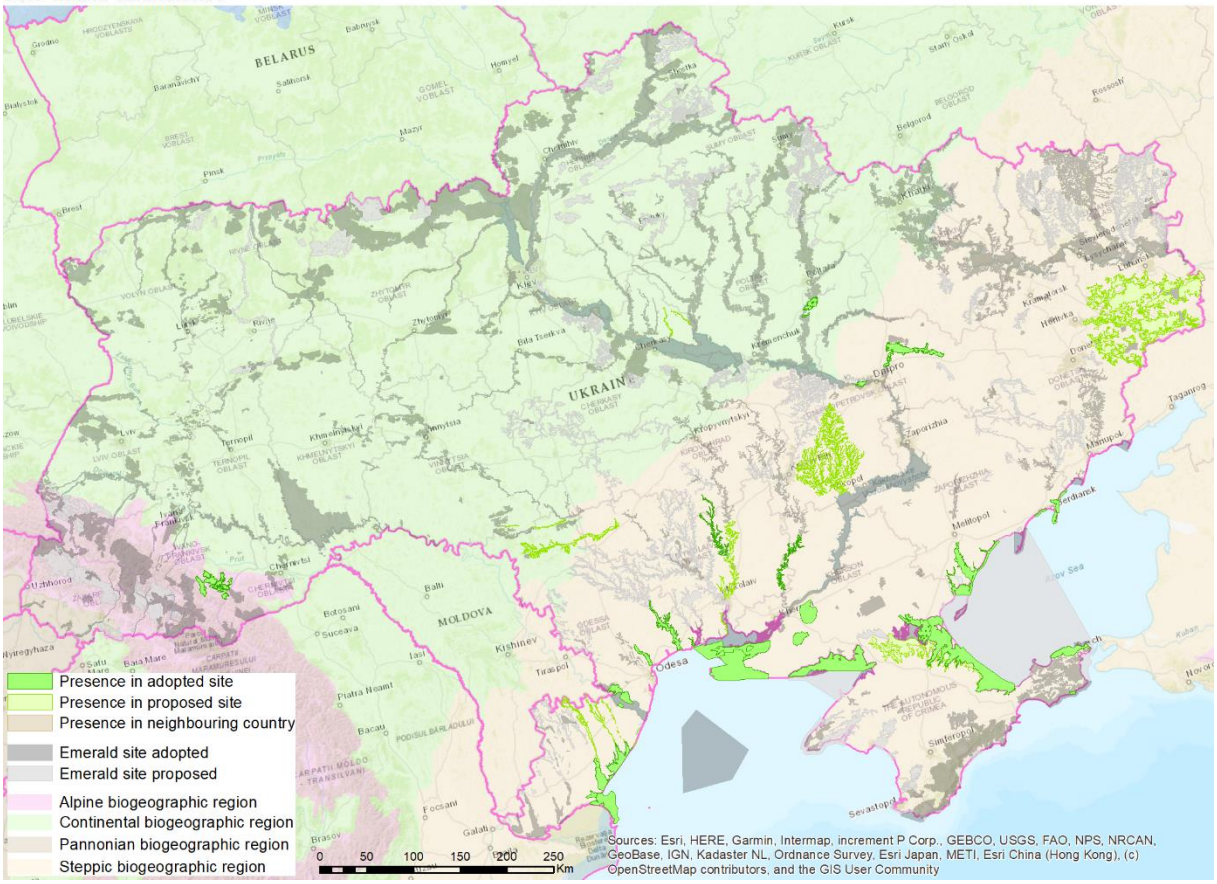
BGR	D5.2 Beds of large sedges normally without free-standing water	
ALP	Num. of sites:	Adopted: 7 (C:7)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check UA0000259 Skhidnyi Svydovets, UA0000117 Marmaroski ta Chyvchyno-Hryniavski Hory. Also check the northwestern part of UA/ALP.
	Comments from external experts:	7C sites. Didukh (2009): Carpathians (Chyvchyno-Hryniavski Mountains, Svydovets (1,250–1,560 m above sea level), Transcarpathian Plain, Malye Polissya (Horyn River basin). Kagalo and Prost (2012): Habitats are distributed in almost all high-altitude vegetation zones of the Ukrainian Carpathians, except for the alpine zone.
	Comments from local experts:	Common habitat. Chyvchyn-Hrynyava range, Marmarosh, Carpathian Svydovets, Carpathian NNP
	References:	Didukh 2009, 448

D5.2 Beds of large sedges normally without free-standing water



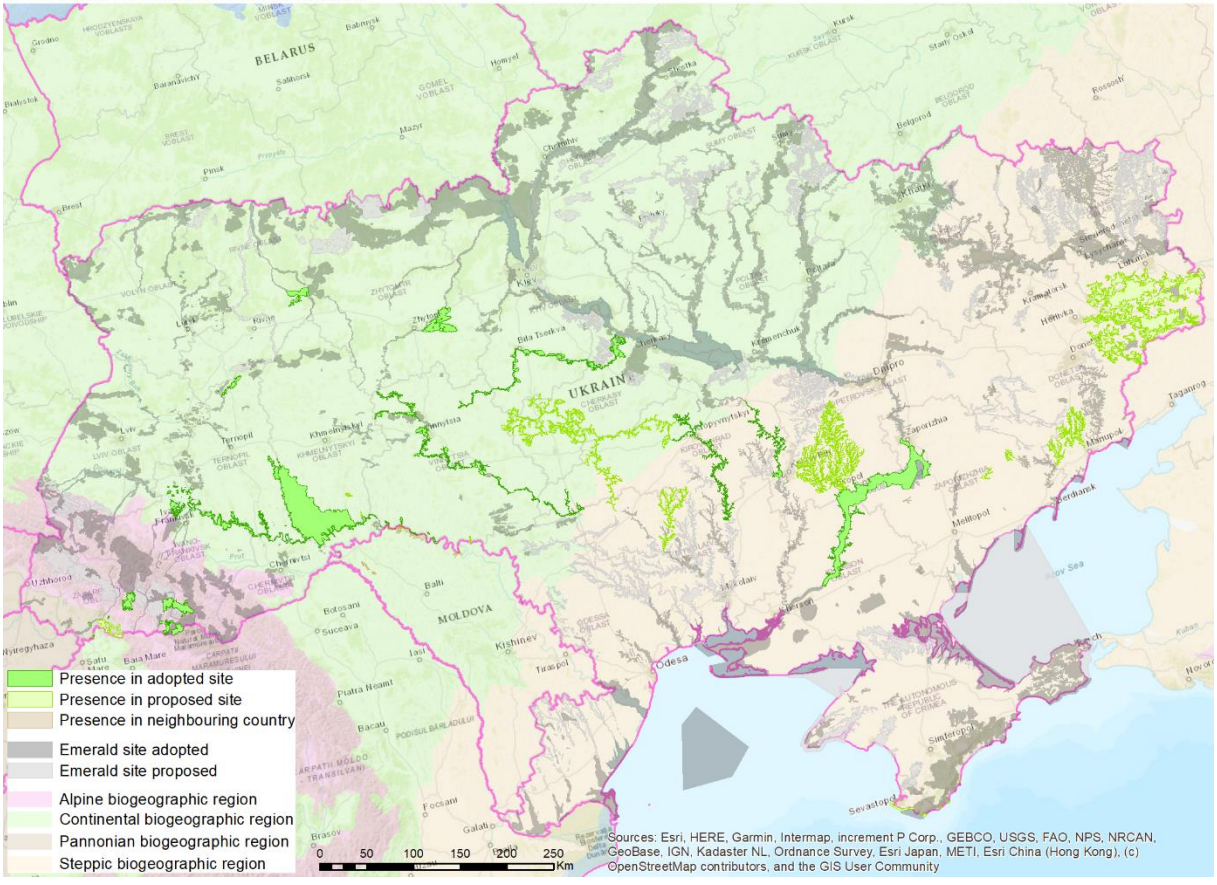
BGR	D6.1 Inland saltmarshes	
ALP	Num. of sites:	Adopted: 1 (C:1)
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	Further research is needed. Check the Hutsulshchyna NNP. To check Transkarpatia (ALP part).
	Comments from external experts:	1C site. Dubyna and Dziuba (2020): Puccinellio distantis-Spergularietum salinae: Carpathians - Hutsulshchyna NNP (Гуцульщина) and Transcarpathia (not clear if ALP or PAN regions)
	Comments from local experts:	UA0000033 Hutsulshchyna—doubts of occurrence. In other parts—to be checked.
	References:	Dubyna and Dziuba 2020
CON	Num. of sites:	Adopted: 1 (C:1), Proposed: 2 (No data: 1, C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check the middle Dnieper and its tributaries, in Poltava and Čerkasy regions, Nyzhniosulskyi NNP. The database to be corrected: relative surface for site UA0000396.
	Comments from external experts:	Added to 2 sites (1C, 1?); now 4 sites (3C, 1?). Dubyna and Dzyuba (2019) reported several vegetation units from terraces and floodplains of the Left Bank of the Middle Dnieper and its tributaries.
	Comments from local experts:	Could be represented in the Poltava region and the Eastern part of the Čerkasy region, Nyzhniosulskyi NNP
	References:	Dubyna and Dziuba 2019

D6.1 Inland saltmarshes



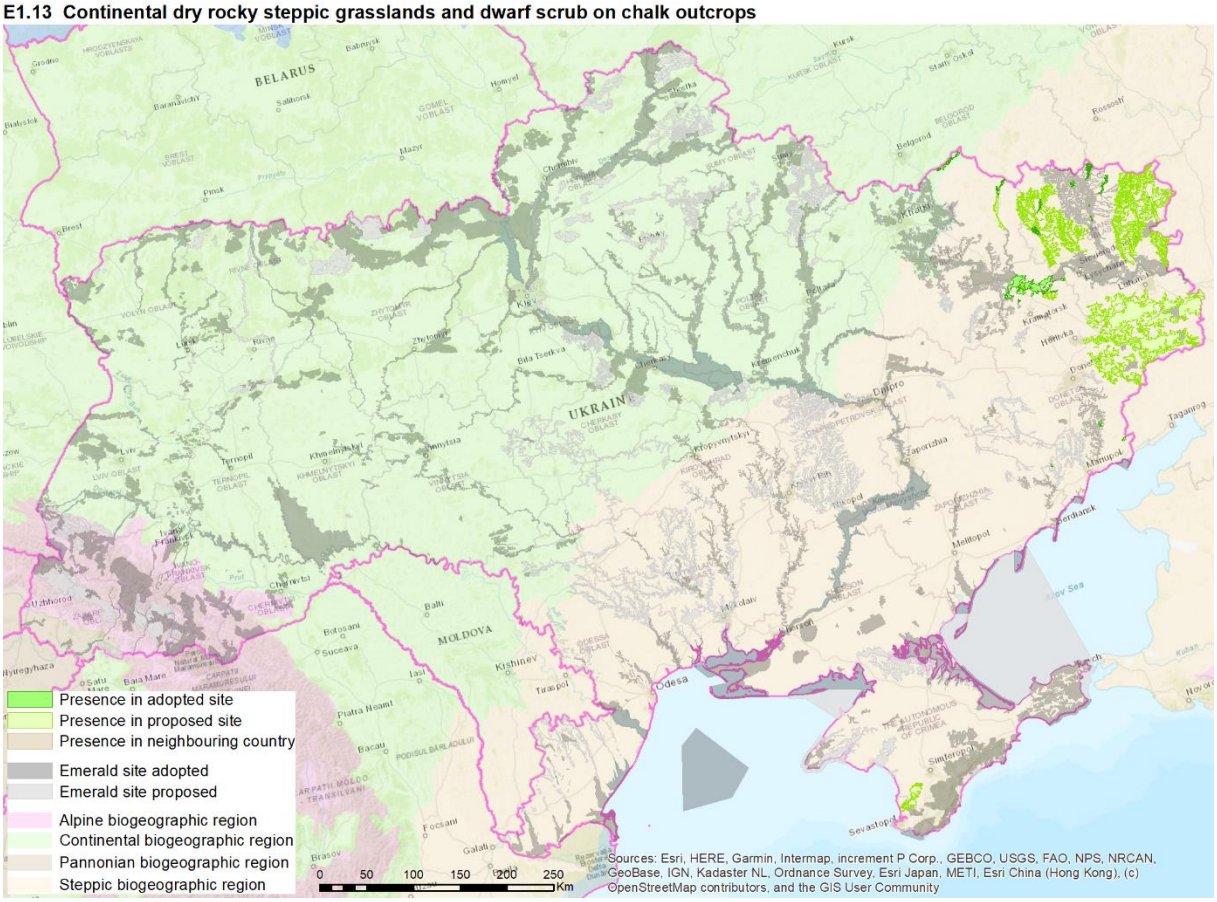
BGR	E1.11 Euro-Siberian rock debris swards	
ALP	Num. of sites:	Adopted: 3 (C:3), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check UA0000013 Skolivski Beskydy NNP and sites indicated by Kagalo and Prost (2012).
	Comments from external experts:	Added to 1C site. Now in 4C sites. Kagalo et al. (2013): UA0000013 Skolivski Beskydy NNP. Kagalo and Prost (2012): Habitat areas occasionally occur in fragments with an impoverished species composition along the southern foothills of the Vyhorlat-Hutynska ridge.
	Comments from local experts:	No further information
	References:	Kagalo and Prost 2012; Karaло et al. 2013
PAN	Num. of sites:	Adopted: 1 (C:1) Proposed: 5 (C:5)
	BGR seminar 2019 conclusion:	IN MOD several sites
	Recommendation 2025:	Added to 5C sites, probably SUF
	Comments from external experts:	Added to 5C sites. Now in 6C sites.
	Comments from local experts:	Close to Vinohradovo. To revise if the stands belong to the same habitat—species composition is different from that in Skoliv Beskyd.
	References:	n/a
STE	Num. of sites:	Adopted: 6 (B:2, C:4), Proposed:6 (B:2, C:4)
	BGR seminar 2019 conclusion:	SR distribution east and west
	Recommendation 2025:	Check sites in the Mykolaiv region (surroundings of Voznesenks on the left bank of the Pivdennyj Bug river), Donetsk region.
	Comments from external experts:	Added to 13C sites and 3B sites. Now in 22 sites (5B, 17C). Didukh (2009) provided a map for Stipeta graniticolae: subzone of true steppes within the Dnieper and Azov Uplands, as well as the south of the Donetsk Range (Mykolaiv, Kirovohrad, Zaporizhia, Donetsk regions).
	Comments from local experts:	Species composition different from other parts of Europe—probably sub-type. Donetsk highland.
	References:	Didukh 2009, 448

E1.11 Euro-Siberian rock debris swards



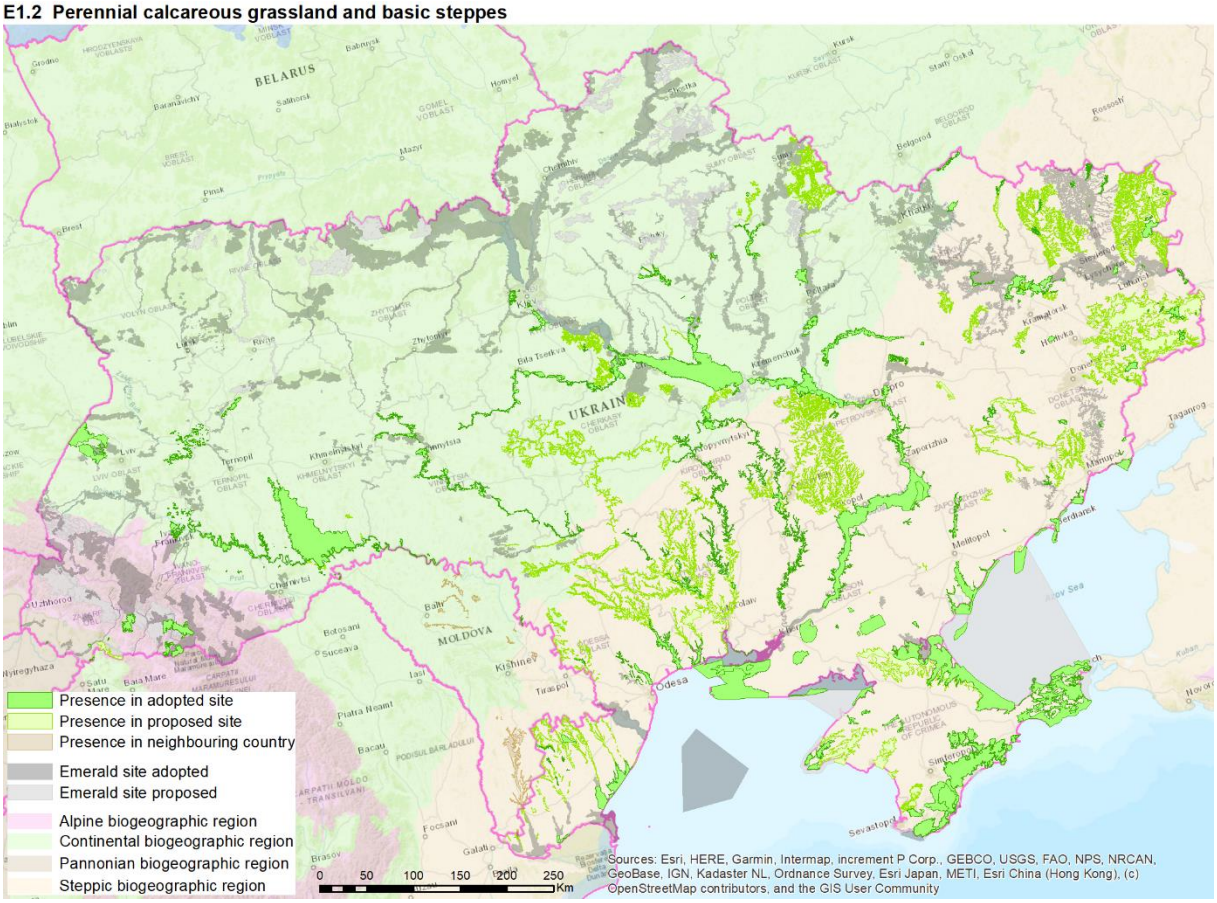
BGR	E1.13 Continental dry rocky steppic grasslands and dwarf scrub on chalk outcrops	
CON	Num. of sites:	Adopted: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN IN MOD western part
	Recommendation 2025:	Upper Dniester basin, Tenmopil region, Kremenets (city), see maps in Didukh (2009). Sites specified by local experts.
	Comments from external experts:	1 C site. Kuzemko et al. (2018): Middle Don subprovince. Didukh (2009): Podolsk, Dnieper, Ternopil region, Kremenets city (Divochi Skeli). Maps for two associations are provided.
	Comments from local experts:	Common in the west of Podilia. North Podilija, Kremenetski hory, Nature Resrve (NR) Medobory, Dniester kanyon NP, Podilski Tovtry NPP, Chotynsky NPP, Zališčyky.
	References:	Kuzemko et al. 2018, 442; Didukh 2009, 448
STE	Num. of sites:	Adopted: 12 (B:3, C:9), Proposed: 16 (B:6, C:10)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN Charkiv region, Lugansky region, Doneck region
	Recommendation 2025:	Added to 16 sites; habitat distribution indicated by literature is well covered, probably SUF. It is also possible to consider sites specified by local experts.
	Comments from external experts:	Added to 16 sites (10C, 6B); now in 28 sites (9B, 19C). Kuzemko et al. (2018): Pontic Steppe Province. Didukh (2009), Zelena kniga Ukrainy: Central Russian Uplands, Donetsk Ridge, and the foothills of the Mountainous Crimea
	Comments from local experts:	Sviatohirskyi NP, Kramatorsk, Siverskyi Donets, Ukrainian Steppe Nature Reserve
	References:	Kuzemko et al. 2018, 442; Didukh 2009, 448

E1.13 Continental dry rocky steppic grasslands and dwarf scrub on chalk outcrops



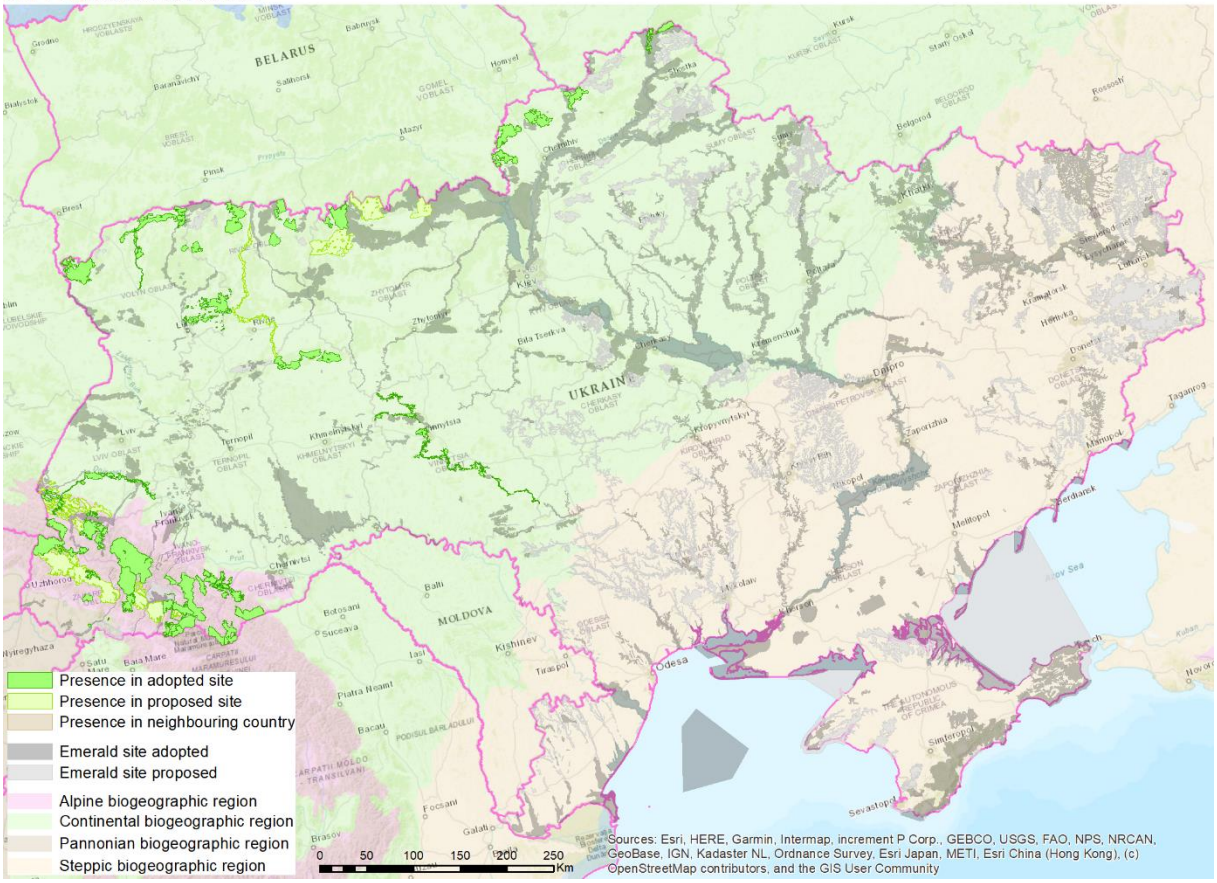
BGR	E1.2 Perennial calcareous grassland and basic steppes	
ALP	Num. of sites:	Adopted: 2 (C:2), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check the valleys of Dniester tributaries, the surrounding area of Velykyi Bychkiv, and sites between Zabrid and Uzhorod in the Uzh valley.
	Comments from external experts:	Added to 1C site; now in 3C sites. Didukh et al. (2016) reported several habitat types belonging to E1.2 from the Carpathians, especially from the valleys of the Dniester tributaries. Chytrý et al. (2019) published a map that indicates sites between Perechyn and Uzhorod in the Uzh valley. Kagalo and Prost (2012): island fragments on the southern slopes of individual hills of the volcanic uplands of the Transcarpathian Lowland and in the Uzh valley.
	Comments from local experts:	Vynohradovo, Čornogora
CON	Num. of sites:	Adopted: 41 (B:2, C:39), Proposed: 27 (B:6, C:21)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Added to 27 sites; all regions of habitat distribution covered, probably SUF.
	Comments from external experts:	Added to 27 sites (6B, 21C); now in 8B and 60 C sites. Didukh (2009) indicated distribution and provided maps for 4 habitat types belonging to E1.2. Kuzemko et al. (2018): Central European province (Hologora-Kremenetskyi ridge, Opillya, Pokuttya, Roztochchya, Volyn Upland), East European forest-steppe province (within Western, Northern, and Central Podillia).
	Comments from local experts:	Dniester tributaries
PAN	Num. of sites:	Adopted: 3 (C:3), Proposed: 2 (C:2)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check sites UA0000270 Ponyzzia Borzhavy, UA0000473 Berezynka, UA0000562 Avashski Hory; consider other sites reported by Chytrý et al. (2019).
	Comments from external experts:	Added to 2C sites; now in 5C sites. Chytrý et al. (2019) published the map that indicates sites in the Tisza valley N of Vinohraiv (part in Emerald site UA0000006 Carpathian Biosphere Reserve, possibly also UA0000562 Avashski Hory); Berehove hills in Borshava valley (UA0000580 Ardov is in the database, but it should be included in UA0000270 Ponyzzia Borzhavy as well), Siltse in Irshaka valley, Mukacheve hills in Latorytsia valley (possibly also in UA0000473 Berezynka).
	Comments from local experts:	No further information
STE	Num. of sites:	Adopted: 108 (A:1, B:11, C:96), Proposed: 64 (B:23, C:41)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Added to 65 sites; now 172 sites. Whole BGR covered, probably SUF.
	Comments from external experts:	Added to 65 sites (23B, 42C); now in 172 sites (1A, 34B, 137C). Didukh (2009) indicated distribution and provided maps for 4 habitat types belonging to E1.2. Kuzemko et al. (2018): East European forest-steppe province (within Western, Northern, and Central Podillia).
	Comments from local experts:	No further information
	References:	Didukh 2009, 448; Chytrỳ et al. 2019; Didukh et al. 2016, 280; Kagalo and Prost 2012; Kuzemko et al. 2018, 442

E1.2 Perennial calcareous grassland and basic steppes



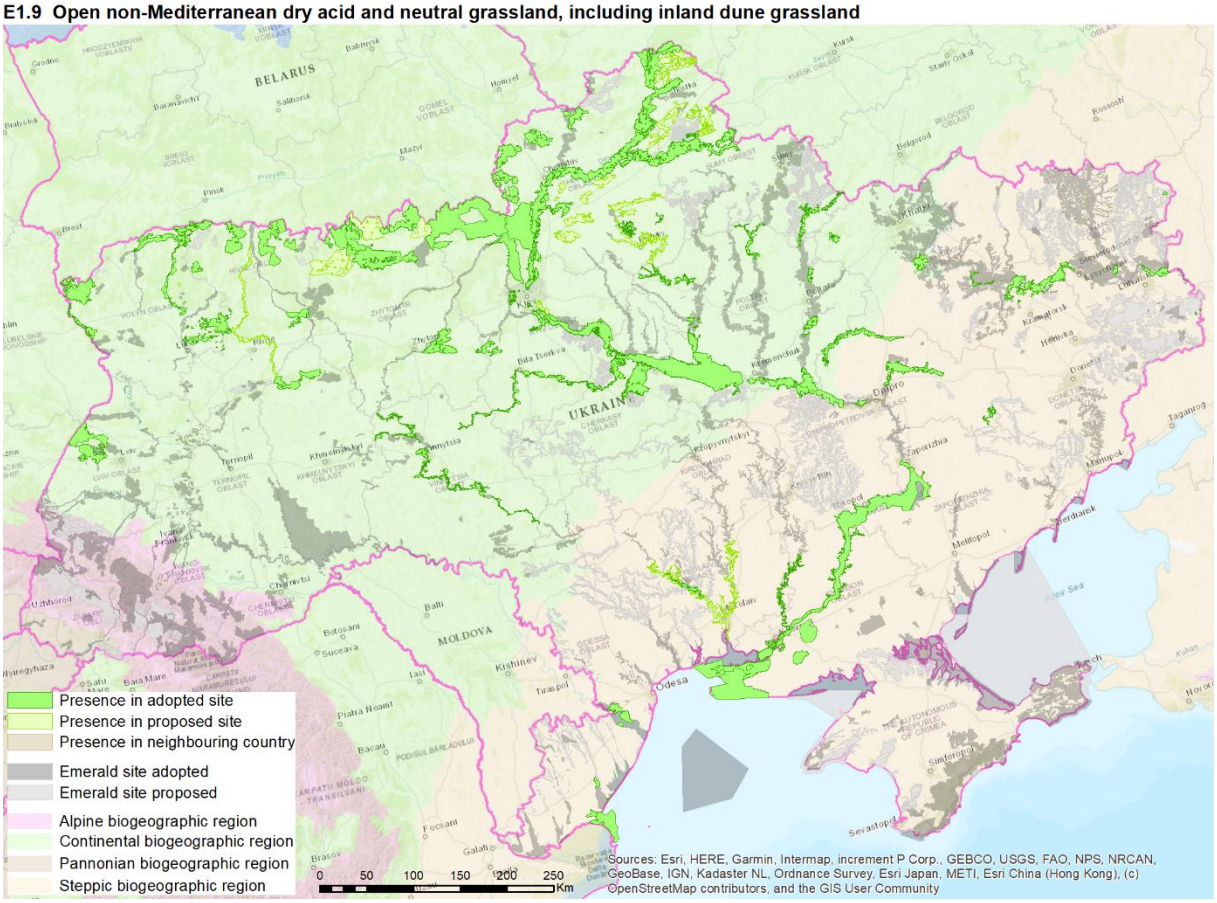
BGR	E1.71 Nardus stricta swards	
CON	Num. of sites:	Adopted: 17 (C:17), Proposed: 4 (B:1, C:3)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	The northern part of UA/CON is well covered; consider new sites in the Lviv and Ivano-Frankivsk regions and Kharkiv geobotanical districts.
	Comments from external experts:	Added to 3 sites (2B, 1C); now 21 sites (20C, 1B). Kuzemko et al. (2018): Central European broad-leaved forest, East European forest, locally in boreal refugia in the East European forest-steppe province (Central Podolsk, North Podolsk, North Right-bank Dnieper, Kharkiv geobotanical districts). Dubyna and Dziuba (2020): the Turkiv district of the Lviv region, the Verkhovyna, Dolyna districts and the western part of the Kosivskyi district of the Ivano-Frankivsk region, western regions of Polissya.
	Comments from local experts:	Javorivskyj NPP, possibly Male Polissya, Northern Podilia, Volyň, Rivno region
	References:	Dubyna and Dziuba 2020; Kuzemko et al. 2018, 442

E1.71 Nardus stricta swards



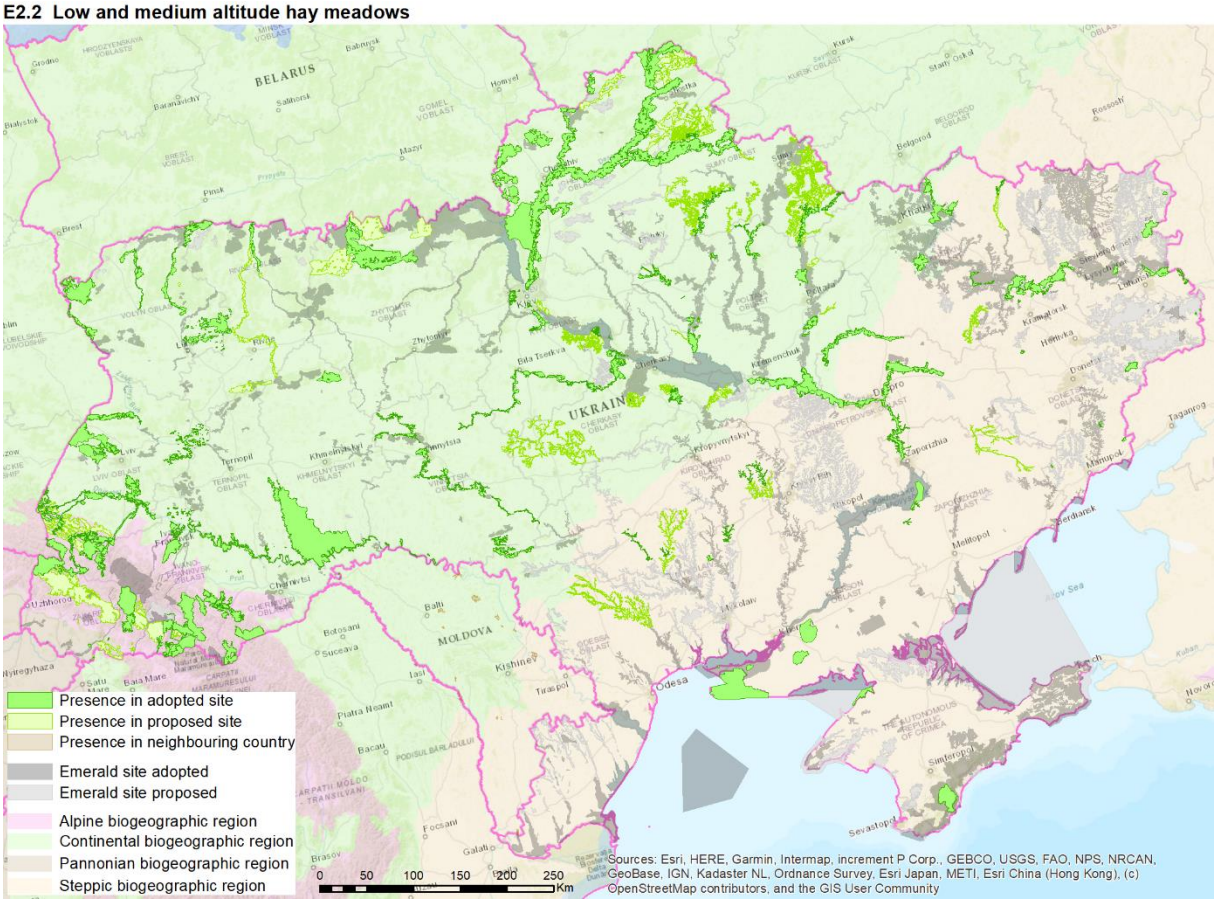
BGR	E1.9 Open non-Mediterranean dry acid and neutral grassland, including inland dune grassland	
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MOD 1 site
	Recommendation 2025:	Further research is needed.
	Comments from external experts:	No site. No information was found in the literature.
	Comments from local experts:	Not occurring
	References:	n/a

E1.9 Open non-Mediterranean dry acid and neutral grassland, including inland dune grassland



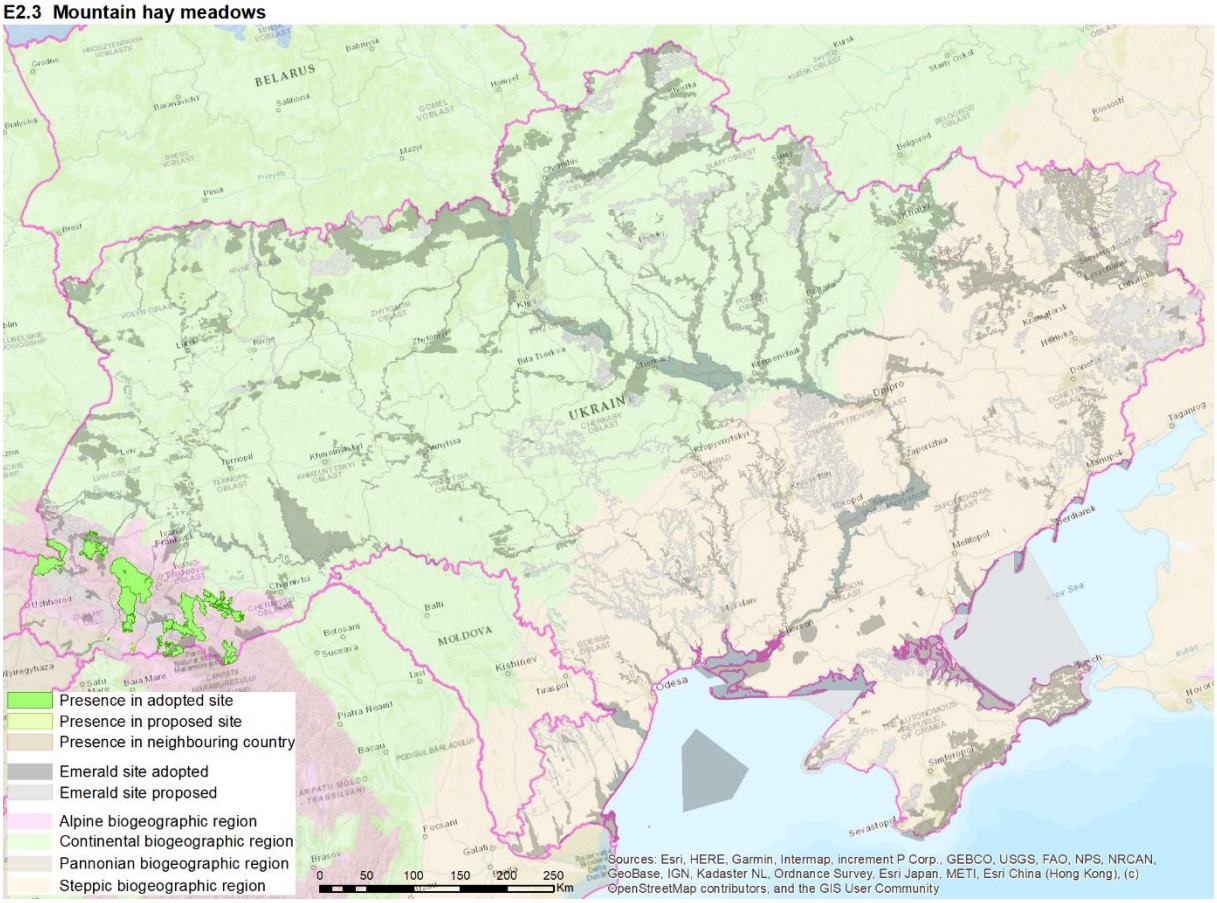
BGR	E2.2 Low and medium altitude hay meadows	
PAN	Num. of sites:	Adopted: 1 (C:1), Proposed: 4 (B:2, C:2)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Floodplains of the Tisa and Rika Rivers, Julivski Hory
	Comments from external experts:	Added to 2C sites; now in 5 sites (3C, 2B). Kuzemko et al. (2018): Pannonian forest-steppe province. Dubyna and Dzyuba (2019): several associations in floodplains of the Tysa and Rika Rivers, Bukovinian Precarpathians (Chernivtsi region)
	Comments from local experts:	Habitat occurs in Julivski Hory.
	References:	Dubyna and Dziuba 2019; Kuzemko et al. 2018, 442

E2.2 Low and medium altitude hay meadows



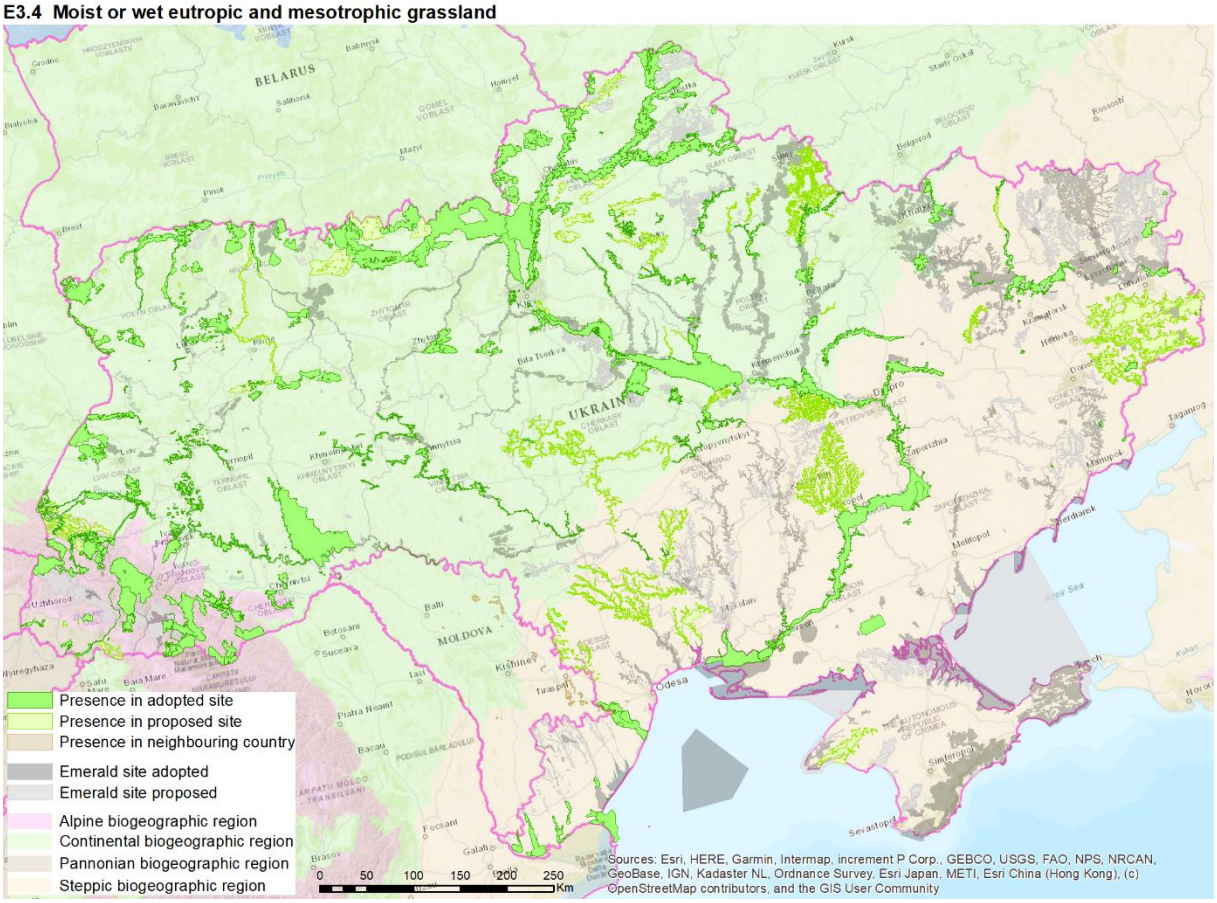
BGR	E2.3 Mountain hay meadows	
ALP	Num. of sites:	Adopted: 12 (B:2, C:10), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD 1 site south
	Recommendation 2025:	Check the presence of habitat in existing sites; otherwise, it is probably SUF.
	Comments from eBroadly distributed.xternal experts:	Added to 1C site; now in 13 sites (2B, 11C). Didukh (2009): Transcarpathian lowland (Khust district), high mountain areas of the Ukrainian Carpathians (Svydovetsky and Marmarosh ranges) (Ivano-Frankivsk and Transcarpathian regions). Kagalo and Prost (2012): throughout the Ukrainian Carpathians region, from the middle montane to the lower part of the subalpine belt.
	Comments from local experts:	Broadly distributed
	References:	Didukh 2009, 448; Kagalo and Prost 2012

E2.3 Mountain hay meadows



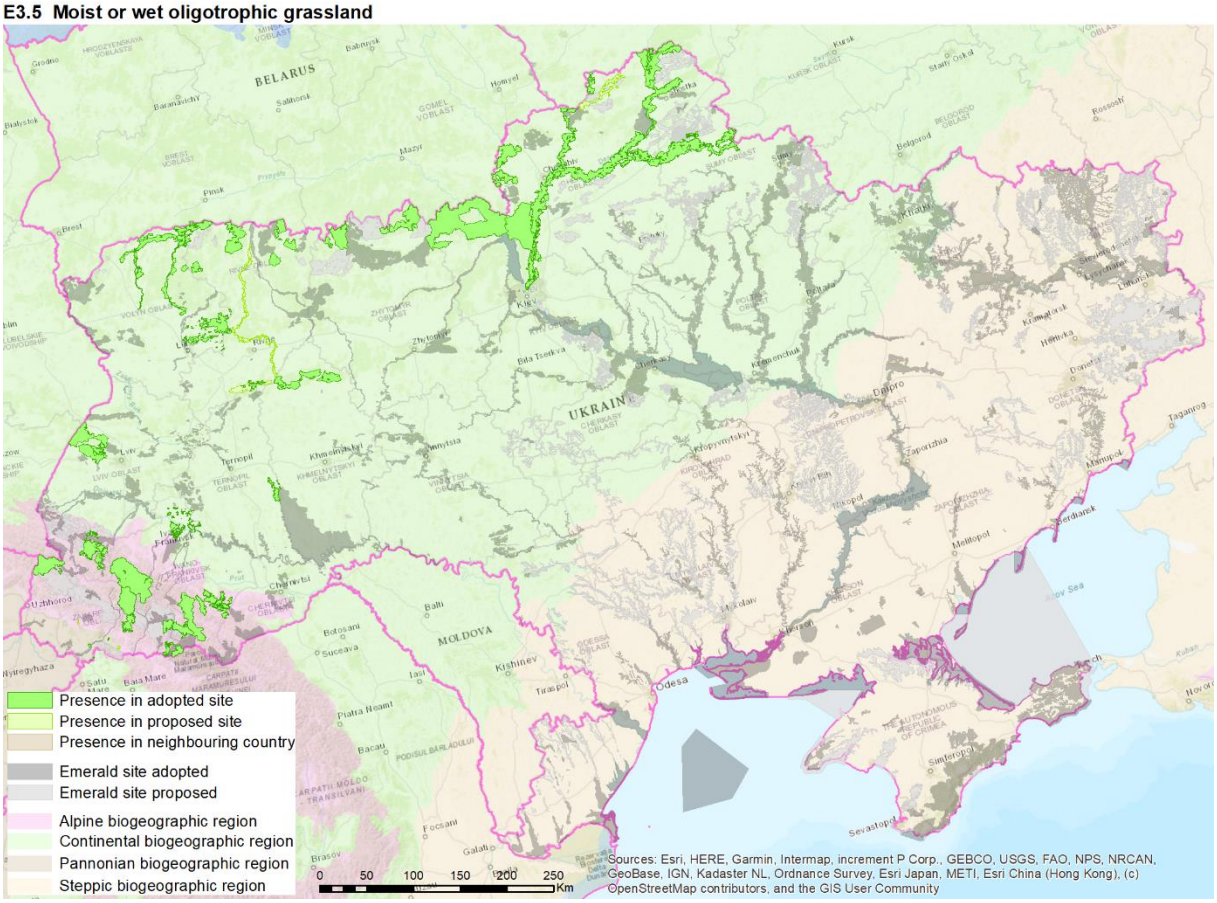
BGR	E3.4 Moist or wet eutropic and mesotrophic grassland	
PAN	Num. of sites:	Adopted: 4 (C:4), Proposed: 5 (B:1, C:4)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Added to 5 sites, probably SUF
	Comments from external experts:	Added to 5 sites (1B, 4C); now in 9 sites (1B, 8C)
	Comments from local experts:	Distributed in the valleys of middle and smaller rivers
	References:	n/a

E3.4 Moist or wet eutropic and mesotrophic grassland



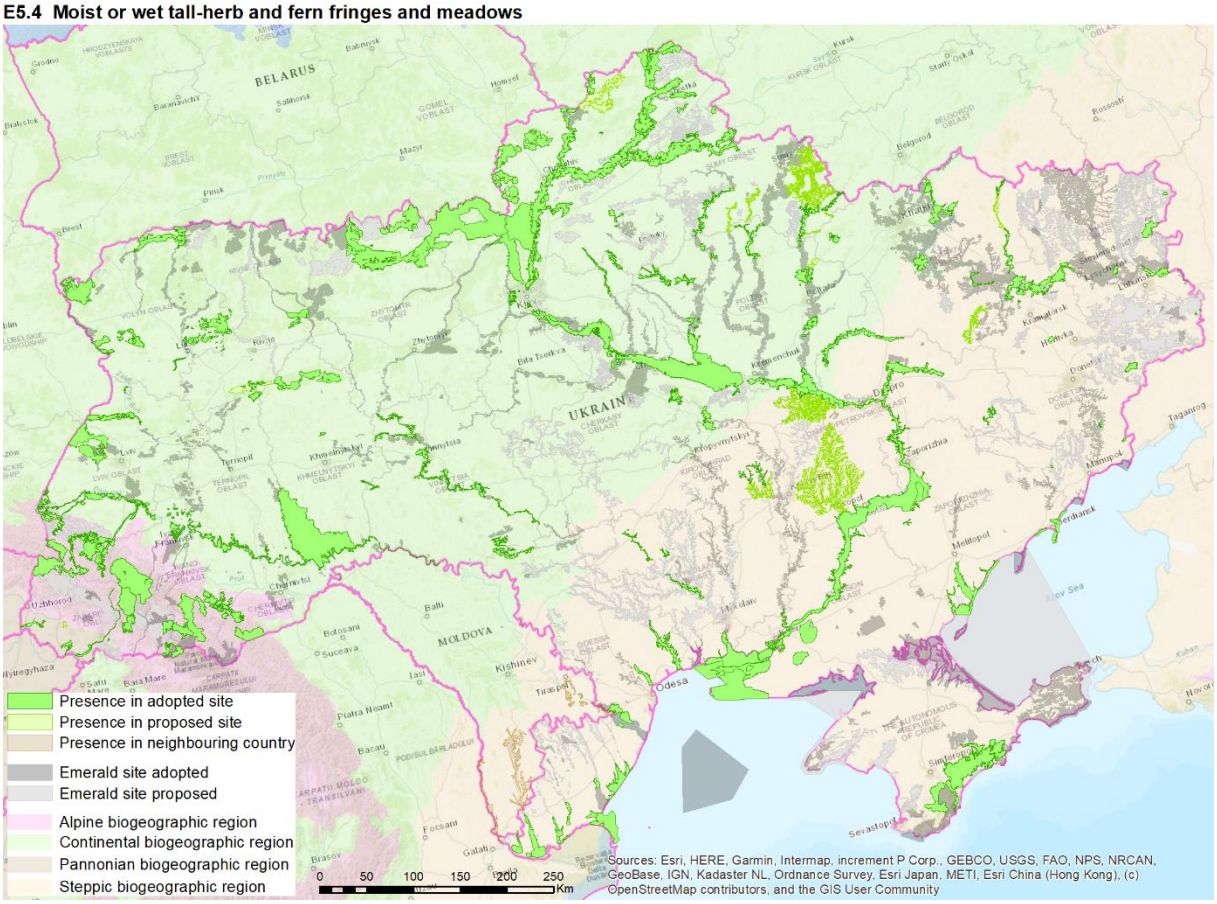
BGR	E3.5 Moist or wet oligotrophic grassland	
CON	Num. of sites:	Adopted: 31 (B:1, C:30), Proposed: 3 (C:3)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Added 3 sites; now probably SUF. But further research is needed.
	Comments from external experts:	Added to 3C sites; now in 34 sites (1B, 33C)
	Comments from local experts:	The question is whether the habitat is correctly classified.
	References:	n/a
PAN	Num. of sites:	Adopted: 1 (C:1), Proposed: 2 (C:2)
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	Added 2 sites; now probably SUF, but further research is needed.
	Comments from external experts:	Added to 2C sites; now in 3C sites
	Comments from local experts:	The question is whether the habitat is correctly classified.
	References:	n/a

E3.5 Moist or wet oligotrophic grassland



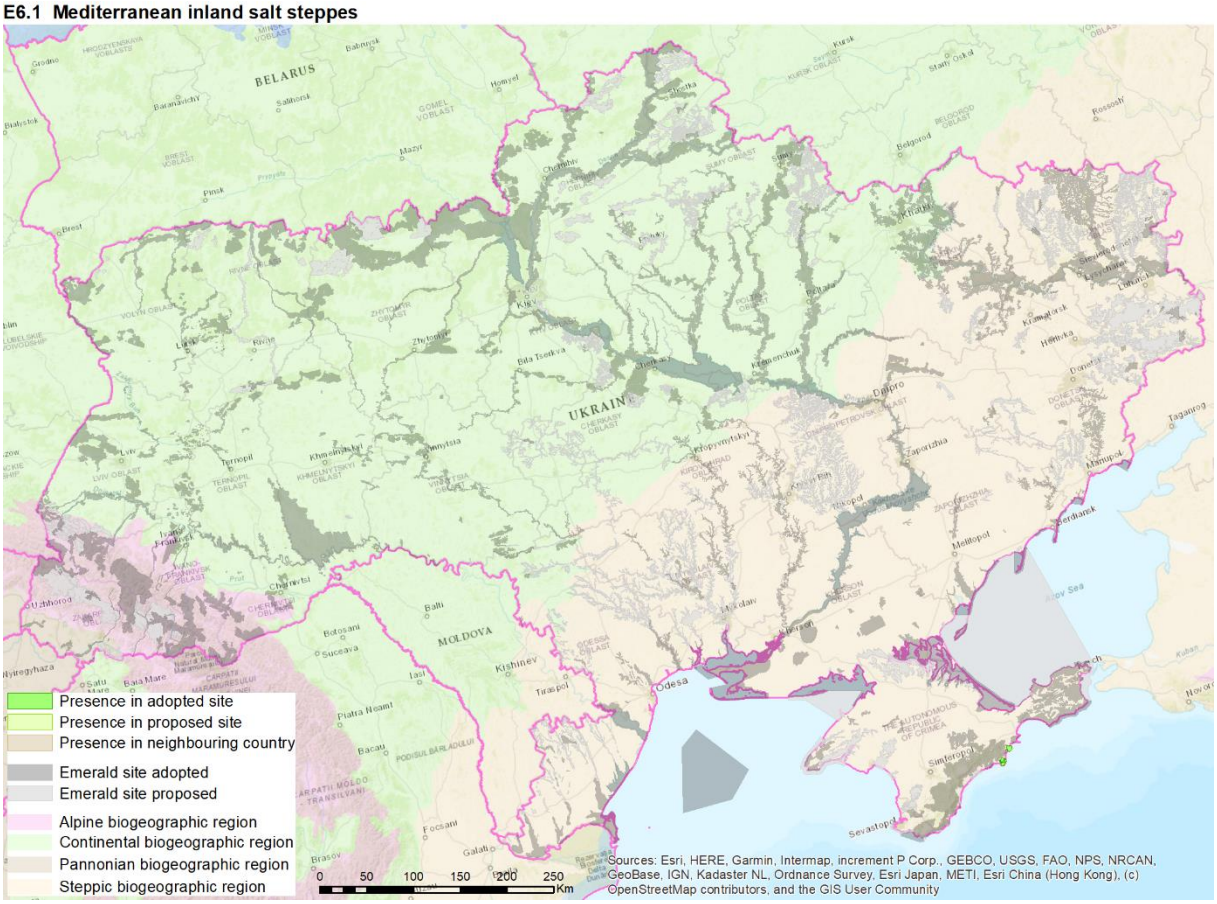
BGR	E5.4 Moist or wet tall-herb and fern fringes and meadows	
PAN	Num. of sites:	Adopted: 4 (C:4), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check sites UA0000423 Tysa River floodplain and UA0000599 Botar
	Comments from external experts:	Added to 1C site; now in 5C sites. Kuzemko et al. (2018): Pannonian Forest-Steppe province. Onyshchenko et al. (2017): Zaplava Tysy. Some other floodplain sites with the potential occurrence of this habitat exist in the region.
	Comments from local experts:	It could occur in other sites. Often, synanthropisation or the invasion of alien species occurs.
	References:	Kuzemko et al. 2018, 442; Onyshchenko et al. 2017

E5.4 Moist or wet tall-herb and fern fringes and meadows



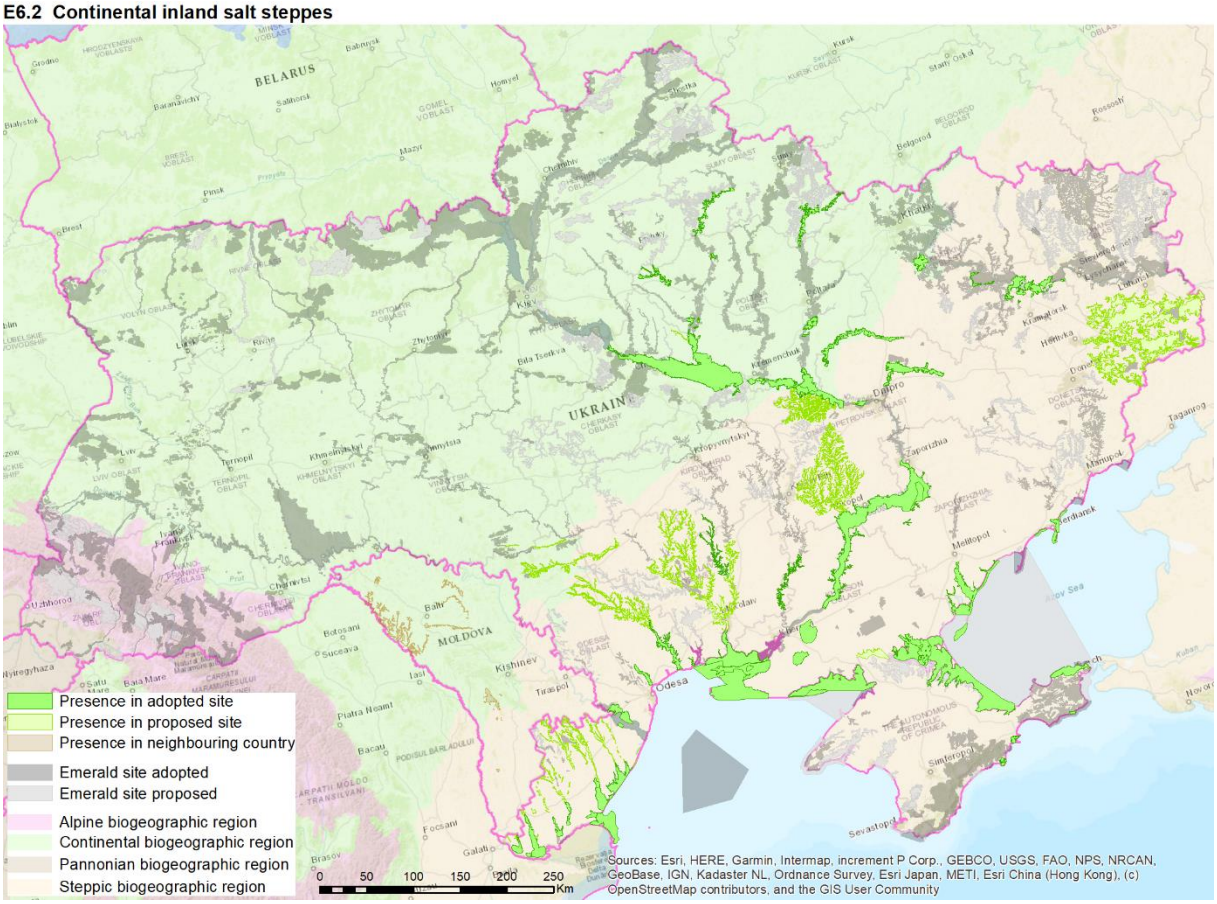
BGR	E6.1 Mediterranean inland salt steppes	
STE	Num. of sites:	Adopted: 2 (C:2)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Black Sea and Azov regions, the southern part of the Left-Bank Dnieper Region. To check if it could be classified as a Mediterranean type.
	Comments from external experts:	2C sites. Dubyna and Dziuba (2020): Black Sea and Azov regions, the south part of the Left-Bank Dnieper Region within the Forest-Steppe zone, Kerch Peninsula.
	Comments from local experts:	Syvaš and salt marshes. Azov Sea coast, Kerch Peninsula, south of Domnetsk.
	References:	Dubyna and Dziuba 2020

E6.1 Mediterranean inland salt steppes



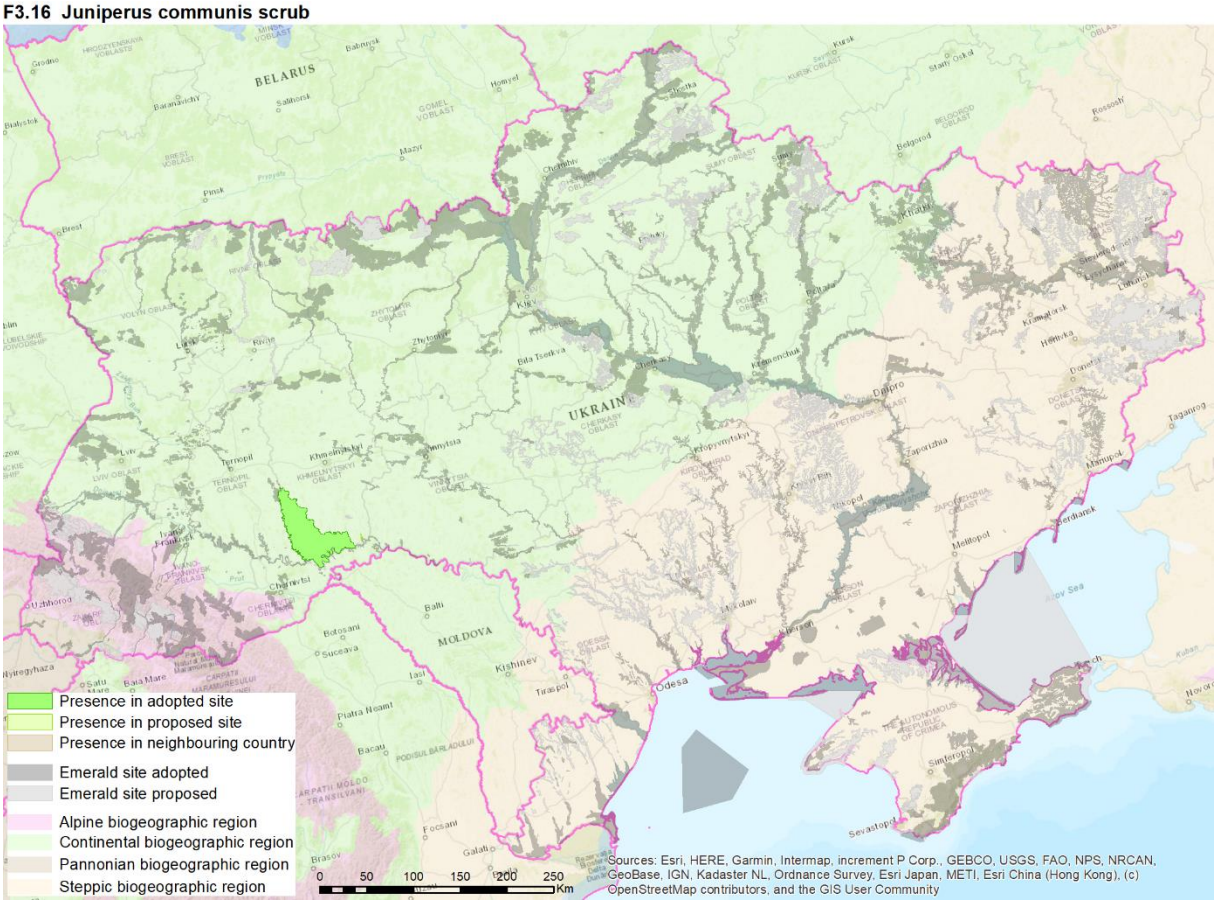
BGR	E6.2 Continental inland salt steppes	
CON	Num. of sites:	Adopted: 12 (B:1, C:11), Proposed:1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Consider the IPA site Hrakove.
	Comments from external experts:	Added to 1C site; now in 13 sites (1B, 12C). Onyshchenko et al. (2017): IPA site Hrakove. Dubyna and Dziuba (2020): Left Bank of the Middle Dnieper and its tributaries; floodplains of the Dnieper River and the rivers of its basin (Seim, Psel, Vorskla, Sula, Ros); floodplains of rivers of the Left-Bank Forest-Steppe.
	Comments from local experts:	Poltava region, Hrakove, Nižnosulský NPP, Kremenčuk - NPs in surroundings
STE	Num. of sites:	Adopted: 34 (A:1, B:10, C:23), Proposed: 23 (B:2, C:21)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Added to 23 sites; now in 57 sites. Probably SUF.
	Comments from external experts:	Added to 23 sites (2B, 21C); now in 57 sites (1A, 12B, 44C). Onyshchenko (2017): IPA sites Tendrivska Zatoka; Molochnyi Lyman; Dunaiski Plavni; Samarskyi Lis. Dubyna and Dziuba (2020): mainly Black Sea and Azov regions.
	Comments from local experts:	No further information
	References:	Dubyna and Dziuba; Onyshchenko et al. 2017

E6.2 Continental inland salt steppes



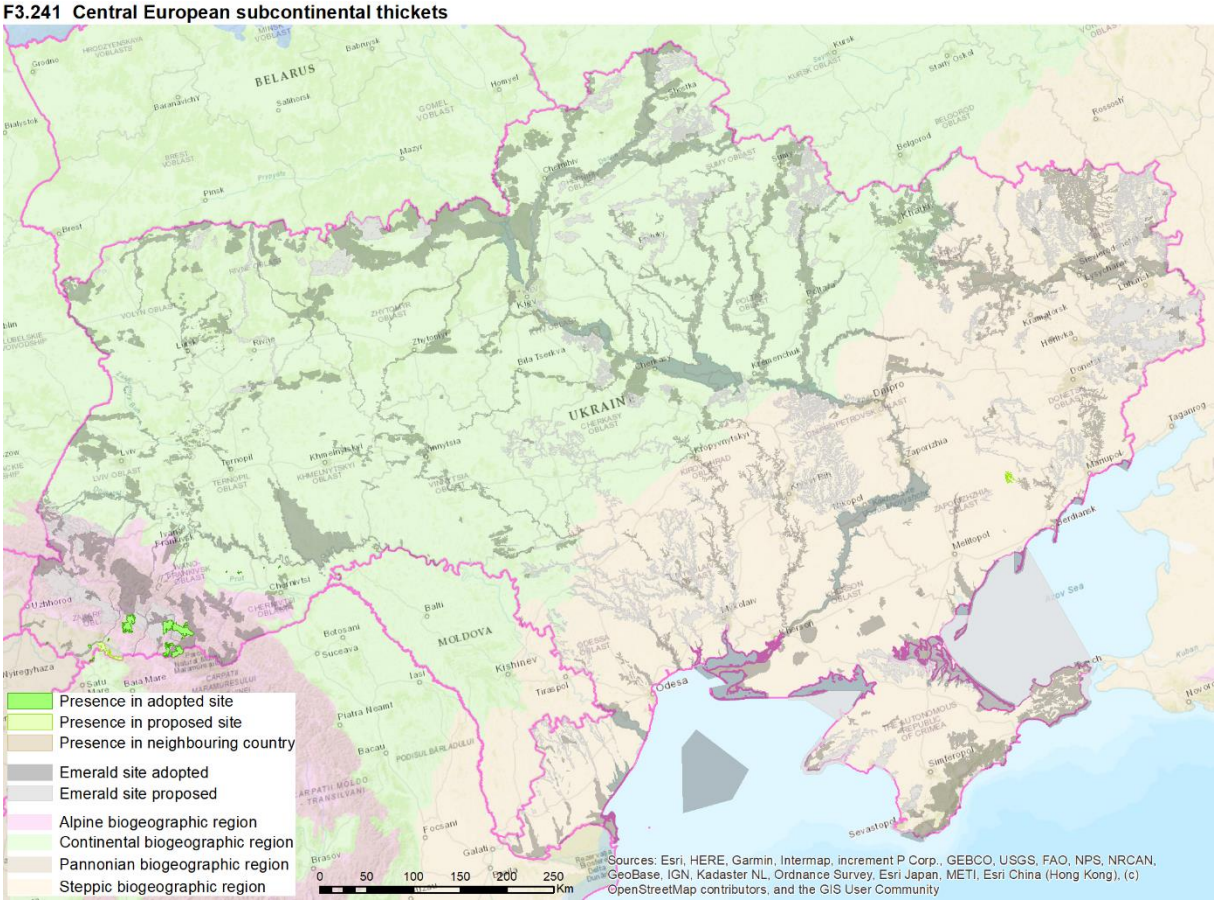
BGR	F3.16 Juniperus communis scrub	
ALP	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	Check the site UA0000006 Carpathian Biosphere Reserve and other sites of the Marmaros-Chornohirsko-Svydovetskyi district of the Carpathian-Alpine mountain province.
	Comments from external experts:	No site. Kuzemko et al. (2018): Marmaros-Chornohirsko-Svydovetskyi district of the Carpathian-Alpine mountain province; Cornohora range.
	Comments from local experts:	Carpathian Biosphere Reserve and NP, Hryňava, Svydovets, Beskydy, Černivci; Čyvčyny
	References:	Kuzemko et al. 2018, 442

F3.16 Juniperus communis scrub



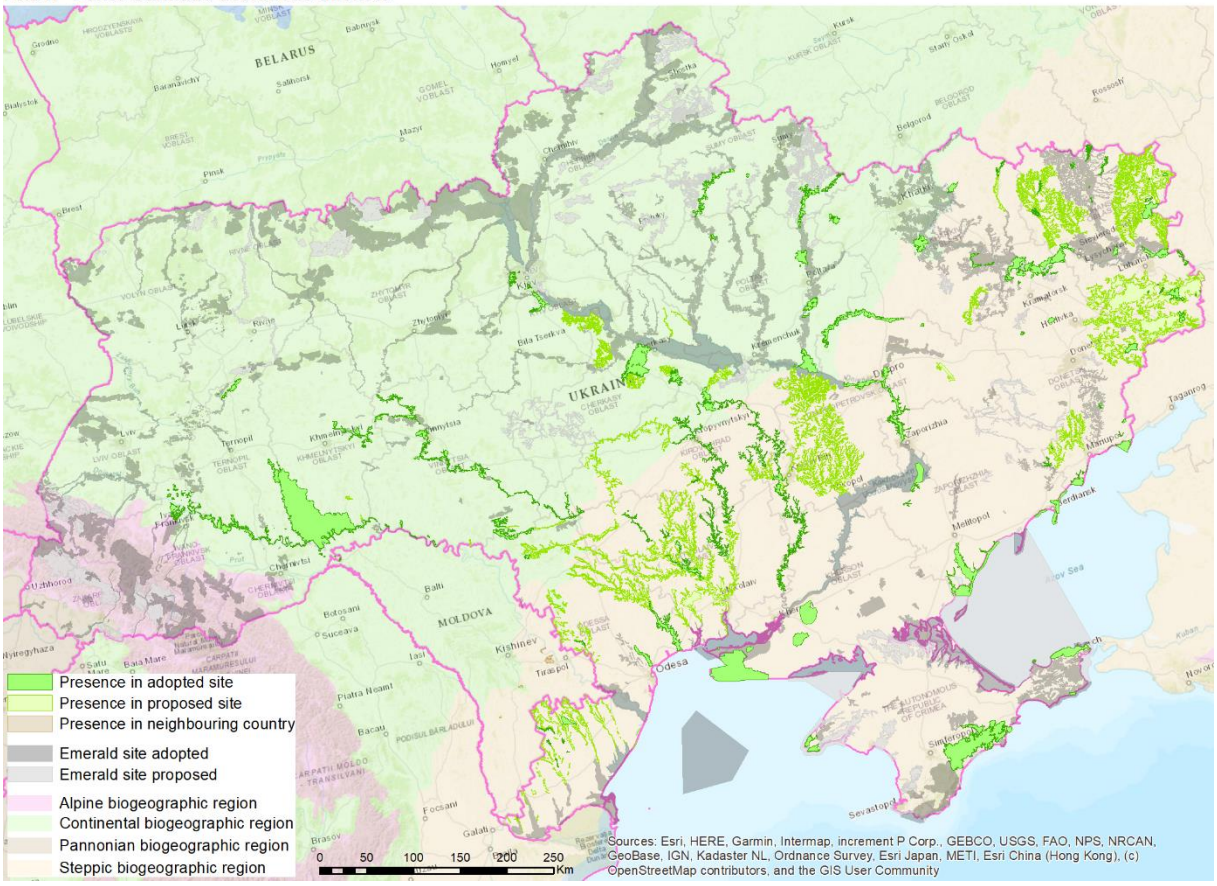
BGR	F3.241 Central European subcontinental thickets	
CON	Num. of sites:	Adopted: 5 (C:5)
	BGR seminar 2019 conclusion:	IN MOD Several sites in western part
	Recommendation 2025:	UA0000011 Podilski Tovtry NNP. Add sites across UA/CON, especially in Polissya, Ternopil, Khmelnytskyi, and Vinnytsia regions and sites/regions specified by local experts.
	Comments from external experts:	5C sites. Kuzemko et al. (2018): all regions. Reported from the Ramsar sites Lower Smotrych River and Bakotska Bay (part of UA0000011 Podilski Tovtry NNP). Dubyna and Dziuba (2020): some associations in all regions. This habitat has a higher diversity of plant associations in the Polissya, Ternopil, Khmelnytskyi, and Vinnytsia regions.
	Comments from local experts:	Kremenetski hory, Medobory, Dniester Canyon NP, Chotynskyj NPP, probably Šatskyj NPP, Male Polisia NP, Roztoччja Biosphere Reserve, Javorivskyj NPP
PAN	Num. of sites:	Adopted: 3 (C:3), Proposed: 3 (C:3)
	BGR seminar 2019 conclusion:	IN MOD several sites
	Recommendation 2025:	Check existing sites and sites specified below.
	Comments from external experts:	Added to 3C sites, now in 6C sites. Onyshchenko et al. (2017): IPA site Chorna Hora (part of UA0000006 Carpathian Biosphere Reserve). Habitat is quite common; C is not sufficient.
	Comments from local experts:	Čornohora close to Vinohrady, Julivski Hory, Berehove, Muzhiievo hills, Yulivska Hora. Habitat is quite distributed, sometimes in small plots.
	References:	Dubyna and Dziuba 2020; Kuzemko et al. 2018, 442; Onyshchenko et al. 2017

F3.241 Central European subcontinental thickets



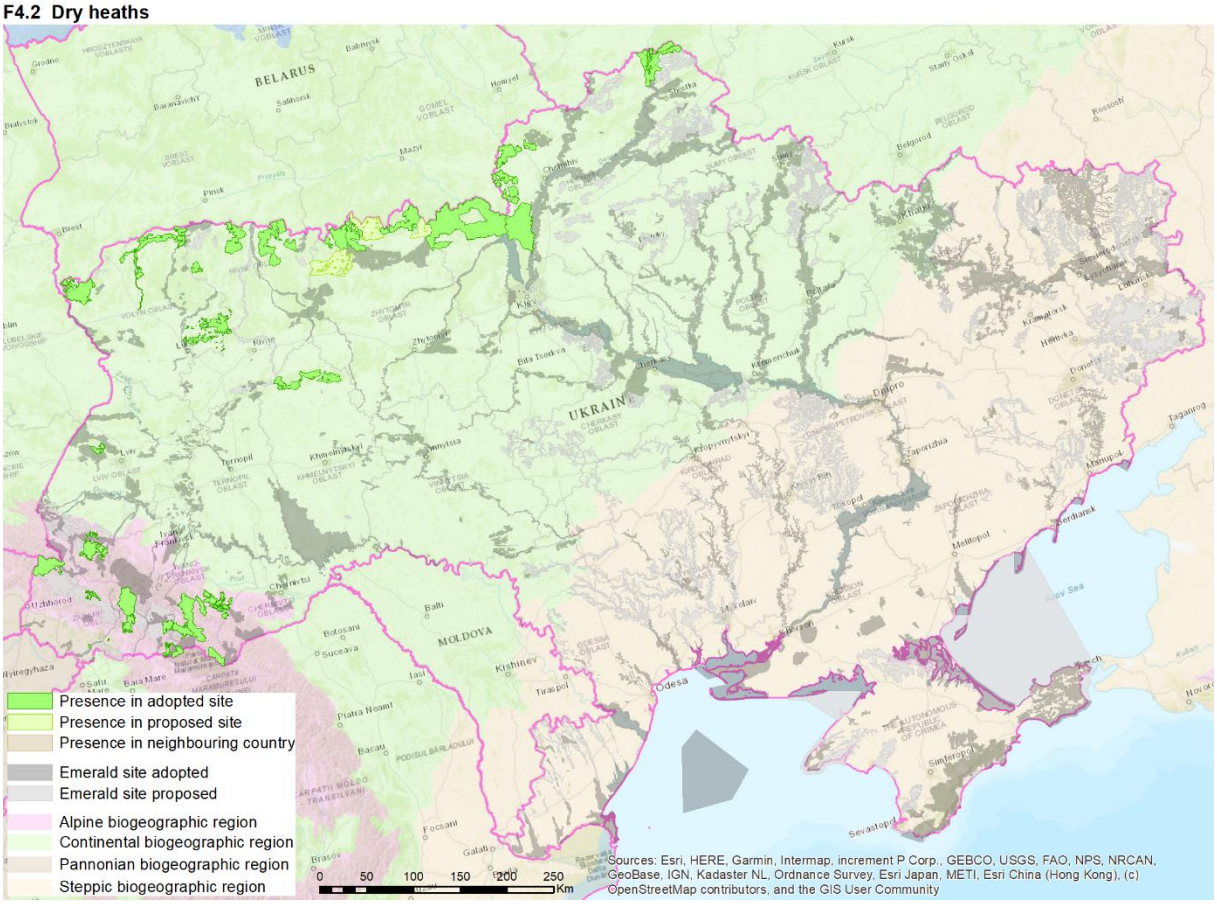
BGR	F3.247 Ponto-Sarmatic deciduous thickets	
CON	Num. of sites:	Adopted: 29 (C:29), Proposed: 12 (C:12)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN Especially in eastern part
	Recommendation 2025:	Added to 12 C sites; now in 41C sites. Probably SUF.
	Comments from external experts:	Added to 12 C sites; now in 41C sites. Kuzemko et al. (2018): Pontic province and adjacent territories (in particular, within the East European and Pannonian provinces). Didukh (2009): Amygdaletea nanae - sporadic in the steppe and forest-steppe (Podillia) zones. The map shows sites near Charkiv, Poltava, Sharhorod, and Chernivtsi. Onyshchenko et al. (2017): IPA sites Ternava - Dnister and Zhyzhava (both are Emerald sites).
	Comments from local experts:	No further information
	References:	Didukh 2009, 448; Kuzemko et al. 2018, 442
STE	Num. of sites:	Adopted: 65 (No data: 1, B:2, C:62), Proposed: 41 (B:4, C:37)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN/CD Delete from Kinburn and Crimea
	Recommendation 2025:	UA/STE well covered, probably SUF. To revise the occurrence in Kinburn and Crimea
	Comments from external experts:	Added to 41 sites (4B, 37C); deleted from 9C sites; now in 106 sites (6B, 99C, 1?). Kuzemko et al. (2018): Pontic province and adjacent territories (particularly within the East European and Pannonian provinces). Onyshchenko (2017): IPA sites Krymski Hory, Striltsivskyi Step, Hranitno-Stepove Pobuzhia, Osovynskyi Step, Kreidiana Flora, Karalarskyi Step, Kamiani Mohyly, Dolyna Mertvovodu.
	Comments from local experts:	To be deleted from Kinburn and Crimea
	References:	Kuzemko et al. 2018, 442; Onyshchenko et al. 2017

F3.247 Ponto-Sarmatic deciduous thickets



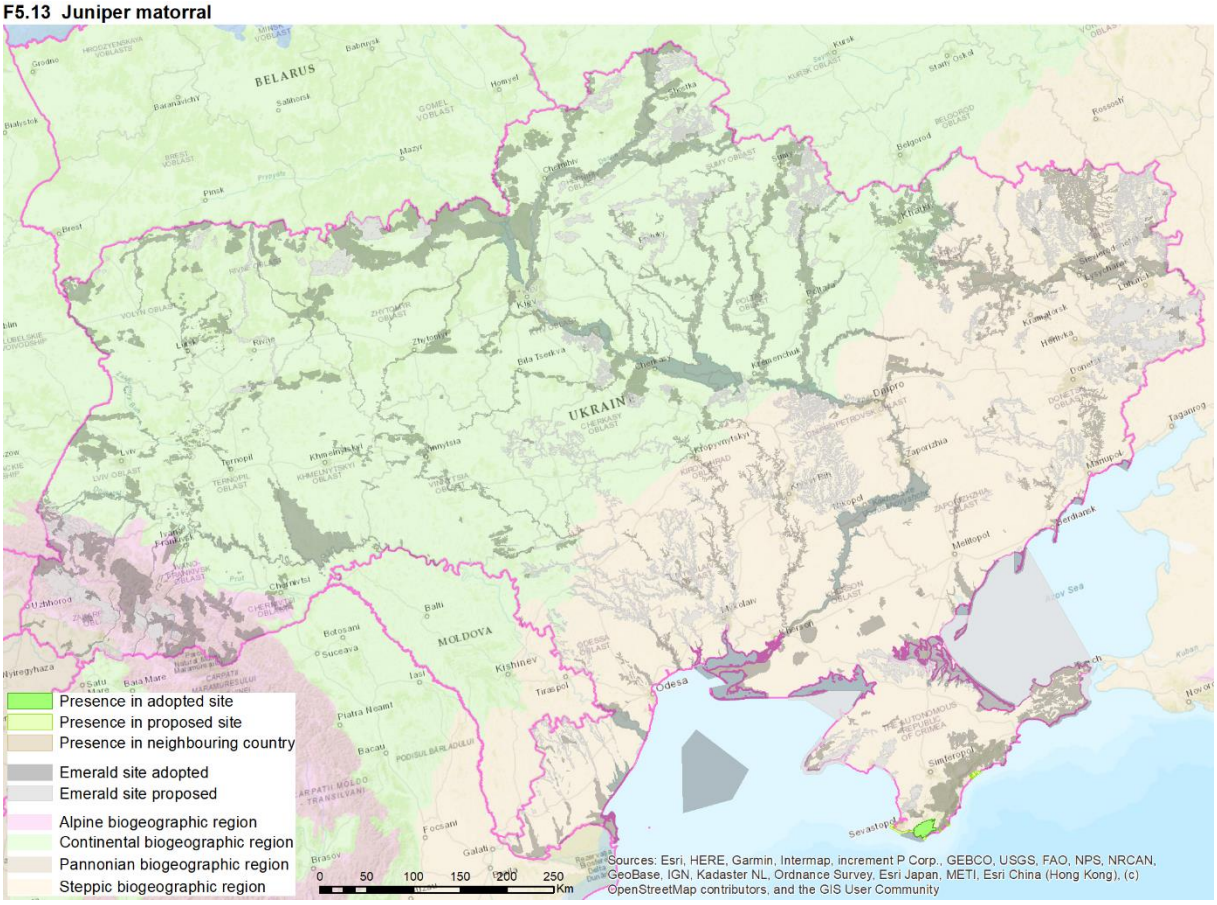
BGR	F4.2 Dry heaths	
ALP	Num. of sites:	Adopted: 8 (C:8)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Additional sites are needed; check Outer and Pokuttskie Gorgany, Gorganska Verkhovyna, and Dniester Beskids, NNP “Skolivski Beskydy”.
	Comments from external experts:	8C sites. Kuzemko et al. (2018): Eastern European forest, Central European broad-leaved forest provinces. Dubyna and Dziuba (2020): Carpathians: NNP “Skolivski Beskydy”, Pidhorodtsivske Forestry. The habitat should have a broader distribution; 8C is not sufficient. Kagalo and Prost (2012): It occurs sporadically in the Outer and Pokuttskie Gorgany, Gorganska Verkhovyna, and Dniester Beskids.
	Comments from local experts:	Gorgany reserve, Verchnij Dnister, Beskydy, Skoliv Beskydy, Verkhovina
	References:	Dubyna and Dziuba 2020; Kagalo and Prost 2012; Kuzemko et al. 2018, 442

F4.2 Dry heaths



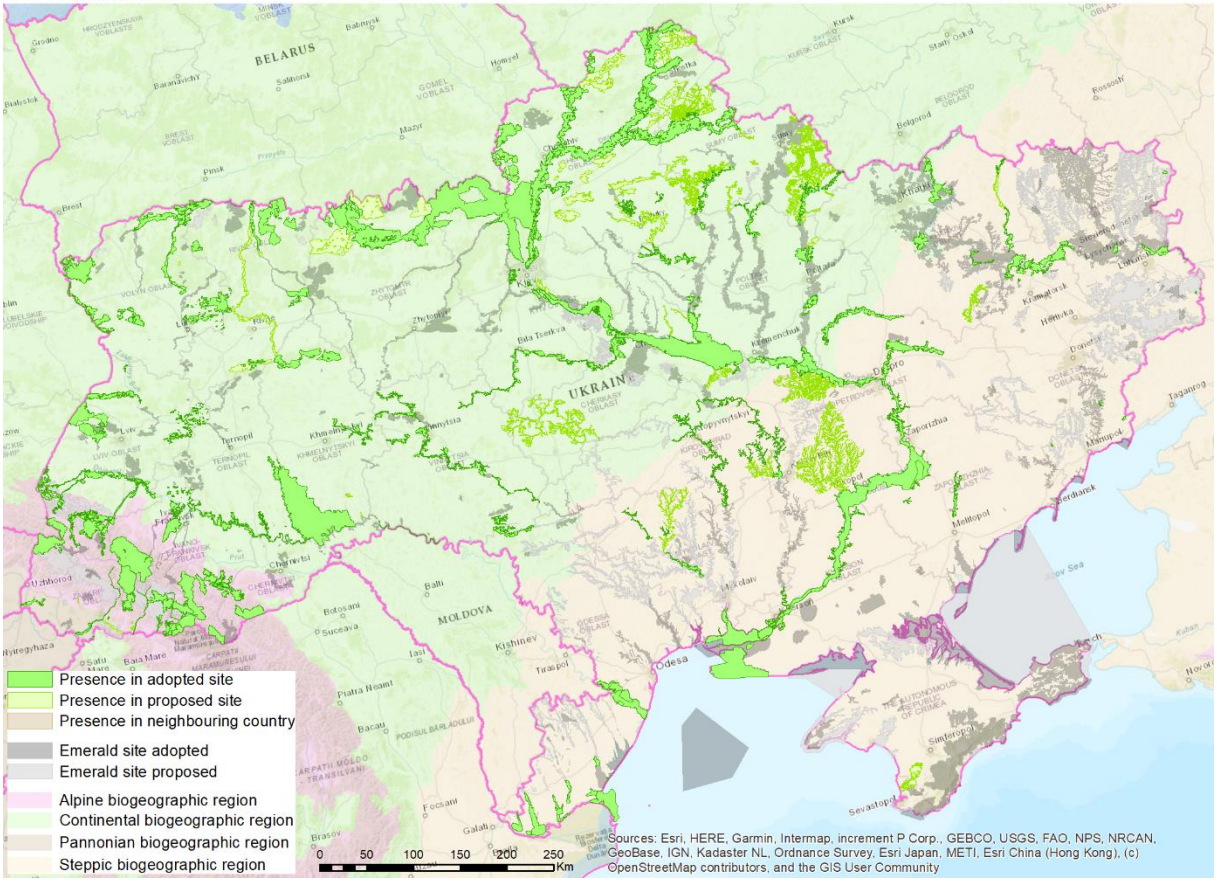
BGR	F5.13 Juniper matorral	
STE	Num. of sites:	Adopted: 1 (A:1), Proposed: 5 (C:5)
	BGR seminar 2019 conclusion:	IN MAJ/IN MIN whole south coast of Crimea
	Recommendation 2025:	Added to 5 sites; now in 6 sites. Probably SUF
	Comments from external experts:	Added to 5 sites; now in 6 sites (1A, 3C). Kuzemko et al. (2018): Euxine province. Didukh (2009): Mountainous Crimea (fragmentary in the western part and on the southern coast).
	Comments from local experts:	Only Crimea
	References:	Didukh 2009; Kuzemko et al. 2018, 442

F5.13 Juniper matorral



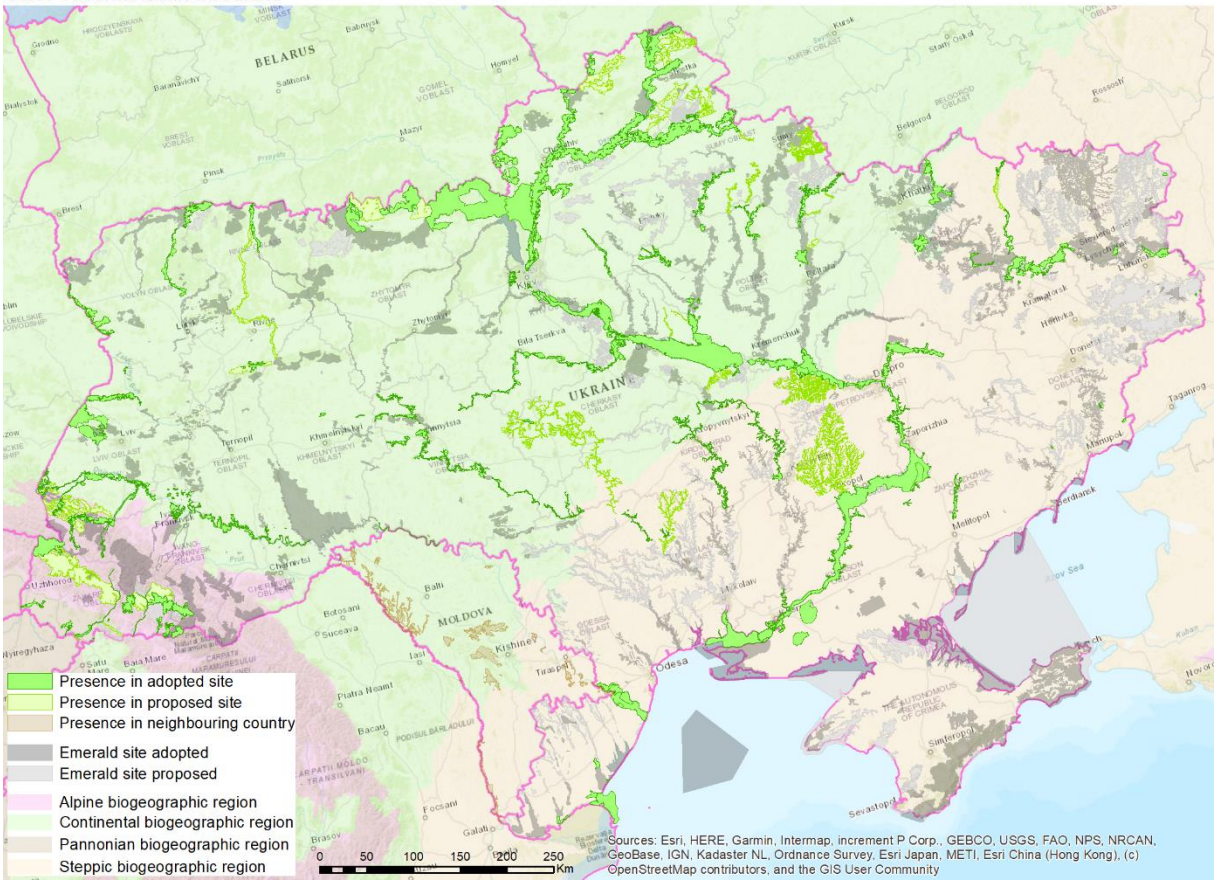
BGR	F9.1 Riverine scrub	
PAN	Num. of sites:	Adopted: 3 (C:3), Proposed: 2 (C:2)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Check sites with rivers/streams: UA0000270 Ponyzzia Borzhavy, UA0000599 Botar.
	Comments from external experts:	Added to 2C sites; now in 5C sites.
	Comments from local experts:	Tisza and the Uh rivers; the lower part of the Borzhava.
	References:	n/a
STE	Num. of sites:	Adopted: 32 (No data: 1, B:2, C:29), Proposed: 7 (C:7)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN/CD CD one site
	Recommendation 2025:	Added to 7C sites; now in 39 sites. Probably SUF.
	Comments from external experts:	Added to 7C sites; now in 39 sites (2B, 36C, 1?). Dubyna and Dzyuba (2019): Salicetum triandrae. Forest-steppe, Steppe (Black Sea region). Listed in Dubyna and Dziuba 2020.
	Comments from local experts:	No further information
	References:	Dubyna and Dziuba 2019; Dubyna and Dziuba 2020

F9.1 Riverine scrub



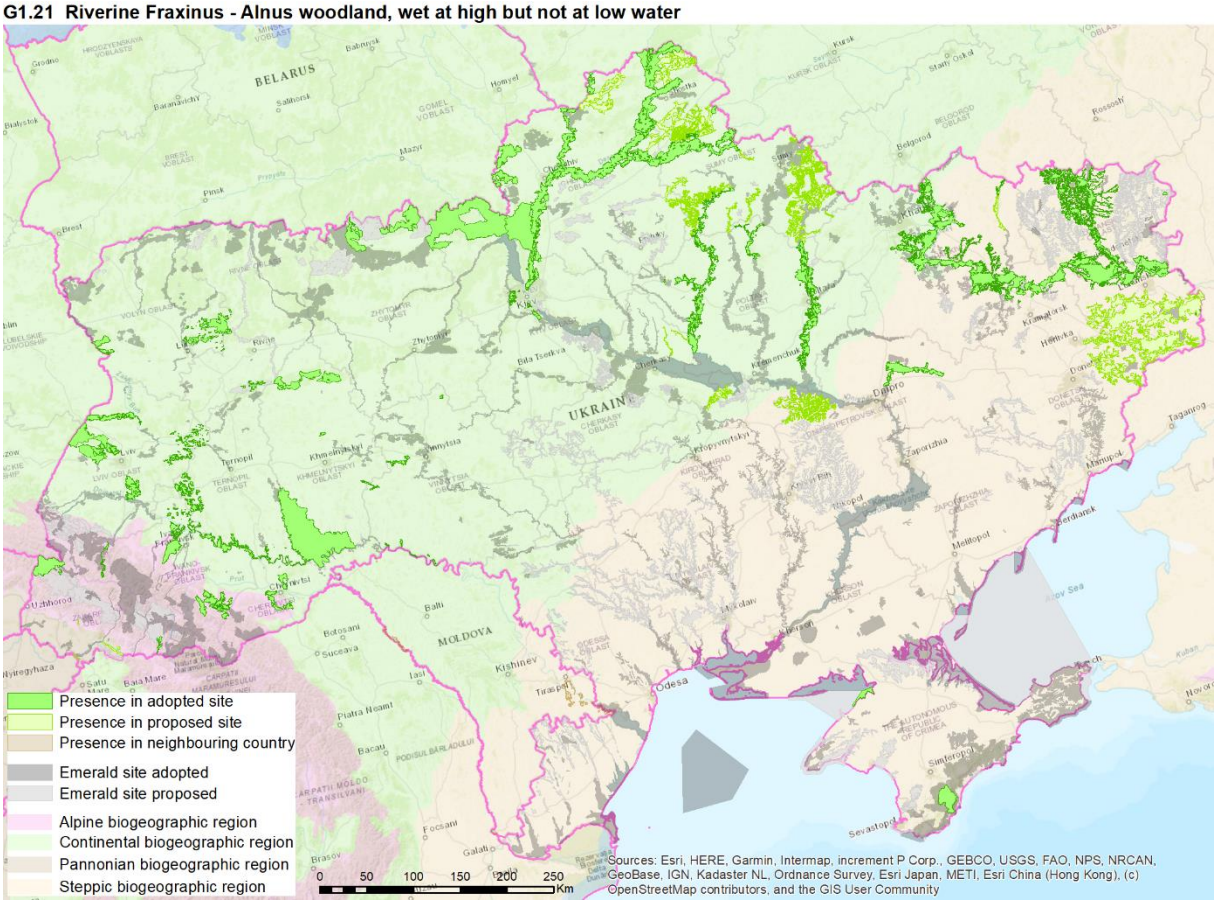
BGR	G1.11 Riverine Salix woodland	
PAN	Num. of sites:	Adopted: 4 (C:4), Proposed: 2 (C:2)
	BGR seminar 2019 conclusion:	IN MOD 2 sites
	Recommendation 2025:	Requested 2 sites added, probably SUF
	Comments from external experts:	Added to 2C sites; now in 6C sites.
	Comments from local experts:	No further information
	References:	n/a

G1.11 Riverine Salix woodland



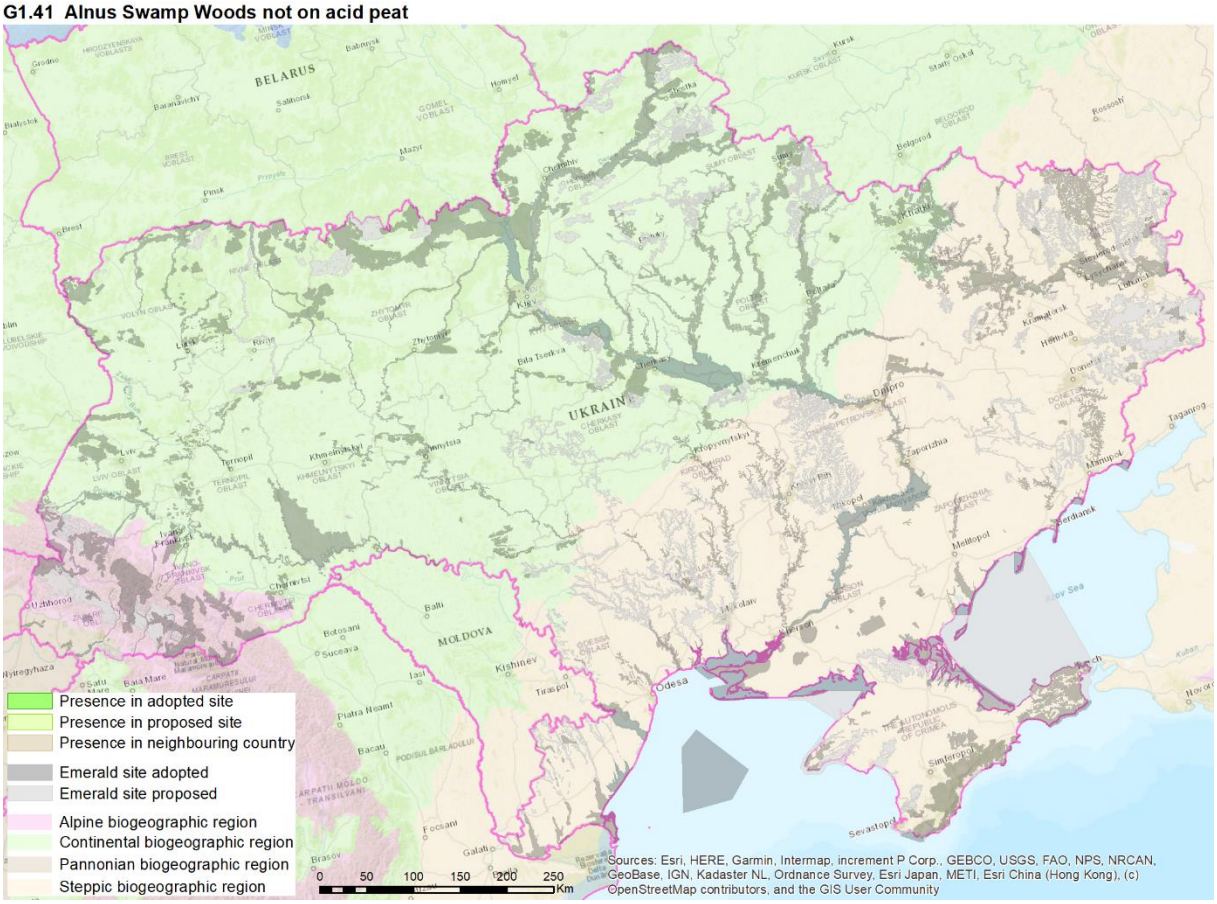
BGR	G1.21 Riverine Fraxinus - Alnus woodland, wet at high but not at low water	
PAN	Num. of sites:	Proposed: 4 (C:4)
	BGR seminar 2019 conclusion:	IN MOD Latorica
	Recommendation 2025:	Further research is needed. Check site UA0000113 Prytysianskyi.
	Comments from external experts:	Added to 4C sites; now in 4C sites. It was added to 4 sites but not to the requested site, Latorica. The occurrence at the site UA0000113 Prytysianskyi should be checked.
	Comments from local experts:	Habitat distribution to be studied
	References:	n/a

G1.21 Riverine Fraxinus - Alnus woodland, wet at high but not at low water



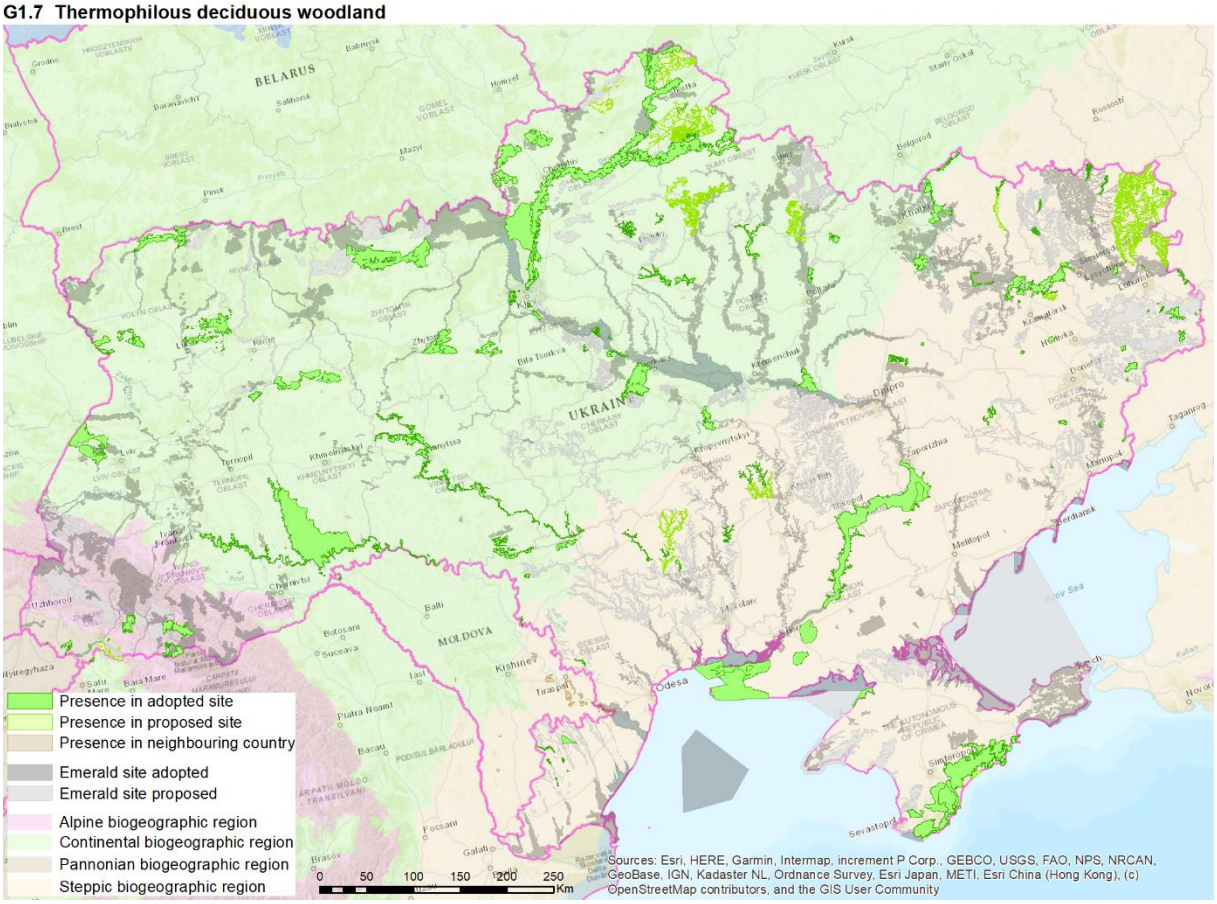
BGR	G1.41 Alnus Swamp Woods not on acid peat	
CON	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MOD/IN MIN/CD
	Recommendation 2025:	Check for sites, especially in the forest-steppe zone. Polissya, Southern Bug River basin, Siverskyi Donets River basin.
	Comments from external experts:	No site. Kuzemko et al. (2018): Carpathian-Alpine mountain (rare), Pannonian forest-steppe, Pontic steppe, East European forest, East European forest-steppe, Central European broad-leaved forest provinces. Dubyna and Dziuba (2020): Polissya, forest-steppe, Southern Bug River basin, Siverskyi Donets River basin.
	Comments from local experts:	Northern Podilia NP, Polissya, Poliskyj NP, Polissya Reserve, Šatskyj NPP, the south part of the Rivne region
	References:	Dubyna and Dziuba 2020; Kuzemko et al. 2018, 442
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MOD/CD
	Recommendation 2025:	Further research is needed. UA0000270 Ponyzzia Borzhavy. Also check other wetland sites.
	Comments from external experts:	No site. Kuzemko et al. (2018): Carpathian-Alpine mountain (rare), Pannonian forest-steppe, Pontic steppe, East European forest, East European forest-steppe, Central European broad-leaved forest provinces. Onyshchenko et al. (2017): IPA site Zaplavni Lisy na Borzhavi (UA0000270 Ponyzzia Borzhavy).
	Comments from local experts:	No further information
	References:	Kuzemko et al. 2018, 442; Onyshchenko et al. 2017
STE	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MOD/IN MIN/CD
	Recommendation 2025:	UA0000141 Dnistrovskyi Lyman, UA0000029 Sviati Hory, UA0000069 Kreminski Lisy, UA0000212 Samarskyi Lis, UA0000215 Kinburnska Kosa. Also, check the other sites specified below.
	Comments from external experts:	No site. Kuzemko et al. (2018): Carpathian-Alpine mountain (rare), Pannonian forest-steppe, Pontic steppe, East European forest, East European forest-steppe, Central European broad-leaved forest provinces. The habitat is reported from the Ramsar site Dniester-Turunchuk Crossrivers Area (Emerald site UA0000141 Dnistrovskyi Lyman). Onyshchenko et al., (2017): IPA sites Sviati Hory (UA0000029 Sviati Hory), Zaplava Siverskoho Dintsia (UA0000029 Sviati Hory and UA0000069 Kreminski Lisy); Samarskyi Lis (UA0000212 Samarskyi Lis); Volyzhyn Lis (UA0000215 Kinburnska Kosa).
	Comments from local experts:	Kreminna Forest, Kinburn - burned down. Dniprovski reserve.
	References:	Kuzemko et al. 2018, 442

G1.41 Alnus Swamp Woods not on acid peat



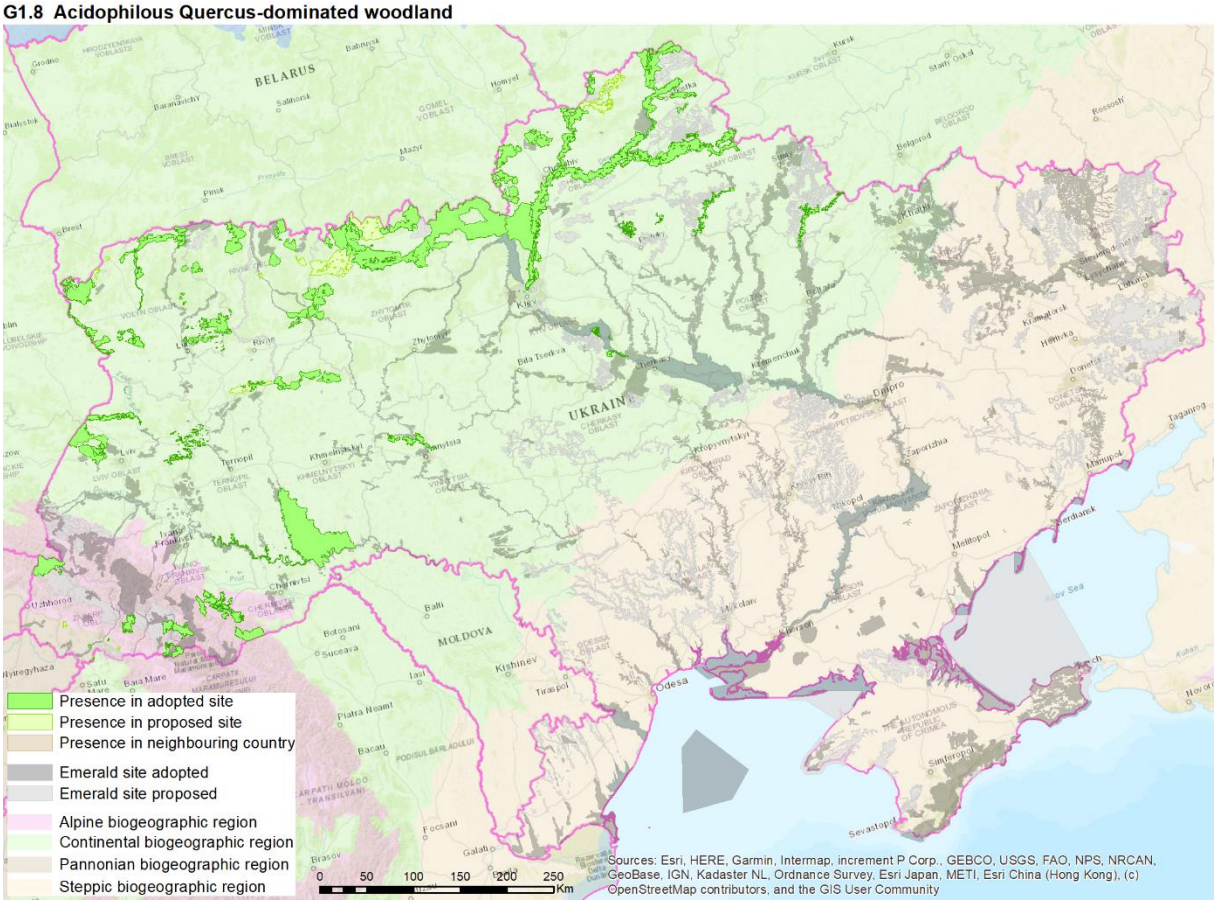
BGR	G1.7 Thermophilous deciduous woodland	
ALP	Num. of sites:	Adopted: 1 (C:1), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Check the Uzhorod region and sites indicated by Kagalo and Prost (2012).
	Comments from external experts:	Added to 1C site; now in 2C sites. Didukh (2009): 33 Querceta (petraeae) cornosa (maris): Uzhhorod, Beregiv districts.
	Comments from local experts:	Kosiv mountains, Černohora
	References:	Didukh (2009), 448, Kagalo and Prost (2012)
PAN	Num. of sites:	Adopted: 4 (C:4), Proposed: 4 (B:2, C:2)
	BGR seminar 2019 conclusion:	IN MOD at least one site
	Recommendation 2025:	Added to 4 sites; now in 8 sites. Probably SUF.
	Comments from external experts:	Added to 4 sites (2B, 2C); now in 8 sites (2B, 6C).
	Comments from local experts:	Sufficient
	References:	n/a

G1.7 Thermophilous deciduous woodland



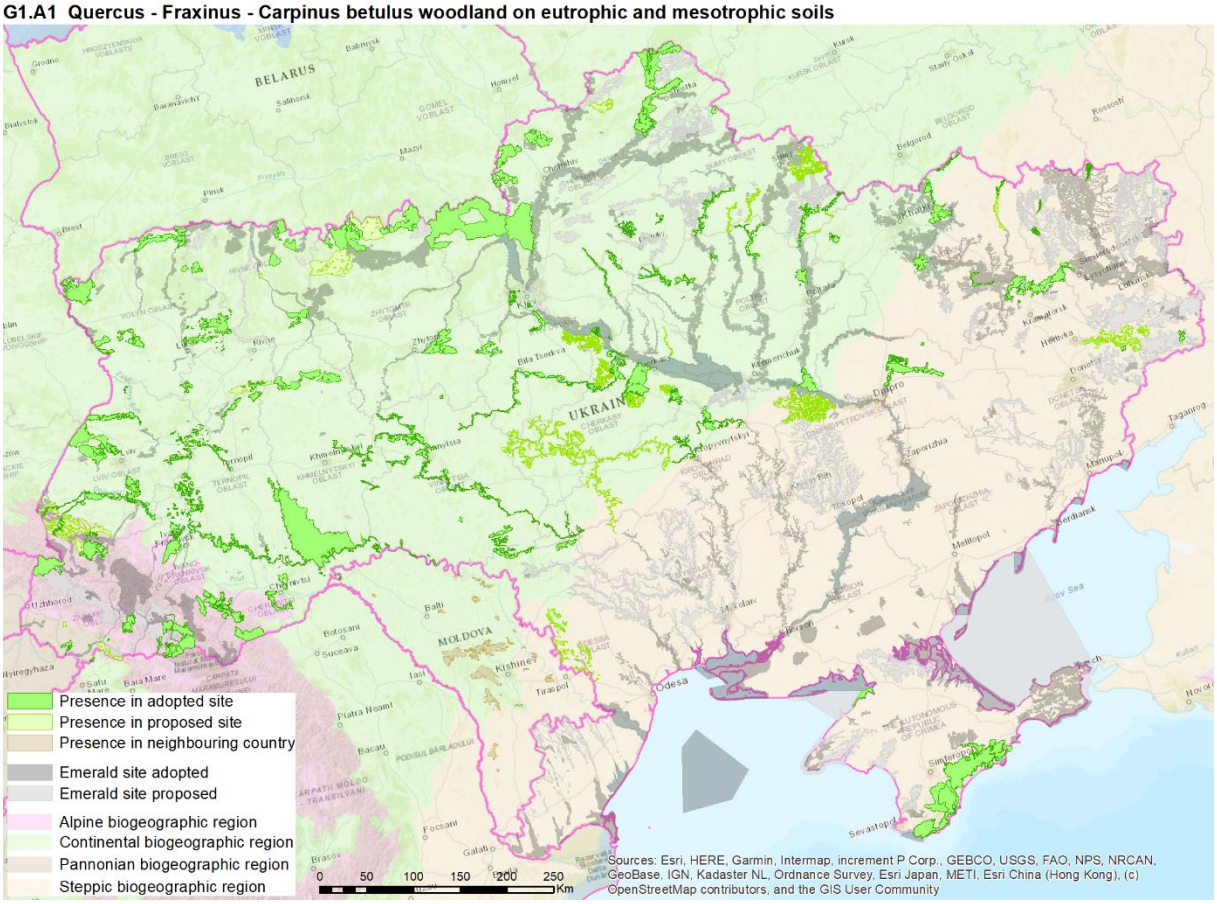
BGR	G1.8 Acidophilous Quercus-dominated woodland	
PAN	Num. of sites:	Adopted: 1 (C:1), Proposed: 4 (A:1, C:3)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Added to 4 sites; now in 5 sites. Probably SUF.
	Comments from external experts:	Added to 4 sites (1A, 3C); now in 5 sites (1A, 4C). Didukh (2009): surroundings of Uzhorod, southern macroslope of the Beskydy Mountains (upper reaches of the Latorytsia River).
	Comments from local experts:	Quite rare
	References:	Didukh (2009)

G1.8 Acidophilous Quercus-dominated woodland



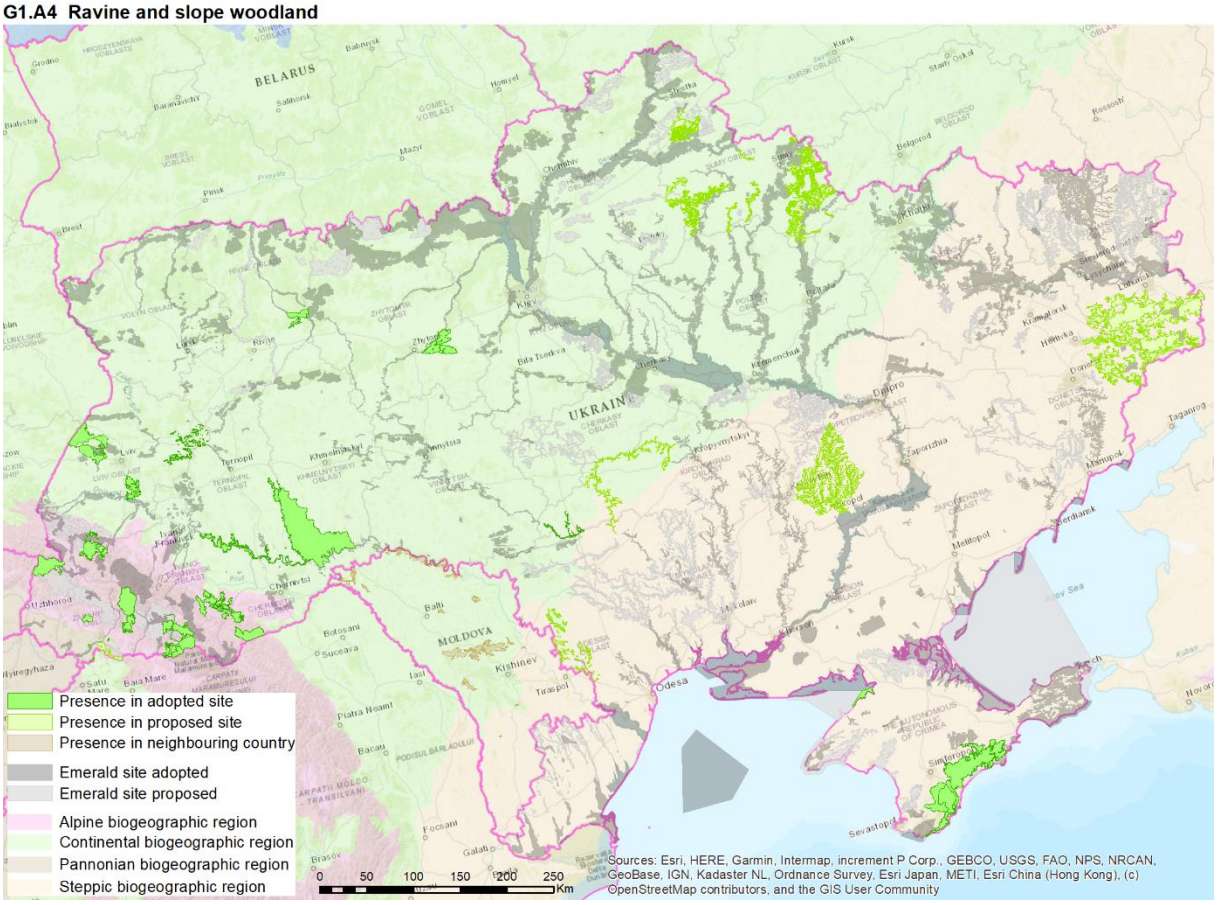
BGR	G1.A1 Quercus - Fraxinus - Carpinus betulus woodland on eutrophic and mesotrophic soils	
PAN	Num. of sites:	Adopted: 3 (C:3), Proposed: 3 (B:1, C:2)
	BGR seminar 2019 conclusion:	IN MOD at least one site
	Recommendation 2025:	Added to 3 sites; now in 6 sites. Probably SUF.
	Comments from external experts:	Added to 3 sites (1B, 2C); now in 6 sites (1B, 5C). Didukh (2009): Transcarpathian Lowlands: floodplains of the Tysa and Borzhava Rivers, Vynohradiv, Uzhhorod, Beregiv districts, volcanic foothills of the Vyhorlat-Hutynskyi ridge (Yulivska Mountain, Biganska Mountain, Chorna Mountain)
	Comments from local experts:	No further information
	References:	Didukh (2009)

G1.A1 Quercus - Fraxinus - Carpinus betulus woodland on eutrophic and mesotrophic soils



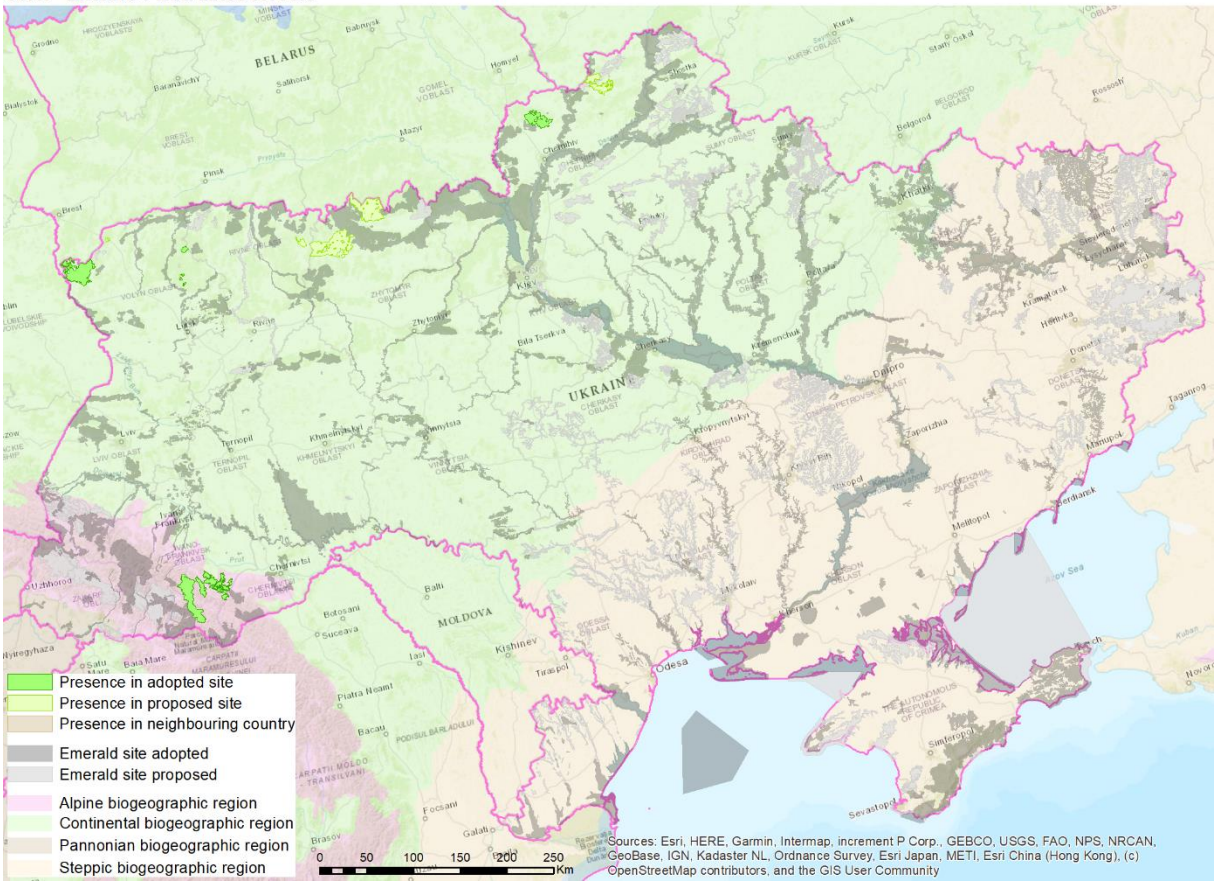
BGR	G1.A4 Ravine and slope woodland	
CON	Num. of sites:	Adopted: 9 (B:3, C:6), Proposed: 14 (B:3, C:11)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Added to 14 sites; now in 23 sites. Probably sufficient.
	Comments from external experts:	Added to 14 sites (3B, 11C); now in 23 sites (6B, 17C). Kuzemko et al. (2018): Carpathian-Alpine Mountain, Pannonian forest-steppe, East European Forest, Central European Broad-Leaved Forest Provinces. Didukh (2009): Transnistria (Khmelnytsky region).
	Comments from local experts:	Northern Podilia, Roztoččja. Habitat is quite well represented.
	References:	Kuzemko et al. 2018, 442; Didukh (2009).

G1.A4 Ravine and slope woodland



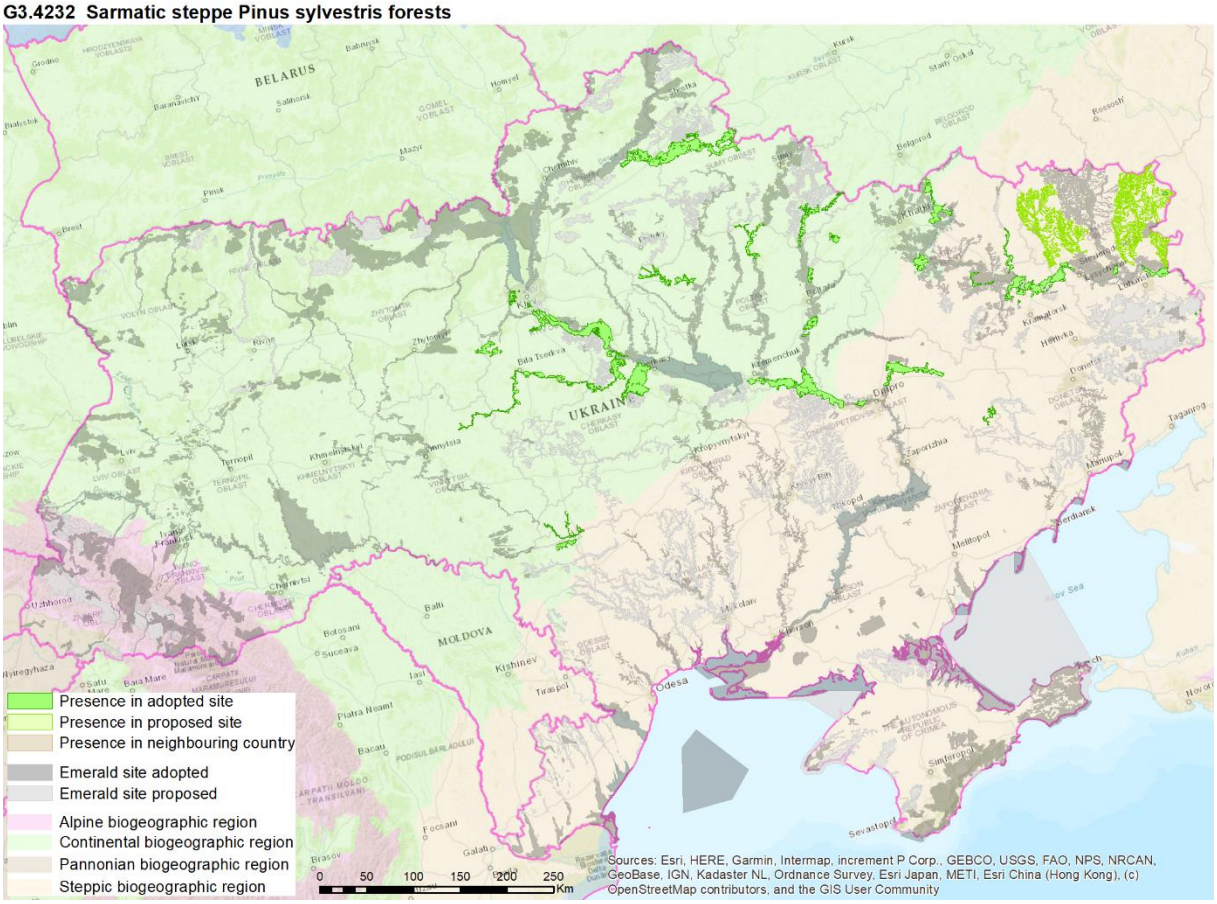
BGR	G3.1F Enclave Picea abies forests	
CON	Num. of sites:	Adopted: 4 (C:4), Proposed: 6 (C:6)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check existing sites in Ukrainian Polissya and also suitable sites in other specified regions.
	Comments from external experts:	Added to 7C sites; now in 10C sites. Kuzemko et al. (2018): Eastern European forest province. Onyshchenko et al. (2017) reported the habitat for IPA sites Cherevaskyi Lis, Rys (both UA0000262 Cherevaskyi Lis), Cheremske Boloto (UA0000024 Cheremskyi Nature Reserve), and Shatski Ozera (UA0000025 Shatskyi). Didukh (2009): Ukrainian Polissya.
	Comments from local experts:	Lviv region, Nemyriv area, Shatski Lis, Rivne region, Polissya (fragmented)
	References:	Kuzemko et al. 2018, 442; Onyshchenko et al. 2017; Didukh (2009)

G3.1F Enclave Picea abies forests



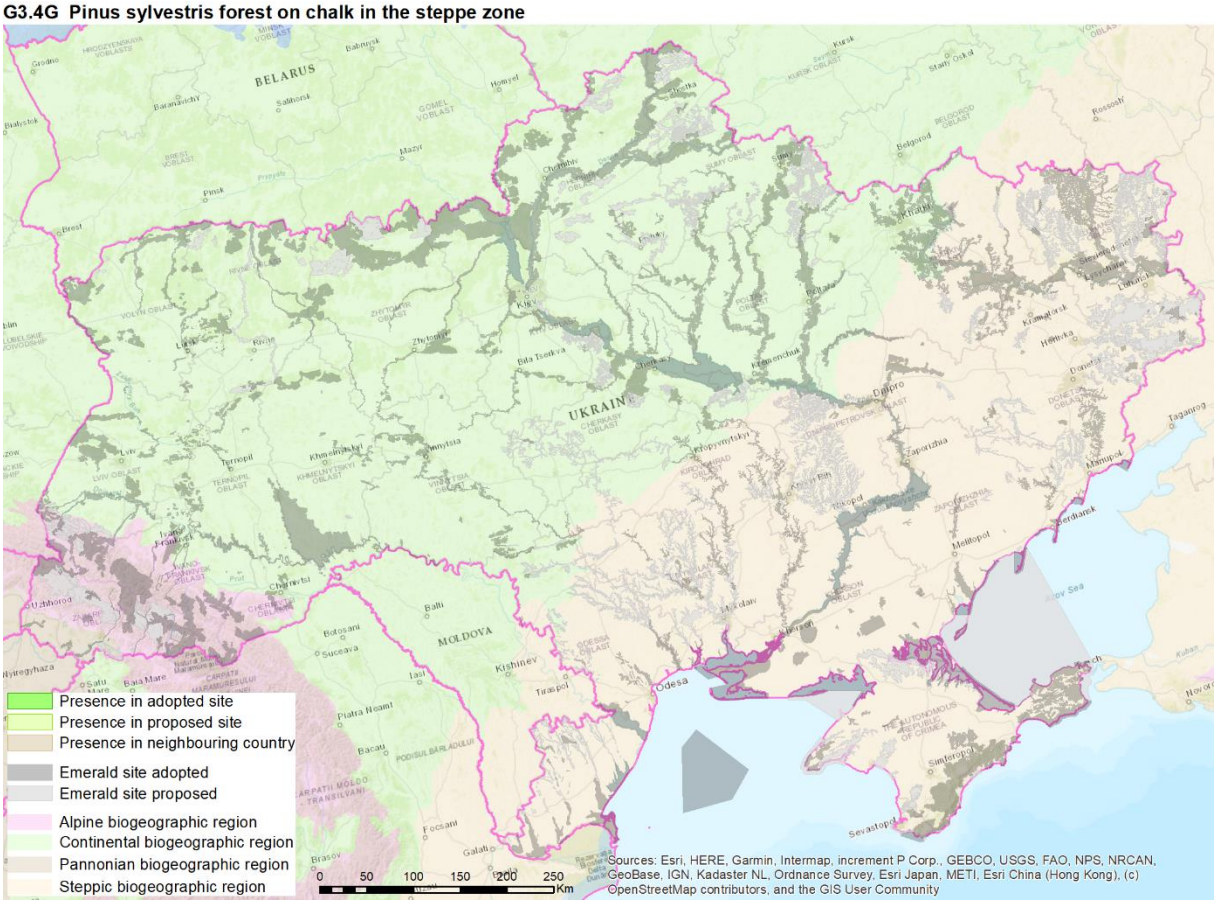
BGR	G3.4232 Sarmatic steppe Pinus sylvestris forests	
CON	Num. of sites:	Adopted: 23 (B:3, C:20)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN eastern part
	Recommendation 2025:	Check the eastern part.
	Comments from external experts:	Added to 5 sites (1B4C). Now in 23 sites (3B, 20C). Kuzemko et al. (2018): East European forest, East European forest-steppe, Pontic steppe provinces. Onyshchenko et al (2017) reported the habitat for IPA sites Koncha-Zaspivskyi Lis (UA0000043 Holosiivskyi NNP) and Bir na Merli (UA0000075 Slobozhanskyi NNP). Dubyna and Dziuba (2020): Pine terraces of the Dnipro River.
	Comments from local experts:	This habitat is sometimes of secondary origin, for example, northern part of Podilia, hilly sites. Thus, it is important to distinguish primary and secondary stands.
	References:	Dubyna and Dziuba; Kuzemko et al. 2018, 442; Onyshchenko et al. 2017
STE	Num. of sites:	Adopted: 12 (B:3, C:9), Proposed: 5 (B:1, C:4)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN eastern part
	Recommendation 2025:	Added to 5 sites; now in 17 sites. Probably SUF.
	Comments from external experts:	Added to 5 sites (1B, 4C); now in 17 sites (4B, 13C). Kuzemko et al. (2018): East European forest, East European forest-steppe, Pontic steppe provinces. Onyshchenko et al. (2017) reported the habitat for IPA sites Sviati Hory (UA0000029 Sviati Hory) and Samarskyi Lis (UA0000212 Samarskyi Lis). Dubyna and Dziuba (2019): Pine terrace of the Siverskyi Donets River.
	Comments from local experts:	Sviatohirskyi NP, Samarski lis—but damaged by the invasion. *Pinus cretica* occurs here.
	References:	Dubyna and Dziuba 2020; Kuzemko et al. 2018, 442; Onyshchenko et al. 2017

G3.4232 Sarmatic steppe Pinus sylvestris forests



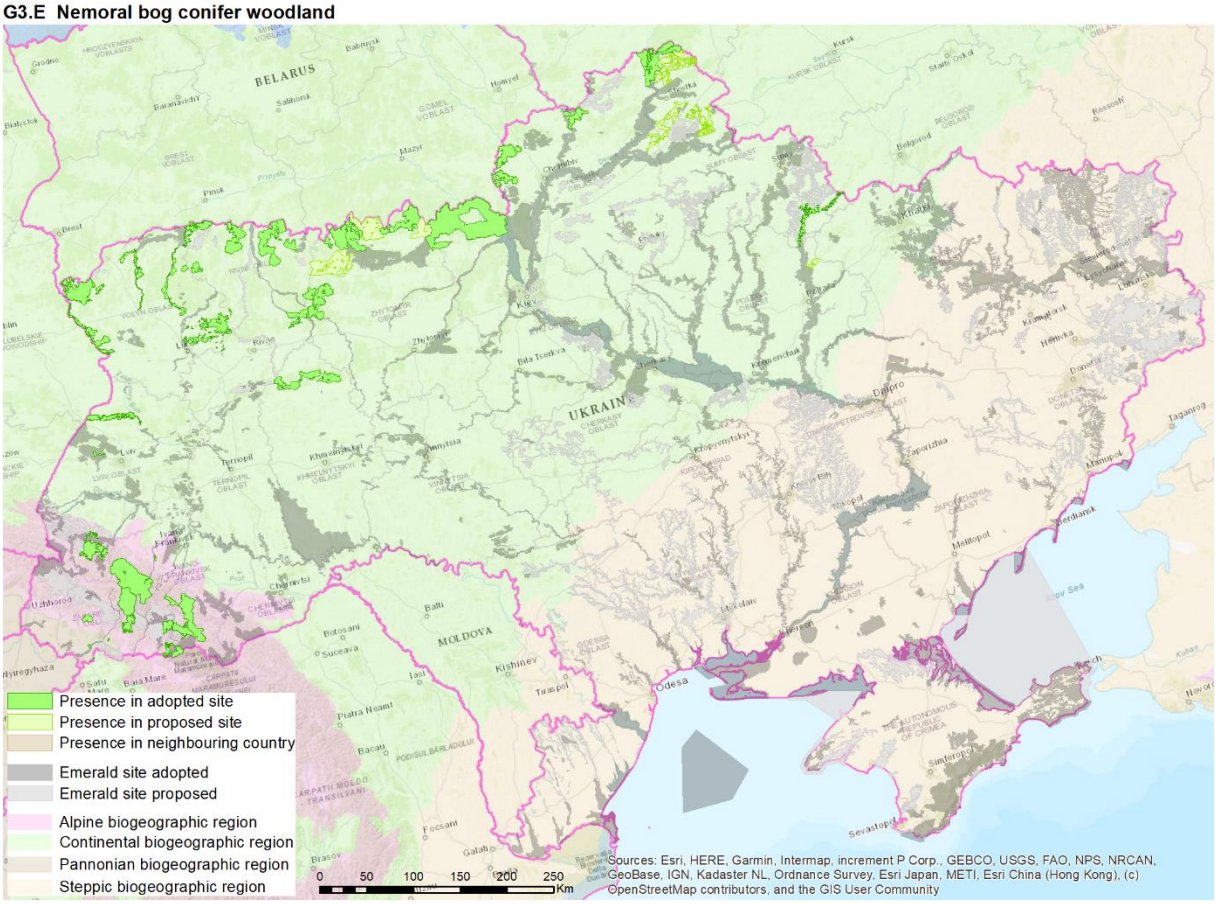
BGR	G3.4G Pinus sylvestris forest on chalk in the steppe zone	
STE	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Siverskyi Donets Basin
	Comments from external experts:	No site. Kuzemko et al. (2018): Pontic steppe provinces (Hologora-Kremenets Range and Siverskyi Donets Basin). Didukh (2009): Chalk slopes of the Siverskyi Donets River in the middle reaches (Donetsk region).
	Comments from local experts:	Hologora and Kremenets ranges are in CON. Siverski Donets is correct.
	References:	Kuzemko et al. 2018, 442; Didukh (2009).

G3.4G Pinus sylvestris forest on chalk in the steppe zone



BGR	G3.E Nemoral bog conifer woodland	
ALP	Num. of sites:	Adopted: 8 (C:8)
	BGR seminar 2019 conclusion:	IN MOD western part
	Recommendation 2025:	Check the western part and sites indicated by Kagalo and Prost (2012).
	Comments from external experts:	8C sites. Kuzemko et al. (2018): Marmaros-Chornohirsko-Svydovetskyi district of the Carpathian-Alpine mountain province. Onyshchenko et al. (2017) reported habitat from the IPA site Turova Dacha (UA0000260 Turova Dacha). Didukh (2009): Ukrainian Carpathians: mainly the Chornohora ridge, subalpine belt (Transcarpathian region, Ivano-Frankivsk region), Skoliv Beskydy, Skybov and Privododilny Gorgany, basins of the Prut, Lomnytsia, Bystrytsia Nadvirnianska rivers. Kagalo and Prost (2012): occasionally in narrow rivers and passage valleys of the northern macroslope: in the Beskydy (Strysko-Syanska Verkhovyna, Skolivskie Beskydy), more often in the Gorgany. Southern macroslope: on the Negrovets, Borzhava, and Krasna ridges—mainly on the edge of developed upland bogs on degraded peatlands. In Chornogora, they are represented in separate fragments in glacial karsts of the northern macroslope (truncheons Kizi Ulogi, Gadzhyna, Tsybulnyk).
	Comments from local experts:	Carpathian NP, Skoliv Beskydy NP, Začarovanyj kraj NPP. Probably Gorgany Reserve, Sini hory.
	References:	Kagalo and Prost 2012; Kuzemko et al. 2018, 442; Onyshchenko et al. 2017; Didukh 2009, 448

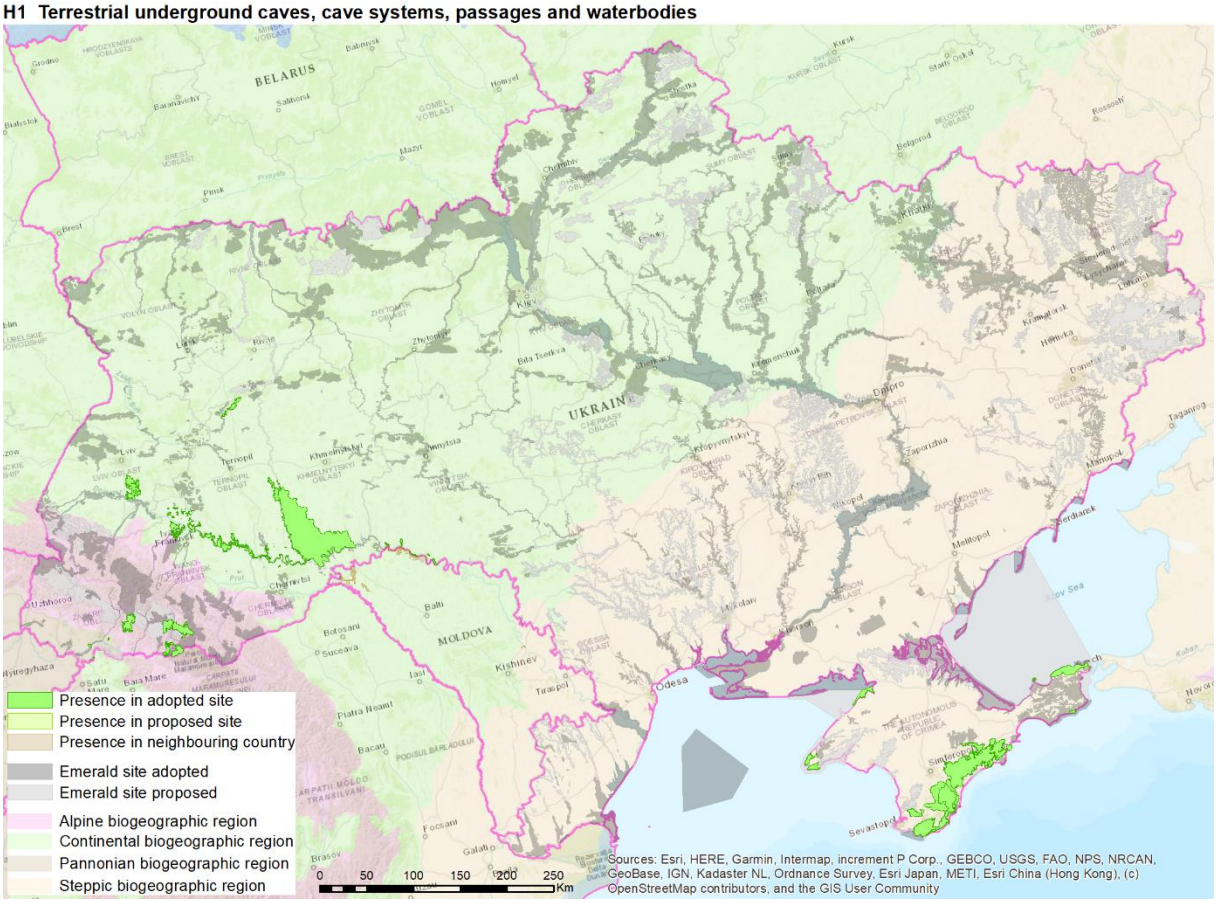
G3.E Nemoral bog conifer woodland



BGR	H1 Terrestrial underground caves, cave systems, passages and waterbodies	
ALP	Num. of sites:	Adopted: 2 (C:2)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	More sites needed. The knowledge of caves is sufficient to select further sites.
	Comments from external experts:	4 sites (1B3C). EU4Environment (2024): 1B 4C sites represent between 2% and 23% of the national total, suggesting more sites are available. The Emil Racoviţă cave belongs to the biggest caves in the world. Kagalo and Prost (2012): It occurs sporadically throughout the region. The most famous is the Druzhba cave, part of the Carpathian Biosphere Reserve. Map of caves in UA/ALP is on https://speleo.land.kiev.ua/atlas-caves.html. https://podorozhuy.com.ua/2020/07/08/zak-caves/
	Comments from local experts:	Velyka Uhonka, Mala Uhonka, Carpathian Biosphere Reserve
	References:	EU4Environment (2024); https://www.moldovenii.md/md/section/333/content/10058
CON	Num. of sites:	Adopted: 9 (B:3, C:6)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Add sites and check sites specified in the two web pages and caves mapped by Kagalo and Prost (2012).
	Comments from external experts:	2C sites. Kuzemko et al. (2018): Carpathian-Alpine Mountain. Karst caves are characteristic of the Carpathians and the Podillia, Bukovina (including Pokuttya). Map of caves in UA/CON is on https://speleo.land.kiev.ua/atlas-caves.html. Listed caves: Cherleny Kamin (Tyachiv district), Druzhba (Mala Ugolka), Milk Stone (Velyka Uholka), Ur Cave (Antalovetska Polyana mountain, Vorochevo, Perechyn district), Cave on Petros.
	Comments from local experts:	Dniester Canyon, southern Podilia, Podilia caves, Transdnisteria. Bukovina (including Pokuttya)
	References:	Kagalo and Prost 2012; Kuzemko et al. 2018, 442; https://podorozhuy.com.ua/2020/07/08/zak-caves/; https://speleo.land.kiev.ua/atlas-caves.html
PAN	Num. of sites:	Adopted: 1 (C:1)
	BGR seminar 2019 conclusion:	SR REF

	Recommendation 2025:	Further research is needed, in cooperation with speleologists. To check the occurrence in UA.
	Comments from external experts:	9 sites (3B, 6C). Kuzemko et al. (2018): Central European Province.
	Comments from local experts:	Surroundings of Hanychi, based on the map provided by Kagalo.
	References:	Kuzemko et al. 2018; https://podorozhuy.com.ua/2020/07/08/zak-caves/; https://speleo.land.kiev.ua/atlas-caves.html
STE	Num. of sites:	Adopted: 11 (A:2, B:1, C:8)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check especially the mountain Crimea.
	Comments from external experts:	1C site. Caves in Black Sea Region (Odessa district, Tarkhankut). Karst caves are characteristic of the Mountainous Crimea (Yalta and Central Karst Plateau, Chatyr-Dag, Dolgorukivska Yayla, Karabi-Yayla), Black Sea Region (Odessa district, Tarkhankut). Map of caves in UA/STE is on https://speleo.land.kiev.ua/atlas-caves.html.
	Comments from local experts:	No more information
	References:	n/a

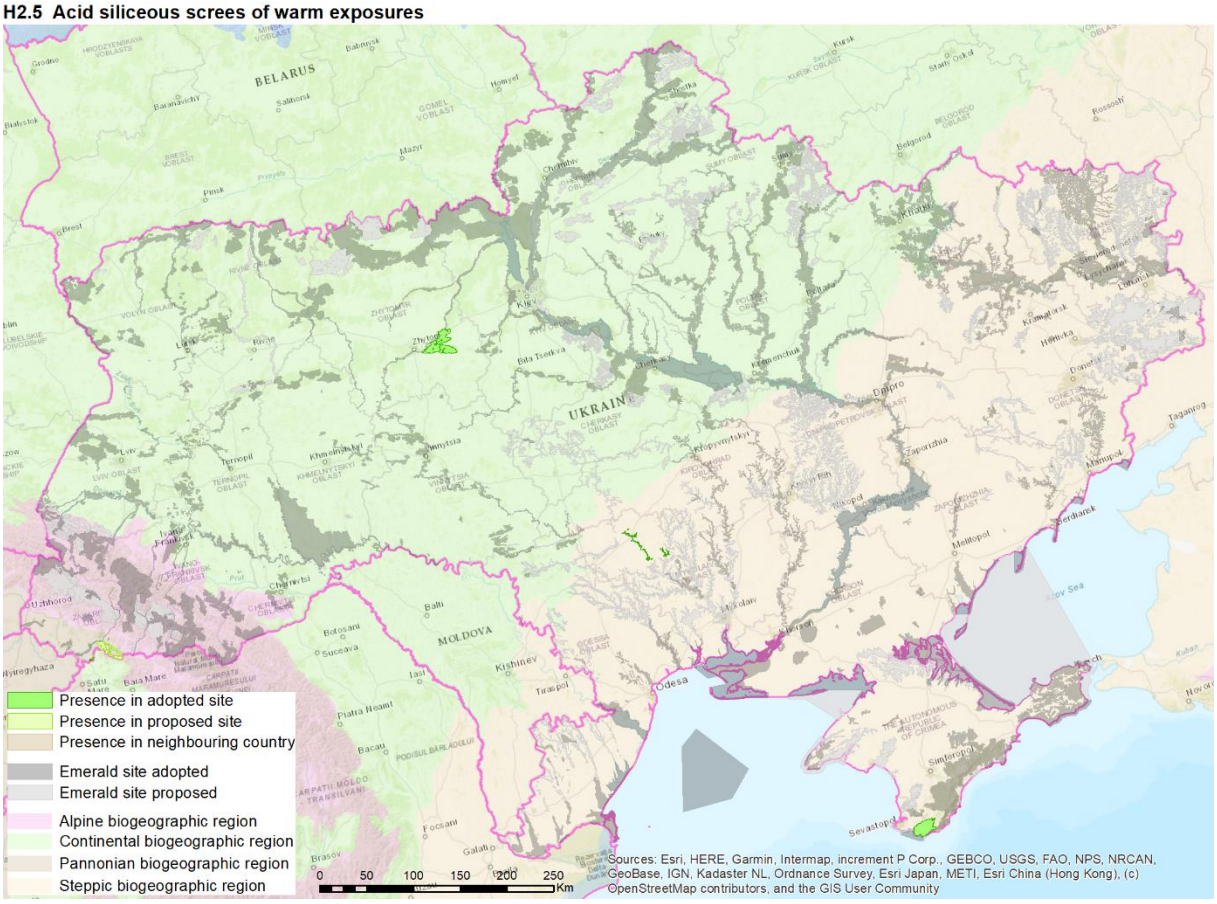
H1 Terrestrial underground caves, cave systems, passages and waterbodies



BGR	H2.5 Acid siliceous screes of warm exposures	
CON	Num. of sites:	Adopted: 2C
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Further mapping is needed; check for suitable sites, especially in Slovečansko-Ovručskyj kriaž and the surroundings of Žytomyr.
	Comments from external experts:	2C sites. Kuzemko et al. (2018): Carpathian-Alpine mountain province (mountain ranges of Svydovets, Chornogora, Vigorlat-Hutynska ridge, in the lowlands of the Polonynsky and Vododilny ranges).
	Comments from local experts:	Slovečansko-Ovručskyj kriaž, Žytomyr
	References:	Kuzemko et al. 2018, 442; https://podorozhuy.com.ua/2020/07/08/zak-caves/; https://speleo.land.kiev.ua/atlas-caves.html
PAN	Num. of sites:	5C sites

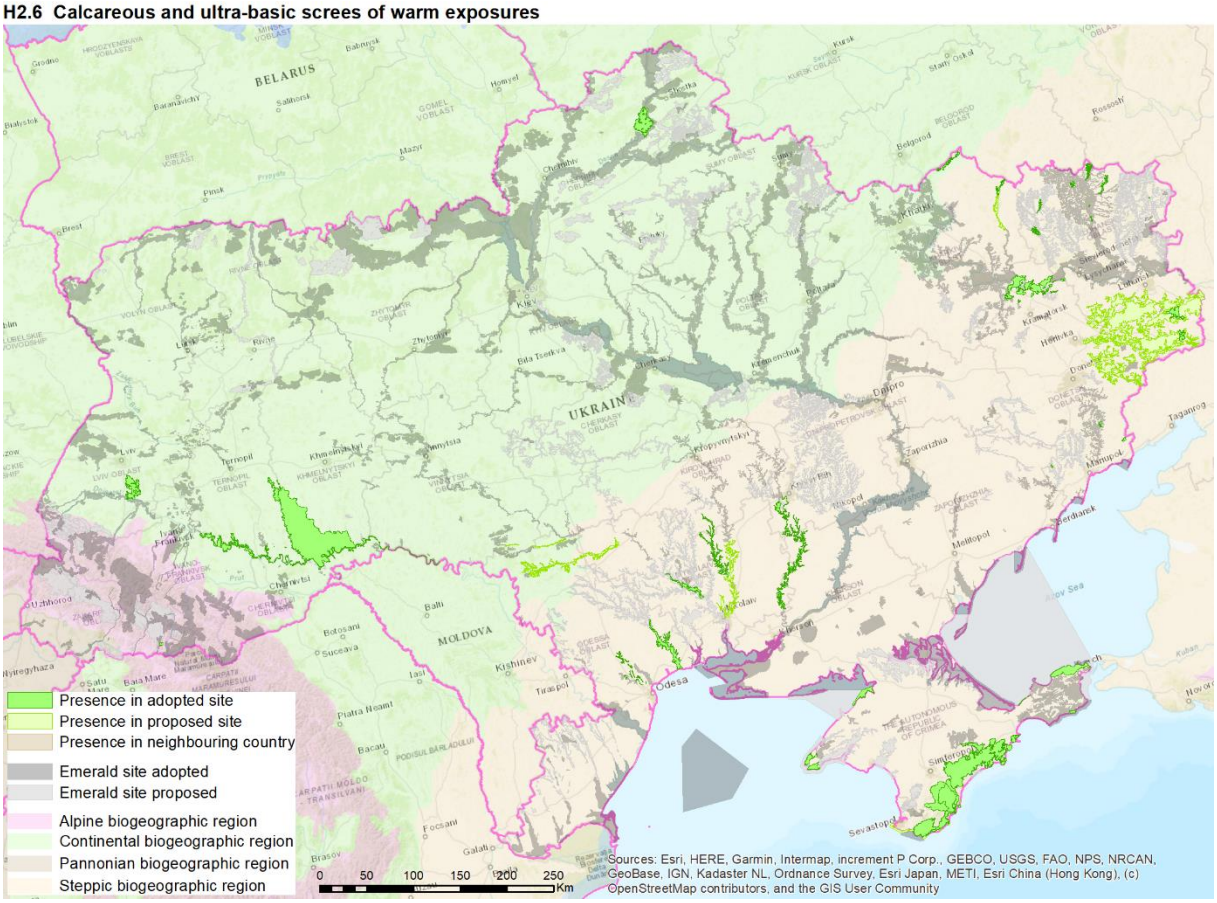
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Further research is needed; check Vyhorlat.
	Comments from external experts:	Added to 4C sites, now in 5C sites. Kuzemko et al. (2018): very rarely in the volcanic uplands of the Transcarpathian lowlands.
	Comments from local experts:	Vyhorlat
	References:	Kuzemko et al. 2018, 442
STE	Num. of sites:	Adopted: 2 (A:1, C:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Southern Bug river catchment, occupied Crimea, middle course of the Kalmius and Kalchyk rivers (Donetsk region)
	Comments from external experts:	2 sites (1A, 1C). Dubyna and Dziuba (2020): flysch lowlands of Southeastern Crimea; eastern part of the Southern coast of Crimea, southern and eastern part of the southern macroslope of the Main Range of the Crimean Mountain, southern coast of Crimea. Lower reaches of the Southern Bug River. Didukh (2009): Erodieta beketowii in the middle course of the Kalmius and Kalchyk rivers (Donetsk region).
	Comments from local experts:	Karadag in the mountain Crimea, Donetski range, stone graves in the Zaporožia region. Probably Khortytsia Island.
	References:	Dubyna and Dziuba 2020; Kuzemko et al. 2018, 442

H2.5 Acid siliceous screes of warm exposures



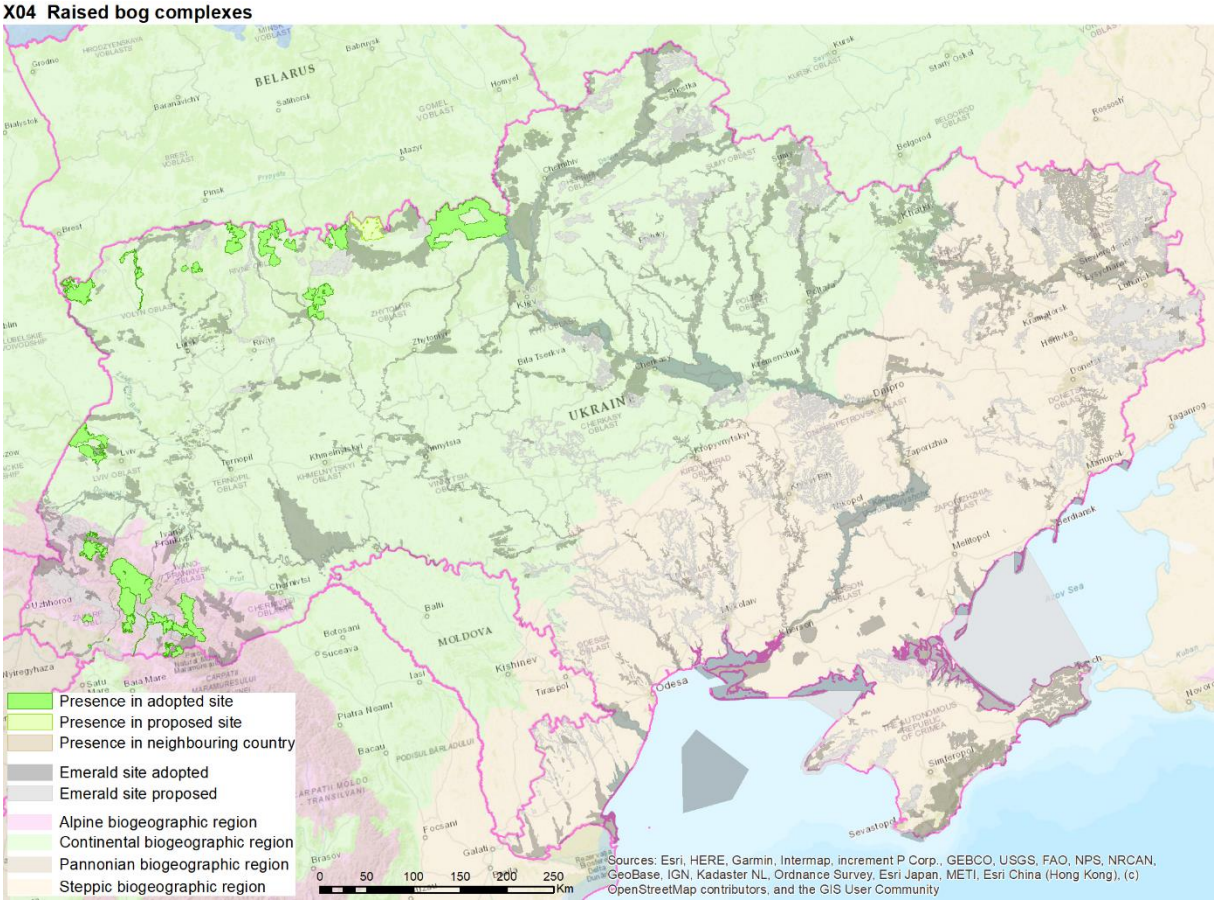
BGR	H2.6 Calcareous and ultra-basic screes of warm exposures	
ALP	Num. of sites:	Adopted: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Consider sites in Pokuttya-Bukovyna outer mountains, Chyvchyna and Rakhiv crystalline mountain range; see map in Kagalo and Prost (2012).
	Comments from external experts:	1C site. Kagalo and Prost (2012): rarely found in the Pokuttya-Bukovyna outer mountains, Chyvchyna and Rakhiv crystalline mountain ranges within the altitude range of 500–1,000 m above sea level.
	Comments from local experts:	Specific type of Carpathian flysch - rulite
	References:	Kagalo and Prost 2012
STE	Num. of sites:	49 (6B, 42C, 1?)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Added to 14 sites; now in 49 sites. Probably SUF, but other sites in Crimea and Black Sea cost could be considered.
	Comments from external experts:	Added to 14 sites (2B, 12C); now in 49 sites (6B, 42C, 1?). Kuzemko et al. (2018): Euxine province. Didukh (2009): chalk slopes of the Komyshna River (occupied Luhansk region). Dubyna and Dzyuba (2019): slopes of the Main Range of the Crimean Mountains (Chatyrdaga, Babugan-yayla, Gurzuf, Nikitskaya, Yalta, Ai-Petrinskaya), the territory of the Yalta and Alushta city councils.
	Comments from local experts:	Crimea: Aj-Petri and Jalta, Karadag, Tarhankut, Babugan-jajlu. Black sea cliffs: Dnistro estuary, Prydunaiskyj NPP, Odesa area.
	References:	Didukh (2009), Dubyna and Dziuba (2019), Kuzemko et al. (2018)

H2.6 Calcareous and ultra-basic screes of warm exposures



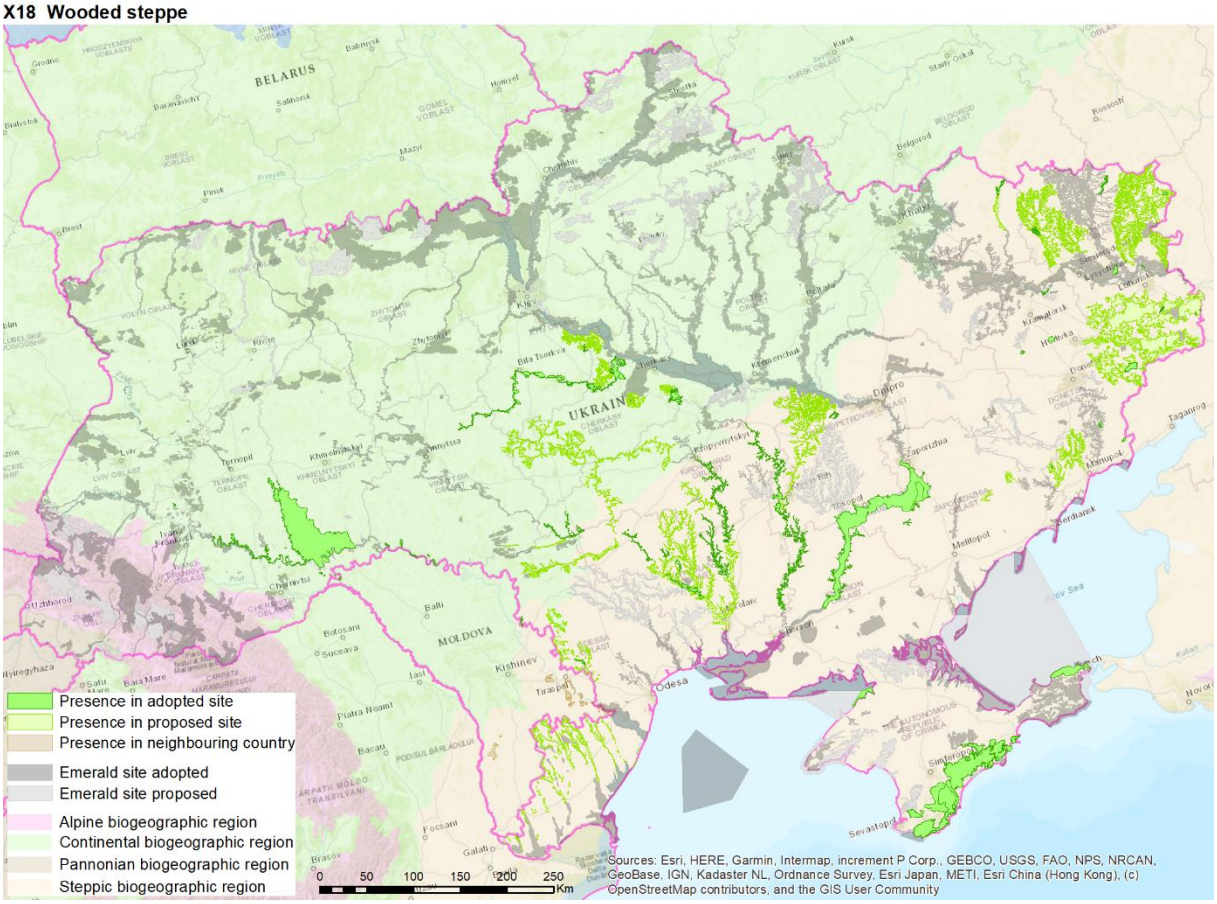
BGR	X04 Raised bog complexes	
ALP	Num. of sites:	Adopted: 7 (C:7)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Check sites in the upper forest belt of the Ukrainian Carpathians (Skoliv Beskydy, Gorgany) (Lviv, Zakarpattia, Ivano-Frankivsk regions).
	Comments from external experts:	7C sites. Kuzemko et al. (2018): the Polesie subprovince of the East European (Sarmatian) province, as well as the East Carpathian subprovince and the Alpine-Carpathian mountain province. Didukh (2009): upper forest belt of the Ukrainian Carpathians (Skoliv Beskydy, Gorgany) (Lviv, Zakarpattia, Ivano-Frankivsk regions).
	Comments from local experts:	Skoliv Beskydy, Gorgany, Sine hory, Bojkivščyna NP, Carpathian NP, Sinevir, Začarovanyj kraj NPP
	References:	Didukh (2009); Kuzemko et al. 2018, 442

X04 Raised bog complexes



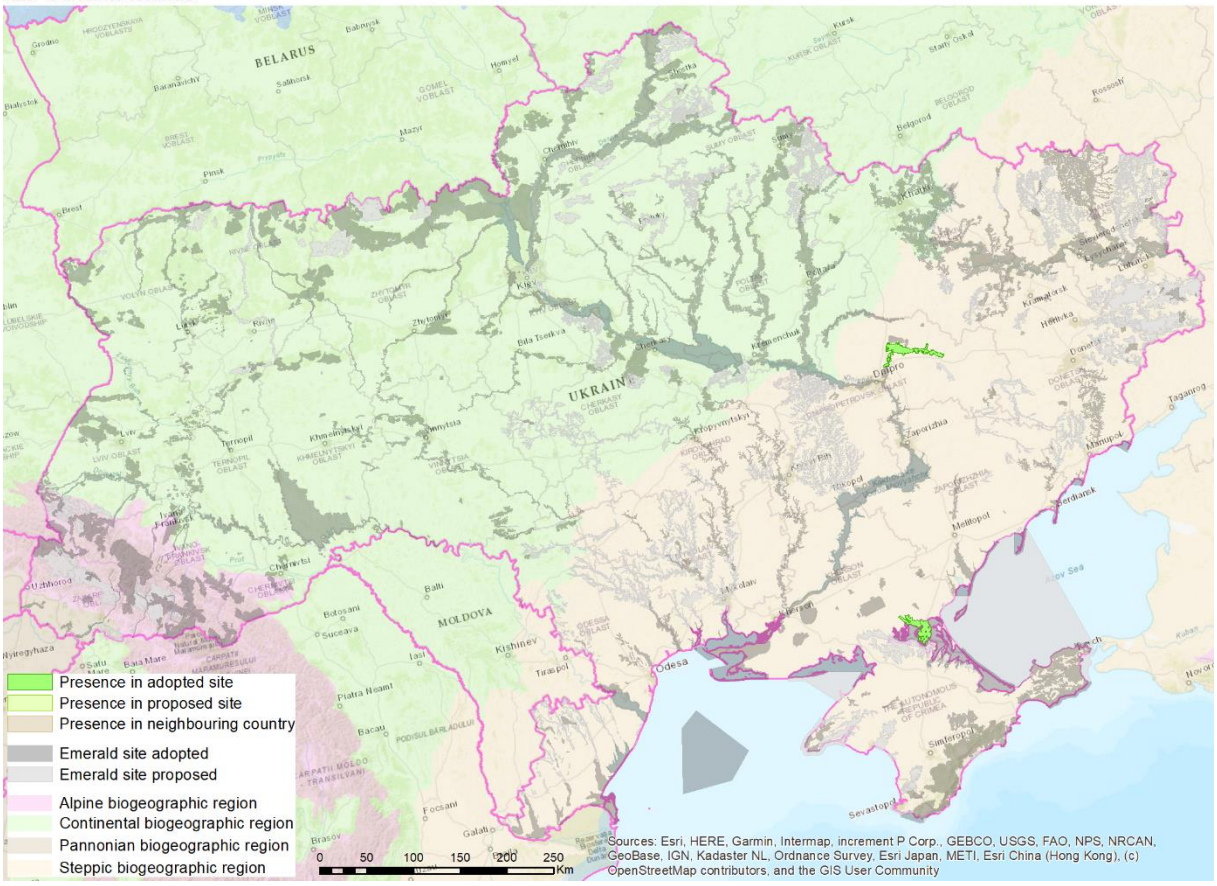
BGR	X18 Wooded steppe	
STE	Num. of sites:	Adopted: 34 (No data: 2, B:4, C:28), Proposed: 33 (B:4, C:29)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Added to 33 sites; now in 67 sites. Probably SUF.
	Comments from external experts:	Added to 33 sites (4B, 29C); now in 67 sites (8B, 57C, 2?). Kuzemko et al. (2018): Pontic province and adjacent territories (in particular, within the East European and Pannonian provinces)
	Comments from local experts:	No further information
	References:	Kuzemko et al. 2018, 442

X18 Wooded steppe



BGR	X29 Salt lake islands	
STE	Num. of sites:	Adopted: 2 (A:1, C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Consider sites UA0000377, Kerch peninsula, and UA0000142, Systema Dunaiskykh Ozer. Check salt lakes in the Kerch peninsula and at the transition between the Crimean peninsula and the mainland.
	Comments from external experts:	2 sites (1A, 1C). Another salt lake with island(s): salty lakes in the Crimea and the Kerch peninsula; salty lake east of Slaviansk; Kartal lake.
	Comments from local experts:	Biloberežžia Sviatoslava NPP, Kiburn, Sivaš laguna complex, Danube lakes, possibly Tuzlovské limany NPP.
	References:	n/a

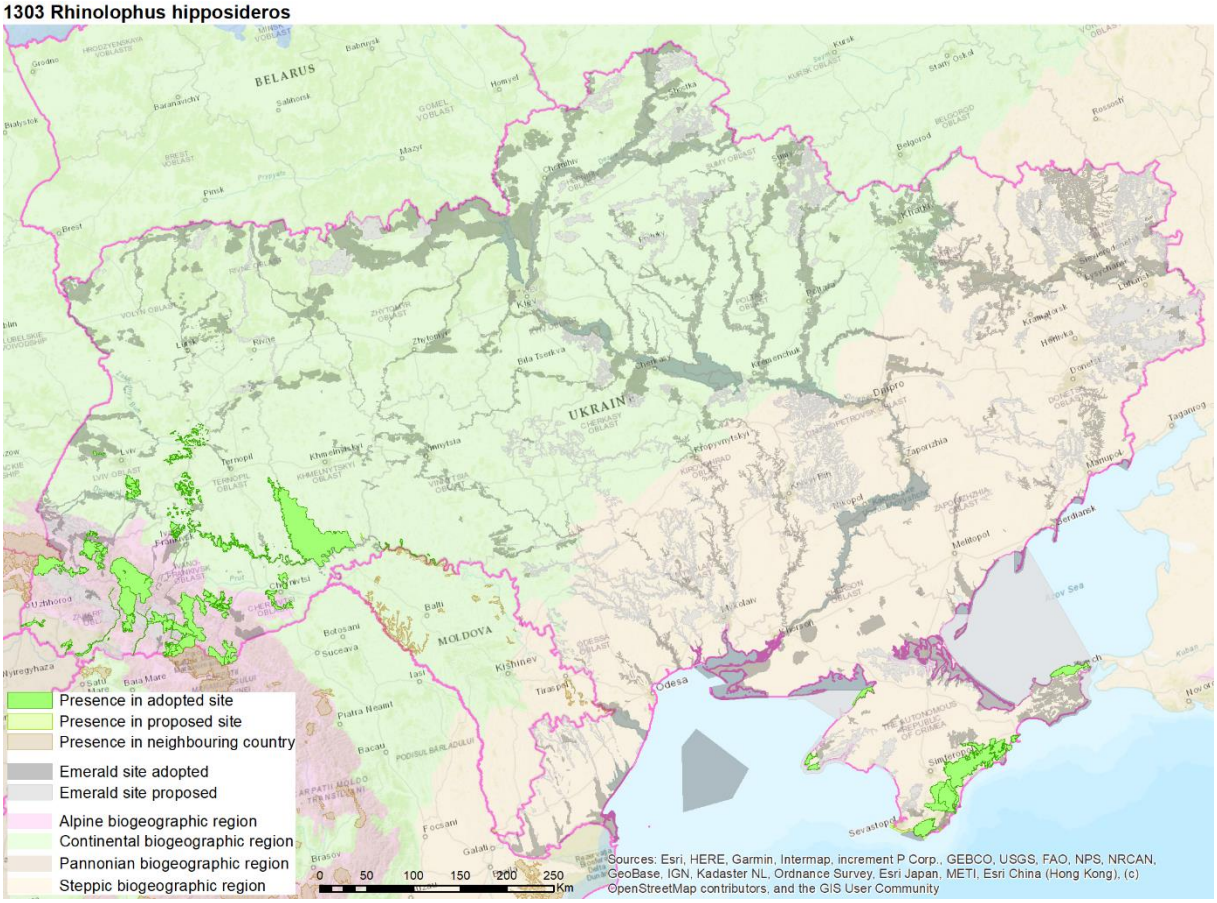
X29 Salt lake islands



Mammals

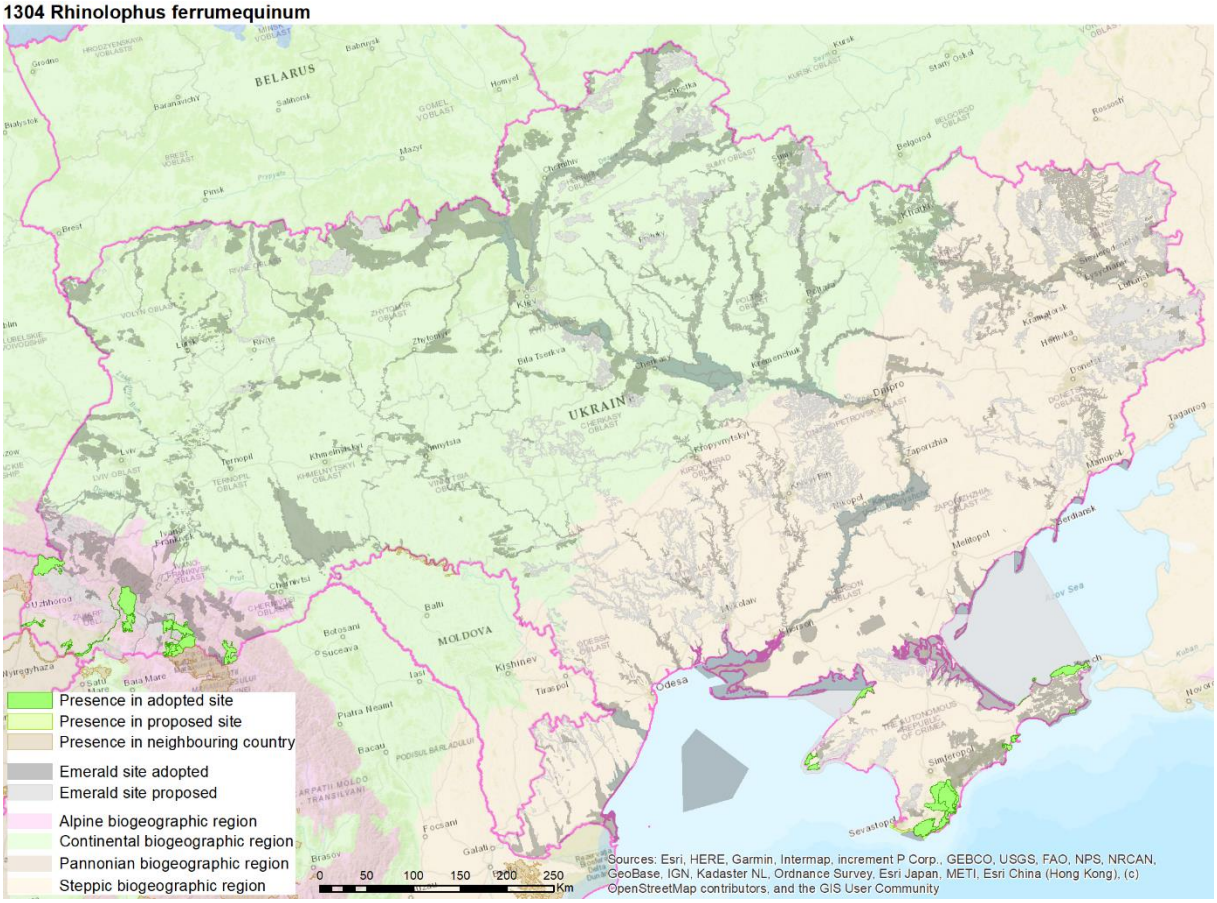
BGR	1303 Rhinolophus hipposideros	
CON	Num. of sites:	Adopted: 12 (B:3, C:3, D:6), Proposed: 1 (A:1)
	BGR seminar 2019 conclusion:	IN MOD caves in Vinnytsia, Ternopil, and Khmelnytska Oblasts
	Recommendation 2025:	Add sites, especially in Khmelnytska Oblast; consult up-to-date sources for recent distribution, especially in caves in Vinnytsia and Ternopil.
	Comments from external experts:	Proposed sites, caves in Vinnytsa and Ternopil, host important populations of this species, and they should be added to the Emerald Network. New data records are from the central part of the Dniester River (Godlevska et al. 2022).
	Comments from local experts:	The species occurs in Vinnytsia, Ternopil, Khmelnytska, Lvivska, and Chernivtsi Oblasts. Check GBIF and other up-to-date sources, as well as the Atlas of European Mammals. Use a top-down approach and involve scientific staff from the protected areas. Additional sites in Khmelnytska Oblast should be added.
	References:	Godlevska et al. 2022; Schofield et al. 2023
PAN	Num. of sites:	Adopted: 4 (B:2, C:2)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Add to the site; review recent sources for distribution
	Comments from external experts:	Its coverage is insufficient (gaps in the central part of the PAN zone. According to Akimov and Radchenko (2009), the species is recorded at several sites in the proposed region.
	Comments from local experts:	The species occurs only in the mountainous part of the Crimean Nature Reserve.
	References:	Akimov and Radchenko 2009; Schofield et al. 2023

1303 Rhinolophus hipposideros



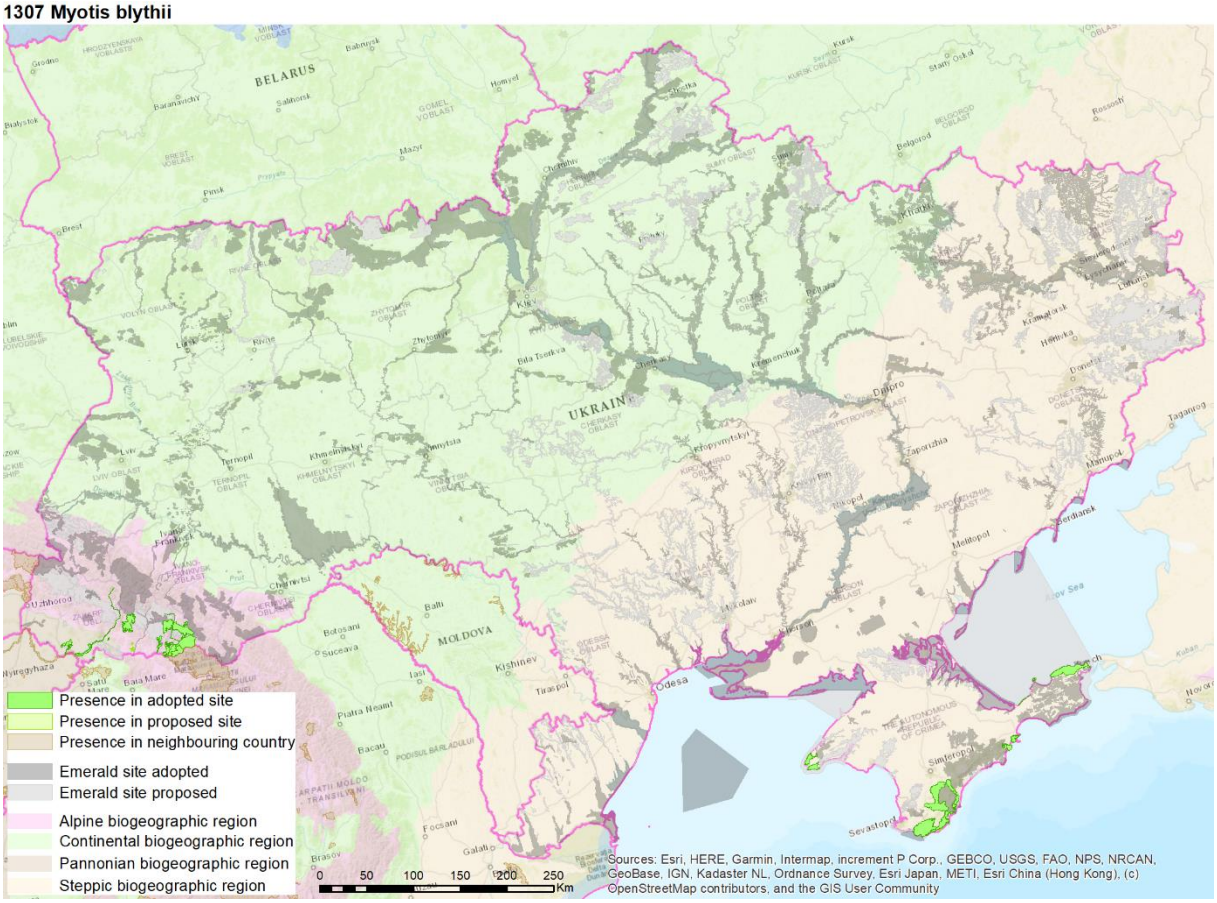
BGR	1304 Rhinolophus ferrumequinum	
ALP	Num. of sites:	Adopted: 6 (B:3, C:3)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Add to more sites after careful consulting of recent databases.
	Comments from external experts:	Currently, the species is listed in 6 sites (3B, 3C populations). Geographically, its coverage is insufficient (for example, gaps in the northwestern part of the ALP zone close margins with the PAN zone). According to Akimov and Radchenko 2009, the species is recorded at several sites in the proposed region.
	Comments from local experts:	More sites should be added after careful checking of recent databases.
	References:	Akimov and Radchenko 2009; Ransome 2020
PAN	Num. of sites:	Adopted: 4 (B:3, C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	n/a
	Comments from external experts:	Currently, the species is listed in 4 sites (3B, 1C populations). Its coverage is insufficient (gaps in the central part of the PAN zone). According to Akimov and Radchenko (2009), the species is recorded at several sites in the proposed region.
	Comments from local experts:	n/a
	References:	Akimov and Radchenko 2009; Ransome 2020
STE	Num. of sites:	Adopted: 13 (B:8, C:3, D:2), Proposed 3 (C:2, D:1)
	BGR seminar 2019 conclusion:	IN MIN
	Recommendation 2025:	Add sites in the eastern part of Crimea and delete from the northern part of Crimea.
	Comments from external experts:	Not evaluated
	Comments from local experts:	The species does not occur in the northern part of the Crimean Nature Reserve. Additional sites in the eastern part of Crimea should be added.
	References:	Akimov and Radchenko 2009; Ransome 2020

1304 Rhinolophus ferrumequinum



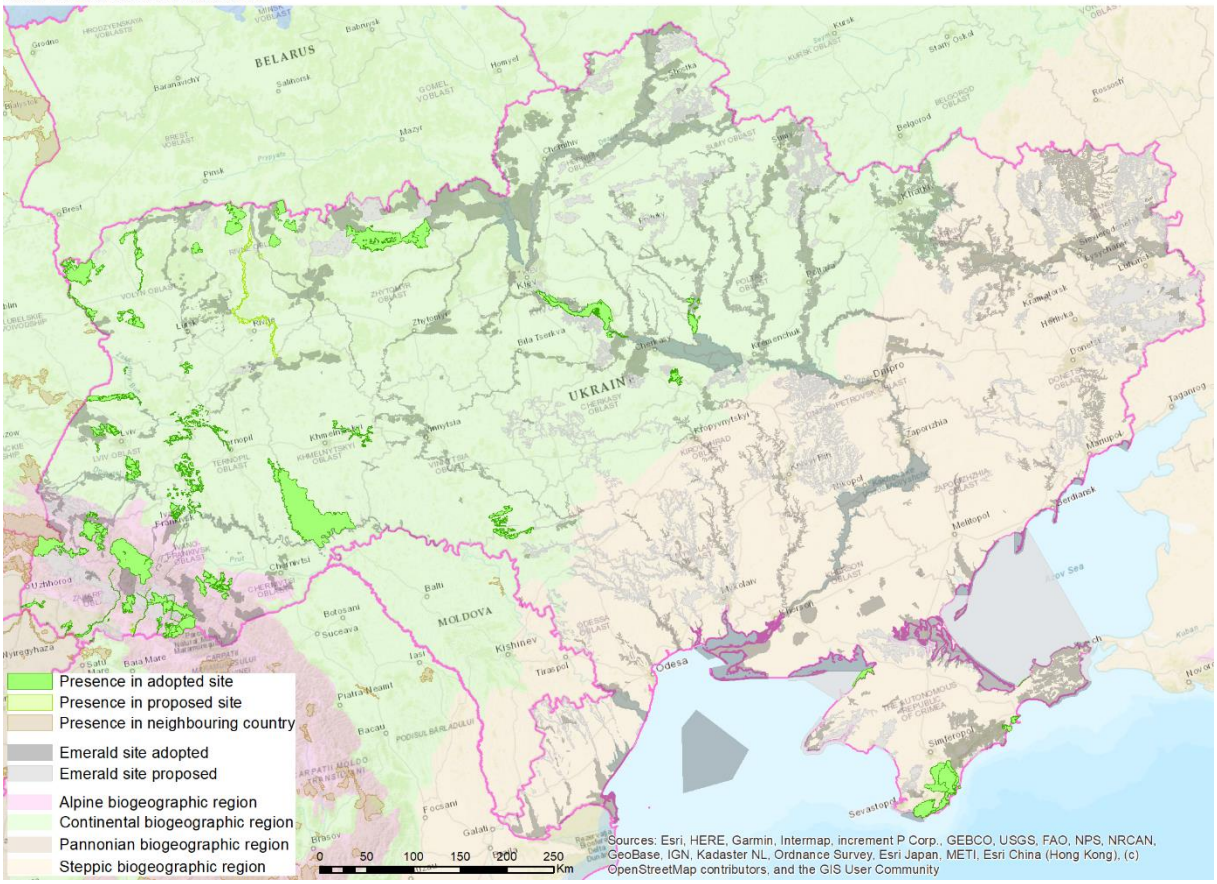
BGR	1307 Myotis blythii	
ALP	Num. of sites:	Adopted: 4 (B:2, C:1, D:1), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Sufficient
	Comments from external experts:	Probably sufficient; its coverage corresponds with its map of distribution in the ALP zone.
	Comments from local experts:	Large aggregations occur in caves in the Alpine region.
	References:	Akimov and Radchenko 2009
PAN	Num. of sites:	Adopted: 3 (B:2, C:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Add to the site(s); more research is needed.
	Comments from external experts:	Currently, the species is listed in 3 sites (1C and 2B populations). Its coverage is insufficient (gaps in the central part of the PAN zone). According to Akimov and Radchenko (2009), the species is recorded at several sites in the proposed region.
	Comments from local experts:	More research is needed.
	References:	Akimov and Radchenko 2009

1307 Myotis blythii



BGR	1308 Barbastella barbastellus	
CON	Num. of sites:	Adopted: 31 (B:22, C:3, D:6), Proposed: 3 (C:1, D:2)
	BGR seminar 2019 conclusion:	IN MOD Zhytomierska and Rivne Oblast
	Recommendation 2025:	Add to site(s), especially in Chernobyl Biosphere Reserve.
	Comments from external experts:	Its coverage corresponds with its distribution map in the ALP zone, according to Akimov and Radchenko 2009 but there are new data on its occurrence Godlevska et al. 2022; Prylutska et al. 2023) where there are geographical gaps.
	Comments from local experts:	The distribution of this species is patchy. The territory of the Chernobyl Biosphere Reserve should be added. The species is absent in the northern part of the Crimean Biosphere Reserve.
	References:	Akimov and Radchenko 2009; Godlevska et al. 2022; Prylutska et al. 2023

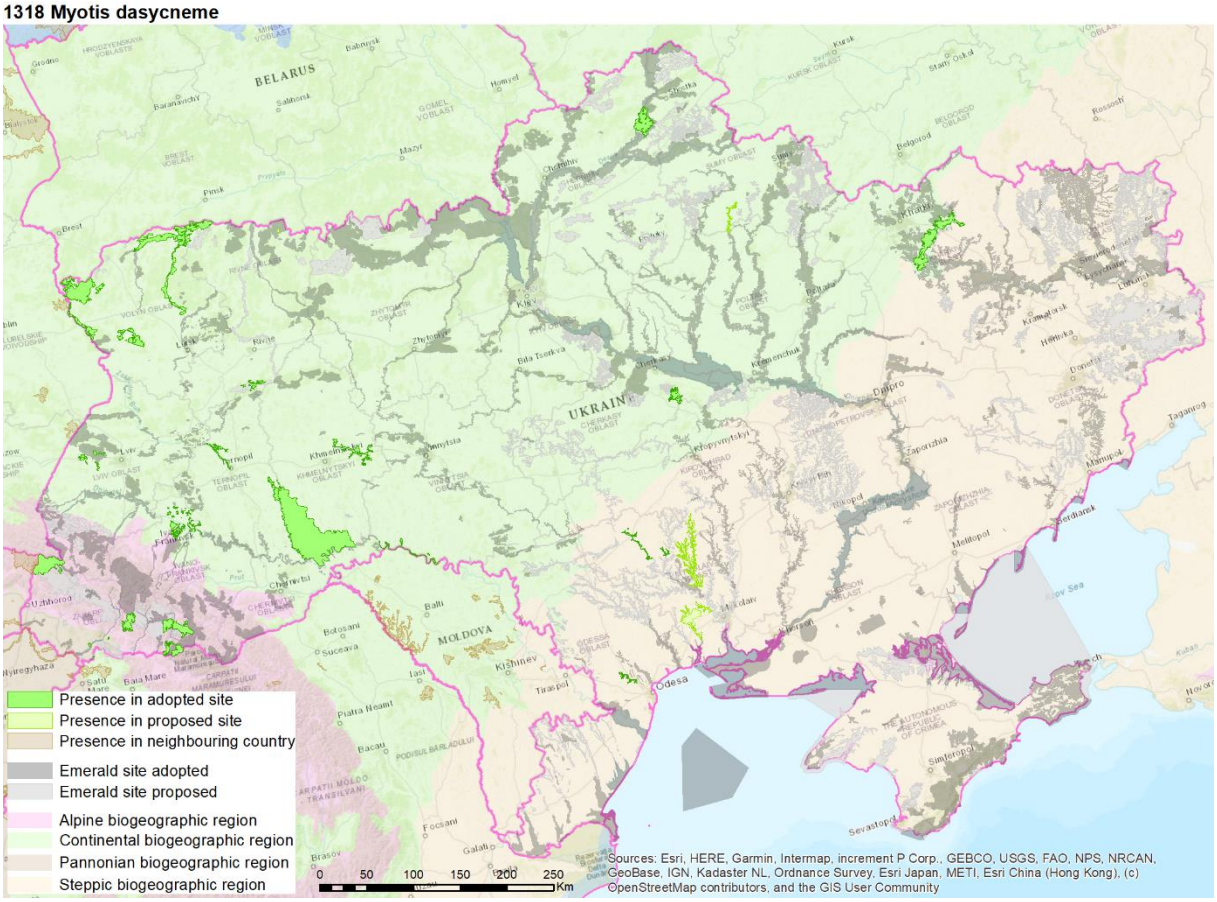
1308 Barbastella barbastellus



BGR	1318 Myotis dasycneme	
ALP	Num. of sites:	Adopted: 3 (B:1, D:2)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Add to the site(s); additional research is needed.
	Comments from external experts:	Add to the site(s); additional research is needed. New findings are presented by Prylutska et al. (2023).
	Comments from local experts:	Add to the site(s); additional research is needed.
	References:	Akimov and Radchenko 2009; Prylutska et al. 2023; https://bdj.pensoft.net/article/99243/element/7/0/Myotis%20dasycneme/
CON	Num. of sites:	Adopted: 22 (B:12, C:6, D:4), Proposed: 2 (C:1, D:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN, IN MIN center and north
	Recommendation 2025:	Add to the site(s), based on recent data.
	Comments from external experts:	Currently, the species is listed in 24 sites. Its coverage is insufficient (gaps in the north and central part of the CON zone). According to its distribution map (Akimov and Radchenko 2009), the species is recorded at several sites in proposed areas, which are not covered by sites. Also, there are recent data (for example, Bashta 2022; Godlevska et al. 2022; Prylutska et al. 2023; and so on).
	Comments from local experts:	Data need to be updated, based on recent research.
	References:	Akimov and Radchenko 2009; Bashta 2022; Godlevska et al. 2022; Prylutska et al. 2023; https://bdj.pensoft.net/article/99243/element/7/0/Myotis%20dasycneme/
PAN	Num. of sites:	Adopted: 1 (B:1)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Additional research is needed; consult the recent databases.

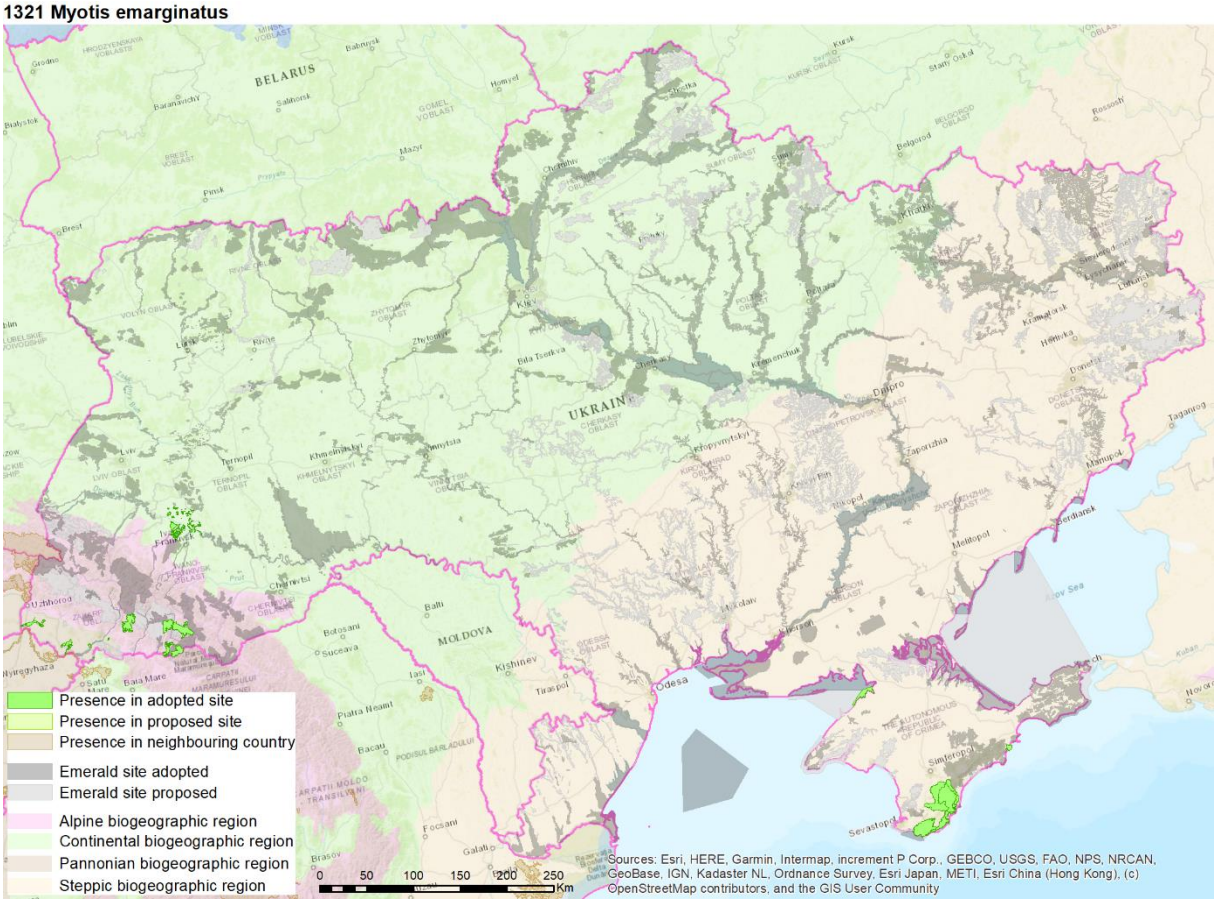
	Comments from external experts:	Currently, the species is listed in 1 site with the B population. According Akimov and Radchenko (2009), the species has not been recorded in this region; therefore, research (SR) is necessary.
	Comments from local experts:	Data need to be actualized from the recent database.
	References:	Akimov and Radchenko 2009;
STE	Num. of sites:	Adopted: 3 (C:3), Proposed: 2 (C:1, D:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN Mykolaiv region
	Recommendation 2025:	Additional site(s) should be added in the Odesa region and Mykolaiv region.
	Comments from external experts:	According to Akimov and Radchenko (2009), its coverage corresponds with its map of distribution in the STE zone but based on recent data, there are geographical gaps in some regions (for example, Odesa and Mykolaiv regions).
	Comments from local experts:	Some key underground aggregations are missing from the map (particularly in the Odesa region), so additional sites should be added.
	References:	Akimov and Radchenko 2009; checklist dataset https://doi.org/10.15468/39omei accessed via GBIF.org on November 4, 2025

1318 Myotis dasycneme



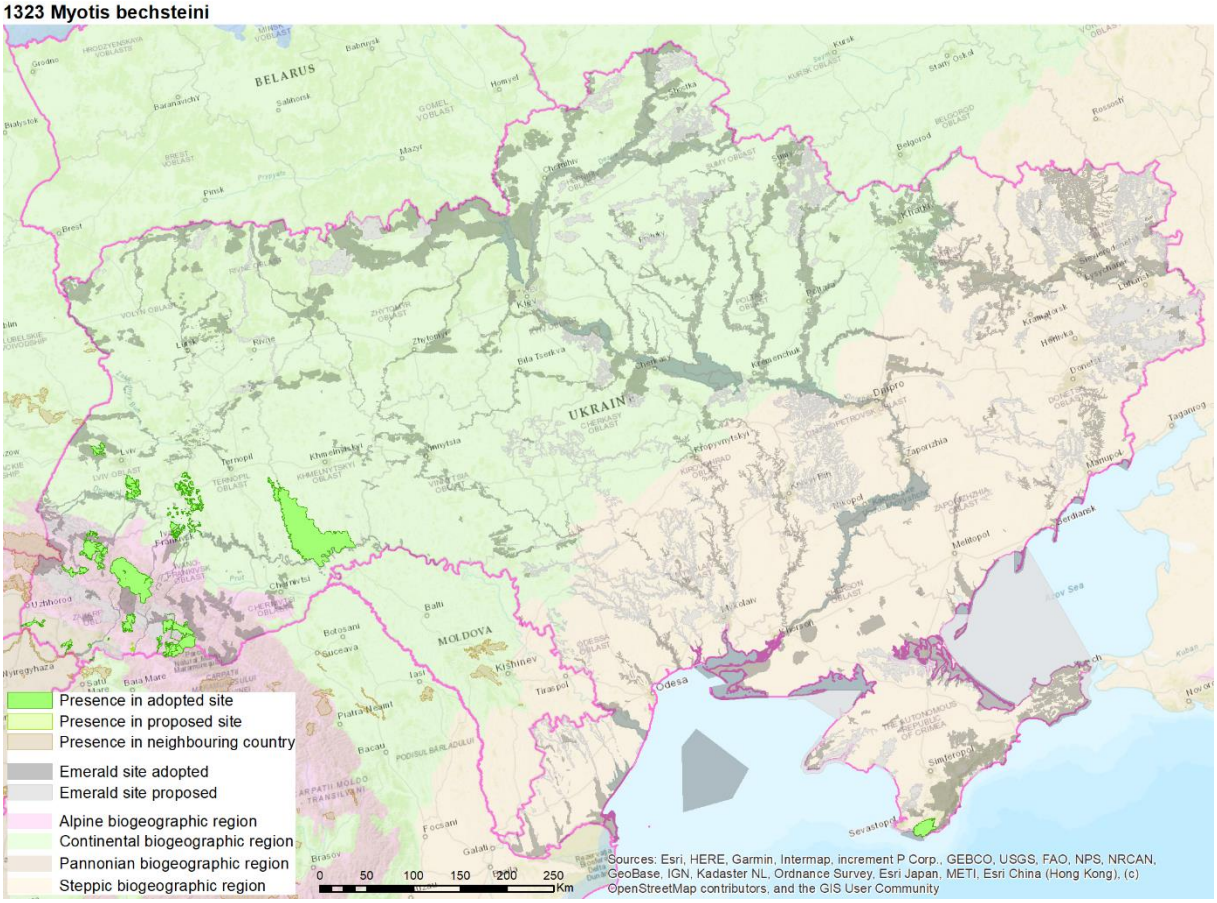
BGR	1321 Myotis emarginatus	
ALP	Num. of sites:	Adopted: 2 (B:1, D:1)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	More research is needed.
	Comments from external experts:	Currently, the species is listed in 2 sites with B and D sites, which corresponds with its map of distribution in the ALP zone according to Akimov and Radchenko (2009). Knowledge of its distribution is insufficient; research (SR) is needed.
	Comments from local experts:	More research is needed—rare species.
	References:	Akimov and Radchenko 2009
CON	Num. of sites:	Adopted: 1 (D:1)
	BGR seminar 2019 conclusion:	SR/CD delete sites from 3 regions
	Recommendation 2025:	Remove from the Reference list.
	Comments from external experts:	Currently, the species is listed only in 1 site with a nonviable population (D population). Akimov and Radchenko (2009) presents no record from the CON zone. Additional research is needed. It is questionable if a viable population occurs. Therefore, the proposal is SR on the Reference list.
	Comments from local experts:	The species does not occur in the CON region.
	References:	Akimov and Radchenko 2009
PAN	Num. of sites:	Adopted: 3 (B:1, C:2)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	More research is needed.
	Comments from external experts:	Currently, the species is listed in 3 sites with 1 B and 2 C populations, which corresponds with its map of distribution in the PAN zone, according to Akimov and Radchenko (2009), but knowledge of its distribution and recent data are insufficient; research (SR) is needed.
	Comments from local experts:	n/a
	References:	Akimov and Radchenko 2009
STE	Num. of sites:	Adopted: 5 (B:1, C:3, D:1)
	BGR seminar 2019 conclusion:	IN MIN (add some territories in southern Crimea)
	Recommendation 2025:	Delete from the northern part of Crimea. Additional research is needed.
	Comments from external experts:	Not evaluated
	Comments from local experts:	The species occurs in the northern part of the Crimea Nature Reserve; further research is needed.
	References:	Akimov and Radchenko 2009

1321 Myotis emarginatus



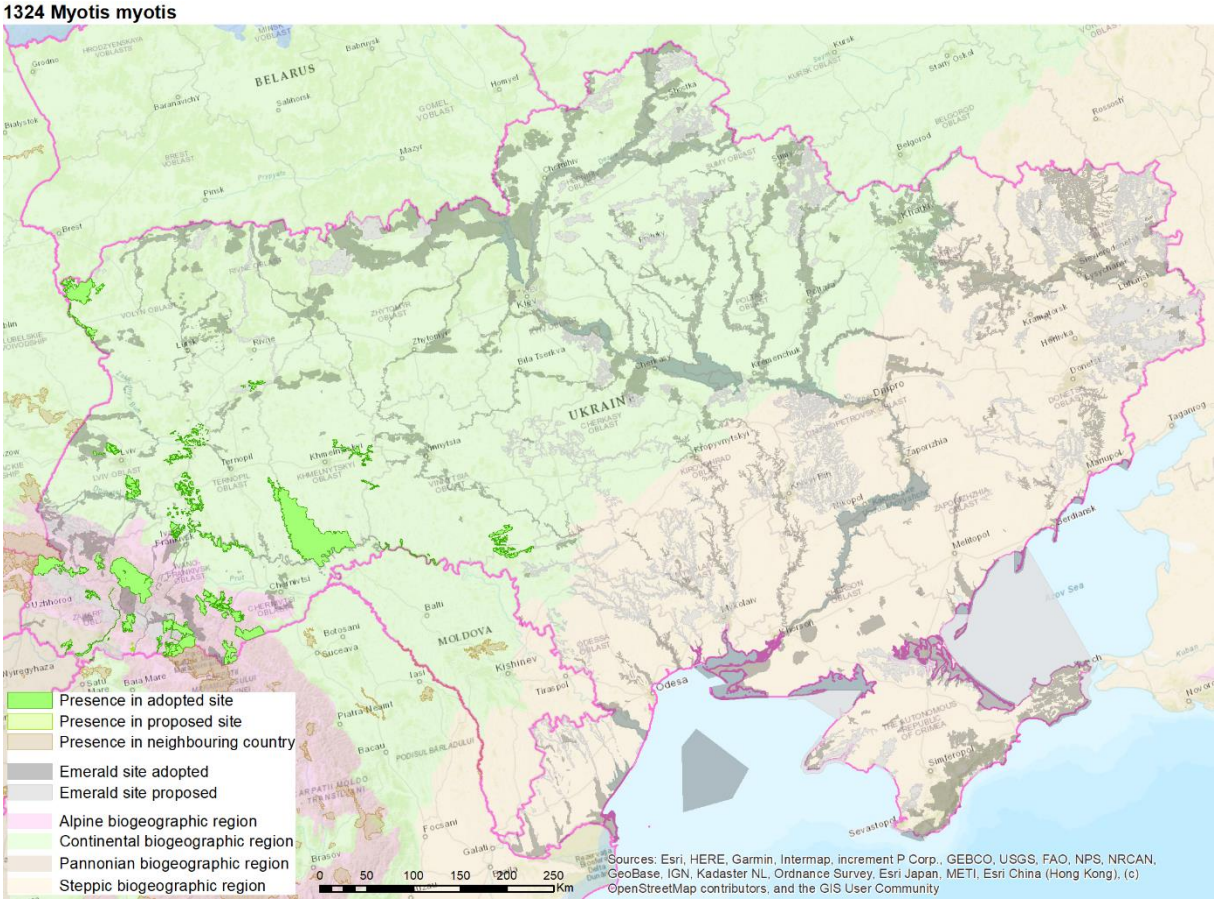
BGR	1323 Myotis bechsteini	
CON	Num. of sites:	Adopted: 8 (B:5, C:2, D:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Add to the site(s) in the northern part of the Dnester and also examine the Vinnytsia region.
	Comments from external experts:	A new site should be added in the north part of the Dnester, where the populations are present, according to Akimov and Radchenko (2009) and Godlevska et al. (2022). Also, in total, 18 record localities of the species are known in Transcarpathia (Zagorodniuk and Gleba 2018).
	Comments from local experts:	More sites could probably be added in the Vinnytsia region.
	References:	Akimov and Radchenko 2009; Godlevska et al. 2022; Zagorodniuk and Gleba 2018
PAN	Num. of sites:	Adopted: 4 (B:4)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN IN MOD Tisza, IN MIN elsevhere
	Recommendation 2025:	Add to site(s); distribution needs to be verified by local experts; the species probably occurs in the Tisza River.
	Comments from external experts:	The species occurs in the site Felső-Tisza in Hungary, located on the border with Ukraine. Probably, species also live on the Ukrainian side of the Tisza River. The proposal is to add a site on the Tisza according to the conclusion from the seminar.
	Comments from local experts:	Distribution needs to be verified by local experts.
	References:	Akimov and Radchenko 2009

1323 Myotis bechsteini



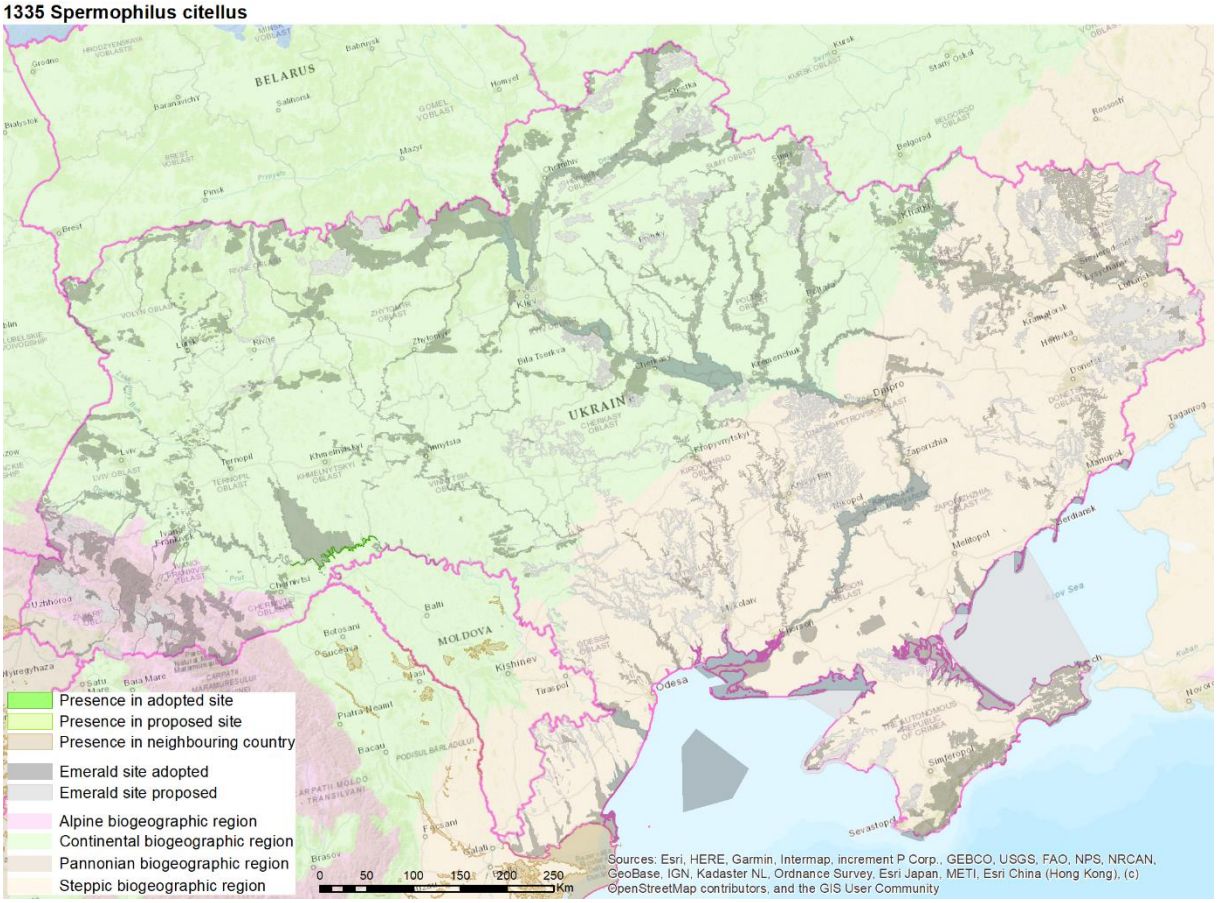
BGR	1324 Myotis myotis	
CON	Num. of sites:	Adopted: 20 (B:10, C:3, D:7)
	BGR seminar 2019 conclusion:	IN MOD Khmelnitsky region
	Recommendation 2025:	Add to site(s) in Khmelnitsky region. Verify the distribution with the local expert. Also, verify if the species occurs in Shatsky NP, Zahidne Pobuzhzhia.
	Comments from external experts:	A new site should be added in the Khmelnitsky region to fill the gap in its coverage by sites (Akimov and Radchenko 2009). Several findings are from the northwestern part of Ukraine (Zagorodniuk 2018).
	Comments from local experts:	Information in the Emerald database is missing and should be added after verification by a local expert. For the northwestern sites (Shatsky NP, Zahidne Pobuzhzhia), the record is old and most likely refers to a migrant; there is no permanent population, so it should be removed.
	References:	Akimov and Radchenko 2009; Zagorodniuk 2018
PAN	Num. of sites:	Adopted: 4 (B:4)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Add more sites, and species are recorded at several sites.
	Comments from external experts:	Currently, the species is listed in 4 sites with B populations. Its coverage is insufficient (gaps in the north and central parts of the PAN zone). According to the map of distribution by Akimov and Radchenko (2009) and Zagorodniuk (2018), the species is recorded at several sites in the proposed areas.
	Comments from local experts:	Experts agree with the conclusion.
	References:	Akimov and Radchenko 2009; Zagorodniuk 2018

1324 Myotis myotis



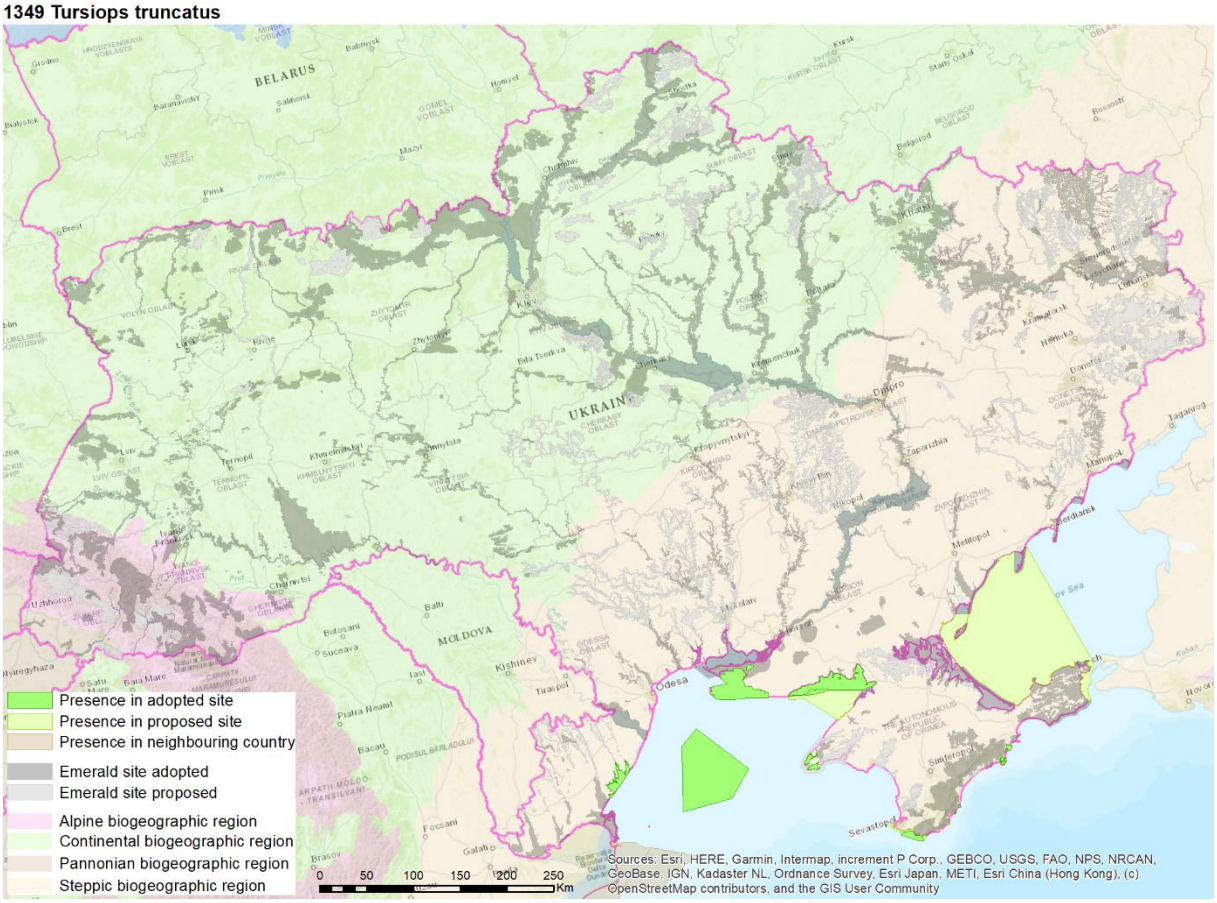
BGR	1335 Spermophilus citellus	
CON	Num. of sites:	Adopted: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD Chernitsi region
	Recommendation 2025:	n/a
	Comments from external experts:	Currently, the species is listed only in one site (1D) with D population, which is insufficient (D site represents a non-significant population (population size is counted 0%). Site assessment is needed. Its coverage does not correspond with its map of distribution in the CON zone, according to Akimov and Radchenko (2009). The older data (occurrences) should be verified; additional research is needed. The current distribution is published by Rusin (2022). New findings are situated along the central part of the Dniester River. In 2025, a new Landscape Reserve was established in the Vinnytsia Region to protect the European Ground Squirrel. https://uncg.org.ua/. Mezhzherim et al. (2025) present its occurrence in the Vinnytsia and Chernivtsi regions.
	Comments from local experts:	No expert was present.
	References:	Akimov and Radchenko 2009; Mezhzherin et al. 2025; Rusin 2022; occurrence dataset https://doi.org/10.15468/9fdw4w accessed via GBIF.org on November 5, 2025.

1335 Spermophilus citellus



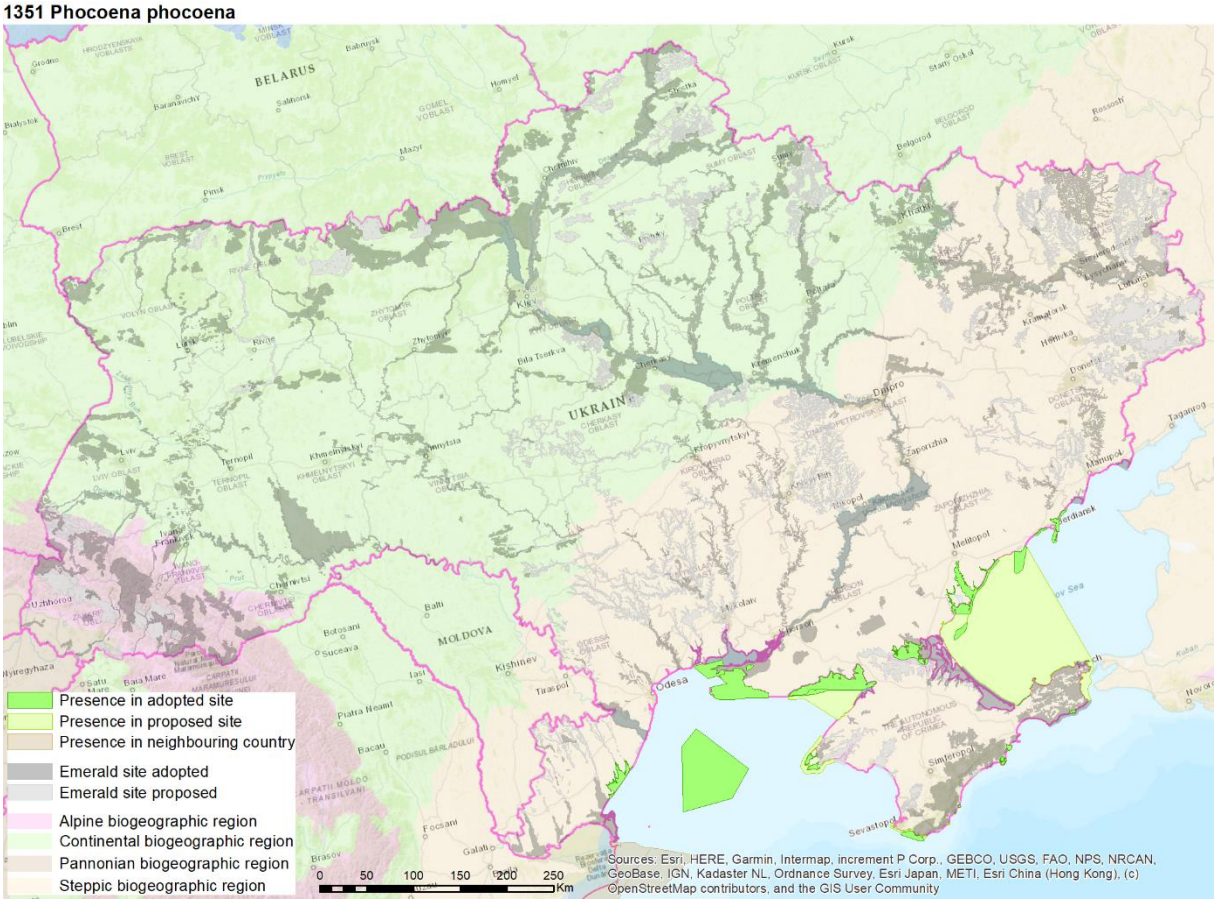
BGR	1349 Tursiops truncatus	
STE	Num. of sites:	Adopted: 11 (B:8, C:3), Proposed: 7 (C:5, D:2)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	The distribution needs to be updated based on recent literature (Paiu et al. 2024). Reassign the species to the MBLS BGR. The current coverage is probably sufficient, as it corresponds to the distribution map in the CON zone.
	Comments from external experts:	Their coverage corresponds with their map of distribution in the STE zone according to Akimov and Radchenko (2009) and seems sufficient. Species should be listed in the MBLS BGR.
	Comments from local experts:	Distribution needs to be updated from recent literature (Paiu et al. 2024). Density and abundance estimates of cetaceans in the Black Sea through aerial surveys (ASI/CeNoBS). Front. Mar. Sci. 11:1248950.
	References:	Akimov and Radchenko 2009

1349 Tursiops truncatus



BGR	1351 Phocoena phocoena	
STE	Num. of sites:	Adopted: 17 (A:1, B:3, C:10, D:3), Proposed: 8 (C:6, D:2)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	The distribution needs to be updated from recent literature. Remove to the MBLS BGR. Probably sufficient; its coverage corresponds with its map of distribution in the CON zone.
	Comments from external experts:	Their coverage corresponds with their map of distribution in the STE zone according to Akimov and Radchenko (2009) and seems sufficient. Species should be listed in the MBLS BGR.
	Comments from local experts:	The distribution needs to be updated from recent literature.
	References:	Akimov and Radchenko 2009

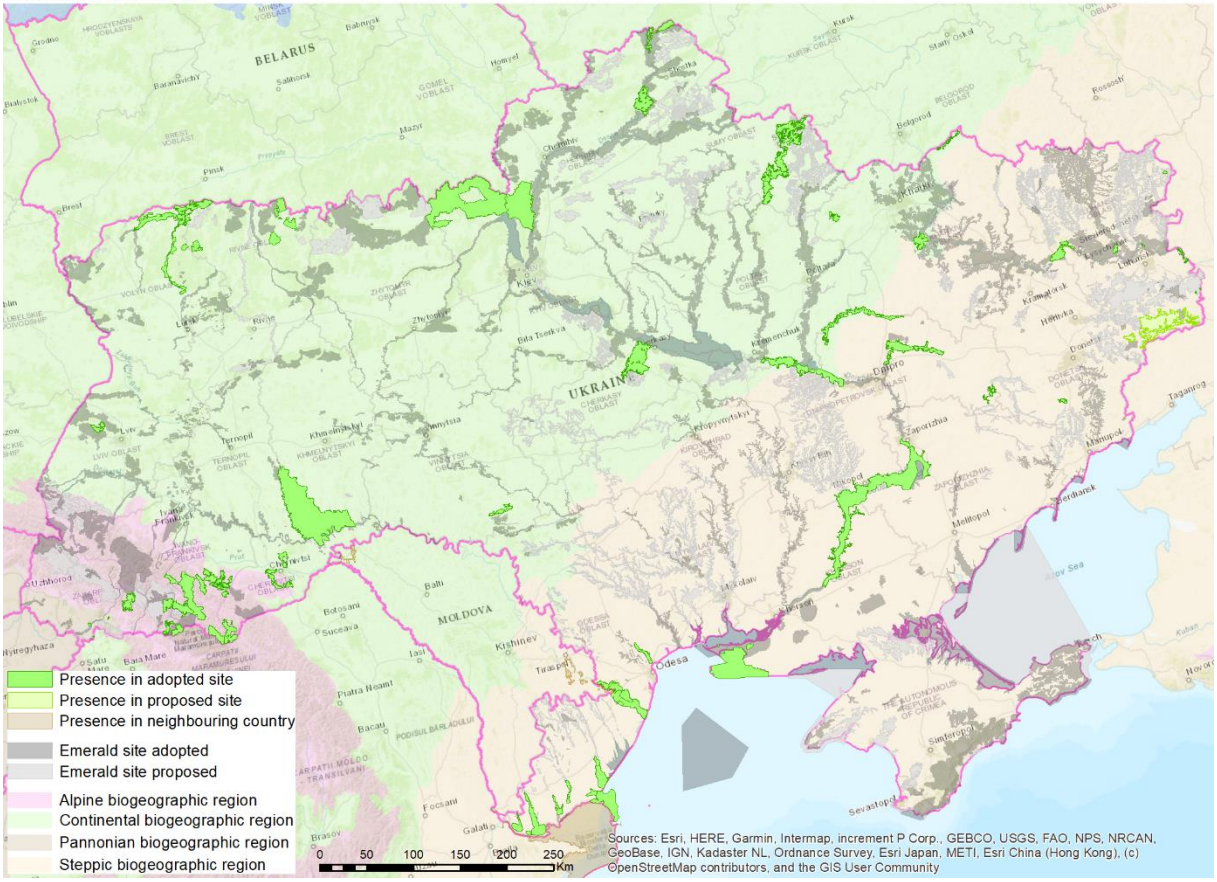
1351 Phocoena phocoena



BGR	1356 Mustela lutreola	
ALP	Num. of sites:	Adopted: 7 (B:1, C:2, D:4)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Add to the site(s); more research is needed.
	Comments from external experts:	Its coverage by sites is questionable because the majority of its records are historical or old (see the distribution map in Akimov and Radchenko (2009). Knowledge of its current distribution is insufficient; research (SR) is needed. According to Maran et al. (2016), the species lives only in the Danube and Dniester deltas of Ukraine; in other localities, it is extinct.
	Comments from local experts:	No expert was present.
	References:	Akimov and Radchenko 2009; Maran et al. 2016
CON	Num. of sites:	Adopted: 20 (B:5, C:8, D:7)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Add to the site(s); more research is needed.
	Comments from external experts:	Its coverage by sites is questionable because the majority of its records are historical or old (see the distribution map of Akimov and Radchenko 2009). Knowledge of its current distribution is insufficient; research (SR) is needed. According to Maran et al. (2016), the species lives only in the Danube and Dniester deltas of Ukraine; in other localities, it is extinct.
	Comments from local experts:	No expert was present.
	References:	Akimov and Radchenko 2009; Maran et al. 2016
STE	Num. of sites:	Adopted: 15 (B:6, C:4, D:5), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	More research is needed.
	Comments from external experts:	Its coverage by sites is questionable because the majority of its records are historical or old (see the distribution map of Rozhenko 2009). Knowledge of its

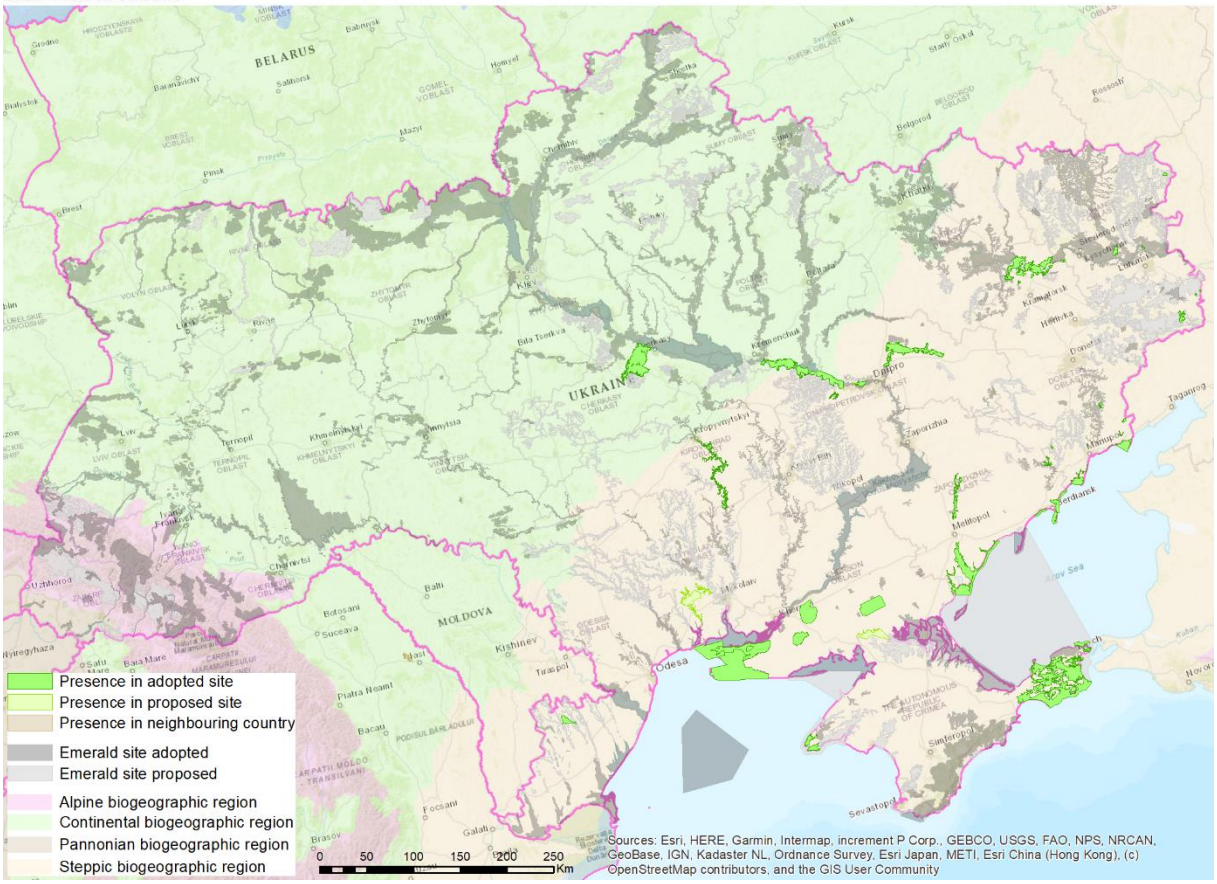
		current distribution is insufficient; research (SR) is needed. According to Maran et al. (2016), the species lives only in the Danube and Dniester deltas of Ukraine.
	Comments from local experts:	No expert was present.
	References:	Akimov and Radchenko 2009; Maran et al. 2016

1356 Mustela lutreola



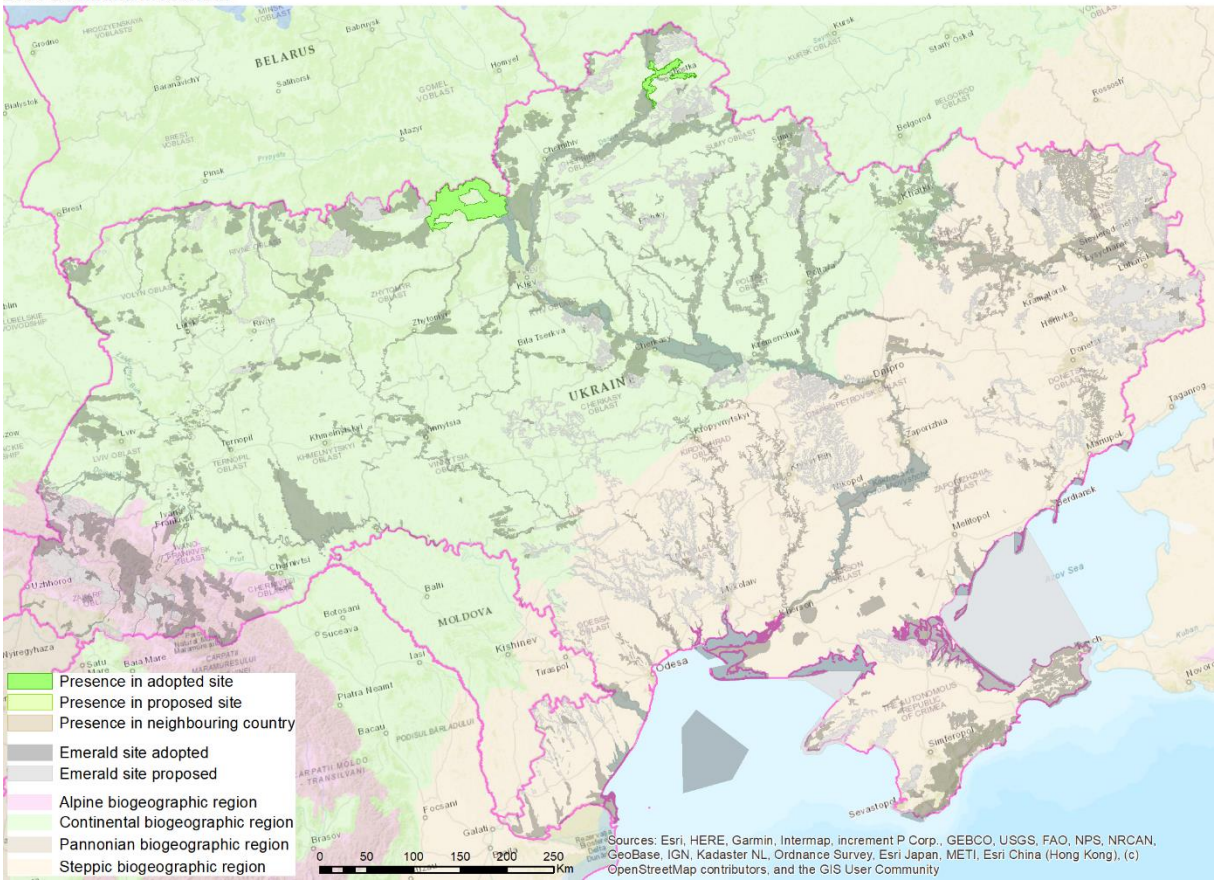
BGR	2021 Sicista subtilis	
CON	Num. of sites:	Adopted: 2 (B:1, C:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Add to the site(s).
	Comments from external experts:	Its coverage is insufficient (gaps in the CON zone's western, north, central, and eastern parts). According to the distribution map in Akimov and Radchenko (2009) and Cserkész et al. (2016), the species was recorded at several sites in the UA CON biogeographic region.
	Comments from local experts:	No expert was present.
	References:	Akimov and Radchenko 2009; Cserkész et al. 2016
STE	Num. of sites:	Adopted: 20 (B:8, C:7, D:5), Proposed: 3 (C:1, D:2)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN Herson, Odessa, Kirovograd, Zaporozie
	Recommendation 2025:	Sufficient
	Comments from external experts:	Currently, the species is listed in 23 sites (8B, 8C, 7D sites). Its coverage corresponds with its distribution map by Akimov and Radchenko (2009) and Cserkész et al. (2016).
	Comments from local experts:	No expert was present.
	References:	Akimov and Radchenko 2009; Cserkész et al. 2016

2021 Sicista subtilis



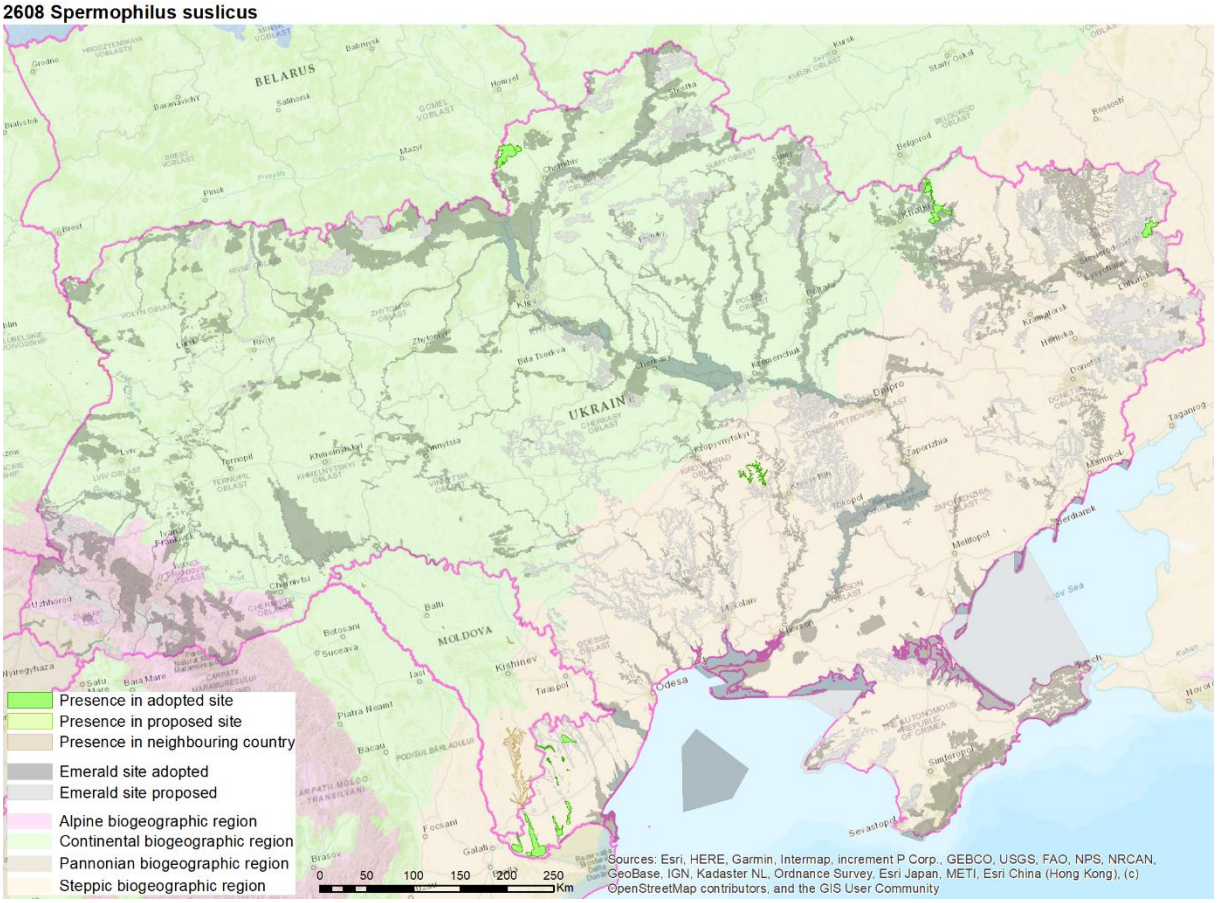
BGR	2604 Desmana moschata	
CON	Num. of sites:	Adopted: 3 (B:1, D:2)
	BGR seminar 2019 conclusion:	IN MOD/CD population assessment
	Recommendation 2025:	Add to site(s). Population assessment. Delete from Chernobyl Biosphere Reserve.
	Comments from external experts:	Its coverage is insufficient (insufficient coverage by site in the northeastern part of the CON zone, where its occurrence is concentrated, according to Akimov and Radchenko (2009). The new site(s) should be added. Also, a small part of its population is covered by sites (less than 16%). The population assessment should be necessary. Species lives along the Seym River in the Sumy region (Pendiur and Gozha 2024).
	Comments from local experts:	The species occurs in the east—in the Desna and Seim river basins—but not in the Chernobyl Biosphere Reserve.
	References:	Akimov and Radchenko 2009; Pendiur and Gozha 2024 (https://uanimals.org/media/en/statti-en/the-desman-a-hidden-treasure-of-the-river-seym-a-fading-article-about-a-fading-species/#section-3)

2604 Desmana moschata



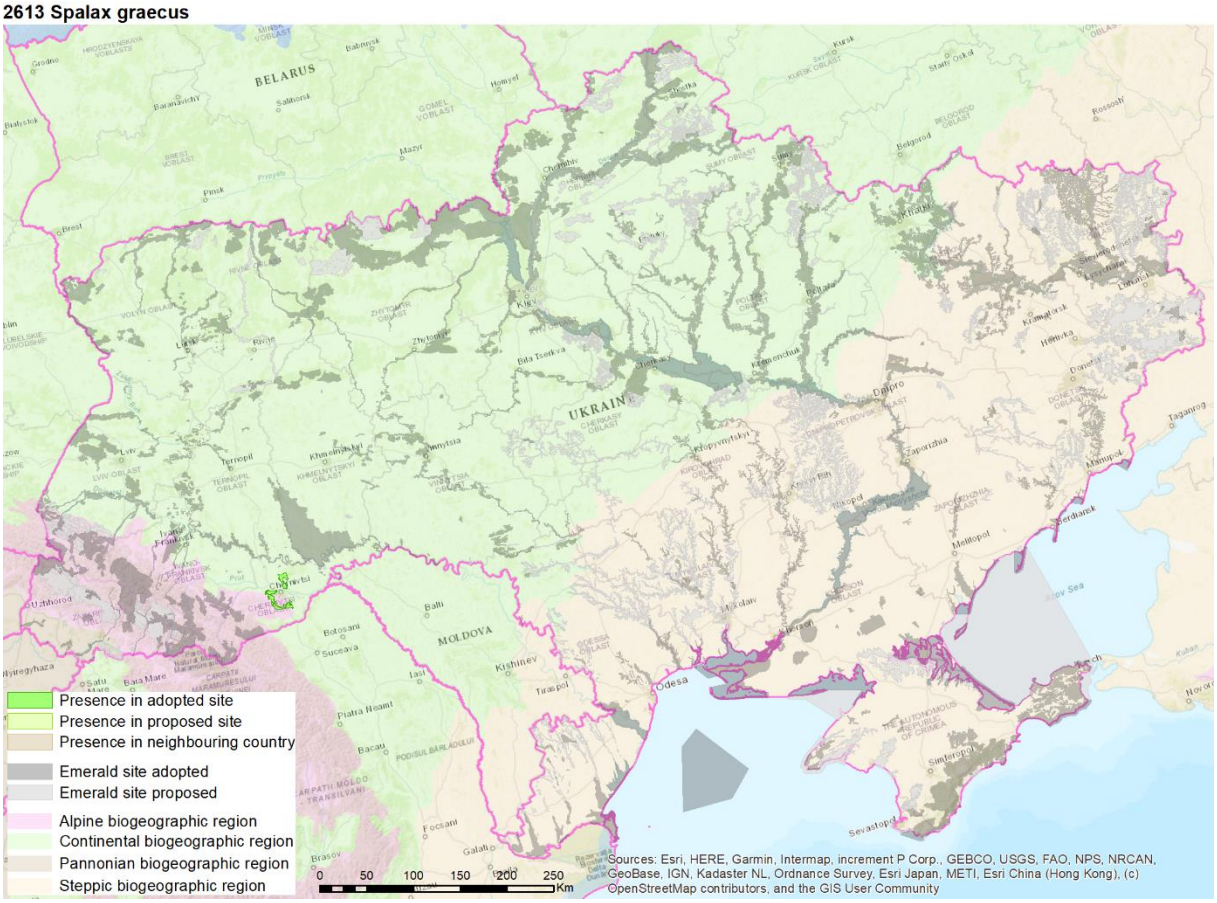
BGR	2608 Spermophilus suslicus	
CON	Num. of sites:	Adopted: 2 (B:2)
	BGR seminar 2019 conclusion:	IN MOD/SR/CD western and central part
	Recommendation 2025:	Add to the site(s); more research is needed.
	Comments from external experts:	Its coverage is insufficient. According to Akimov and Radchenko (2009) and Mezhzherin et al. (2025), the species is recorded at two sites in the proposed eastern part of this zone. In the western part of the CON zone, species live on the border with Poland—the area of the town of Zamos in Poland and also in the neighbouring area in Ukraine, about 10–15 km from the Polish border (Biedrzycka and Konopiński 2008). Protection of this western population is needed. Knowledge of its current distribution is insufficient; research (SR) is needed.
	Comments from local experts:	No expert was present.
	References:	Akimov and Radchenko 2009; Biedrzycka and Konopiński 2008; Mezhzherin et al. 2025
STE	Num. of sites:	Adopted: 7 (B:5, D:2), Proposed: 1 (B:1)
	BGR seminar 2019 conclusion:	IN MOD/SR
	Recommendation 2025:	Add to site(s); additional research is needed.
	Comments from external experts:	Akimov and Radchenko (2009) recorded this species in the UA STE BGR only from one locality, which is covered by site UA0000068, Bilovodskyi Regional Landscape Park. Biedrzycka and Konopiński (2008) present its occurrence on sites near Odessa that are not protected. Also, Mezhzherin et al. (2025) present the Odessa region and other regions in the STE zone. Therefore, its coverage is insufficient. Knowledge of its current distribution is insufficient; research (SR) is needed.
	Comments from local experts:	No expert was present.
	References:	Akimov and Radchenko 2009; Biedrzycka and Konopiński 2008; Mezhzherin at al. 2025

2608 Spermophilus suslicus



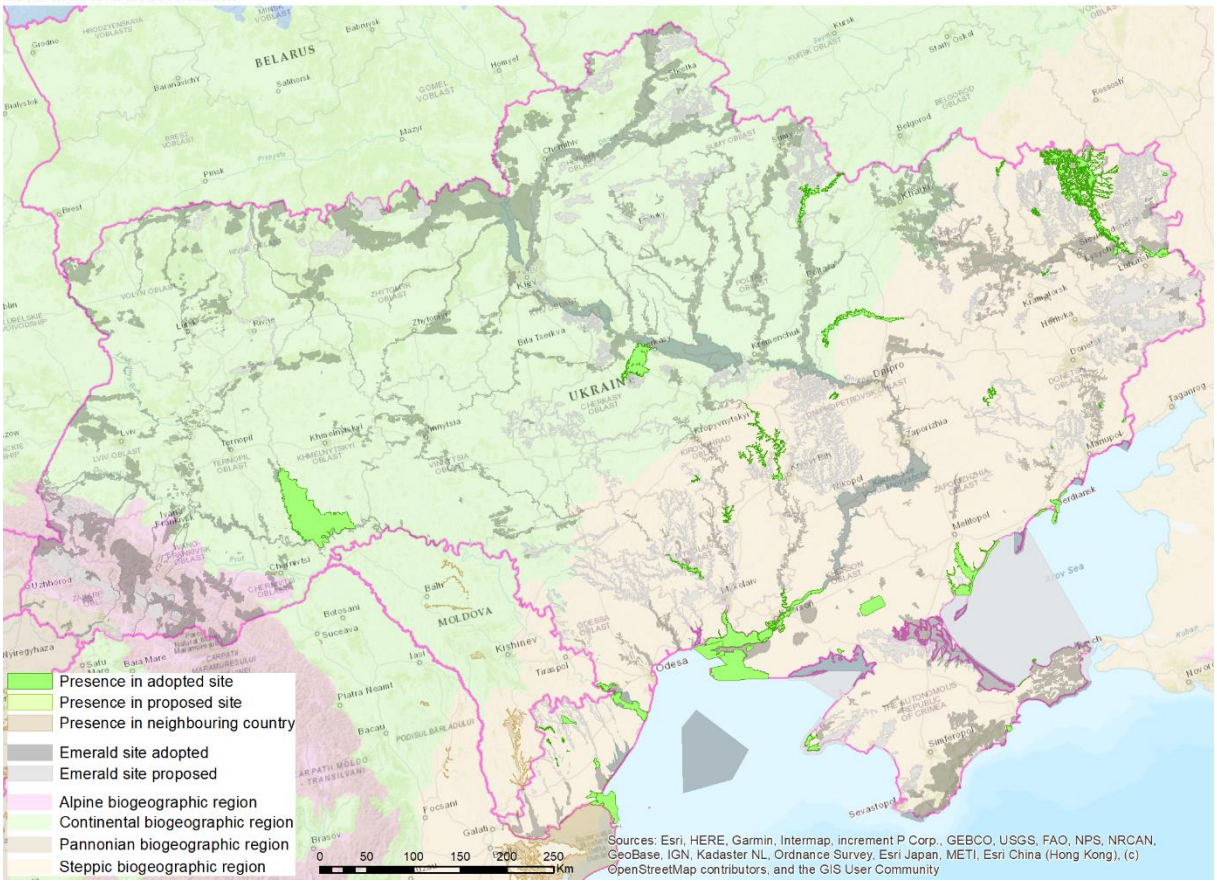
BGR	2613 Spalax graecus	
ALP	Num. of sites:	Adopted: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD/CD 1 site Zavoloka/population assessment
	Recommendation 2025:	Add to site(s); verify occurrence using recent publications and GBIF data.
	Comments from external experts:	This species lives in Ukraine; only a small territory on the border with Romania—see the distribution map in Akimov and Radchenko (2009). It is one of three population fragments of this species located in northeastern Romania and Ukraine (Romanian Moldova and in Bukovina). Chişamera et al. (2013) present seven sites on the UA part, which are situated partly in the ALP and partly in the CON zone. There are gaps in its coverage. Also, the proposed site Zavoloka was not added. Its coverage seems to be insufficient.
	Comments from local experts:	The occurrence needs to be verified using recent publications and GBIF data.
	References:	Akimov and Radchenko 2009; Chişamera et al. 2013
CON	Num. of sites:	Adopted: 1 (C:1), Proposed: 1 (A:1)
	BGR seminar 2019 conclusion:	IN MOD/CD population assessment
	Recommendation 2025:	Add to site(s); verify occurrence using recent publications and GBIF data.
	Comments from external experts:	This species lives in Ukraine, only a small territory on the border with Romania—see the distribution map in Akimov and Radchenko (2009). It is one of three population fragments of this species located in northeastern Romania and Ukraine (Romanian Moldova and in Bukovina). Chişamera et al. (2013) present seven sites on the UA part, of which five are situated in the CON zone. According to the map of its occurrence by Chişamera et al. (2013), there are still gaps in its coverage. The new site(s) should be added.
	Comments from local experts:	The occurrence needs to be verified using recent publications and GBIF data.
	References:	Chişamera et al. 2013; Akimov and Radchenko 2009

2613 Spalax graecus



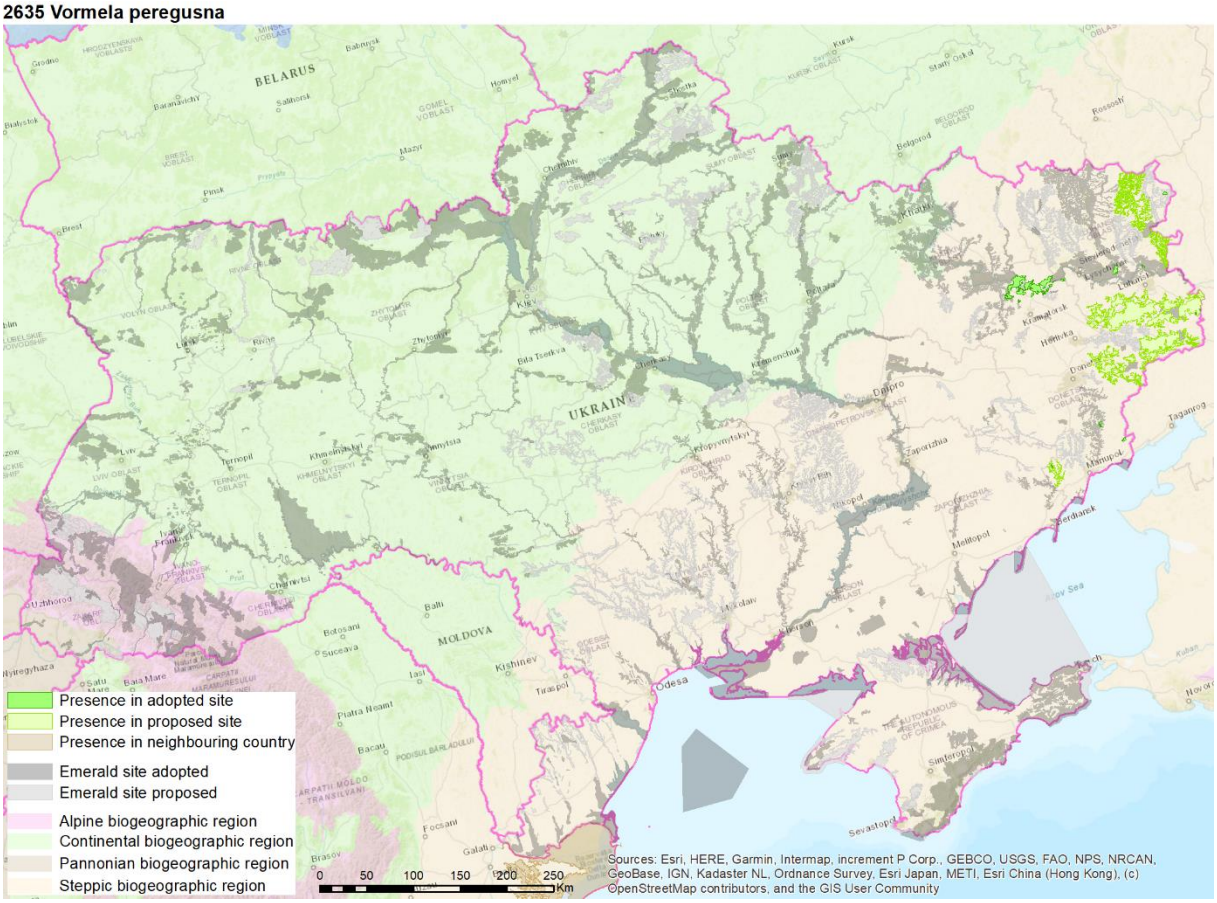
BGR	2633 Mustela eversmannii	
CON	Num. of sites:	Adopted: 4 (C:3, D:1)
	BGR seminar 2019 conclusion:	IN MOD Kyrovograd, Odessa, and Mikolajiv region
	Recommendation 2025:	Add to site(s); verify occurrence using recent publications and GBIF data.
	Comments from external experts:	Its coverage is insufficient (gaps in the western, north, central, and northeastern parts of the CON zone), according to the distribution map of Akimov and Radchenko (2009) and Šálek et al. (2013). Species are recorded in all proposed areas. The new site(s) should be added.
	Comments from local experts:	The occurrence needs to be verified using recent publications and GBIF data.
	References:	Akimov and Radchenko 2009; Šálek et al. 2013

2633 Mustela eversmannii



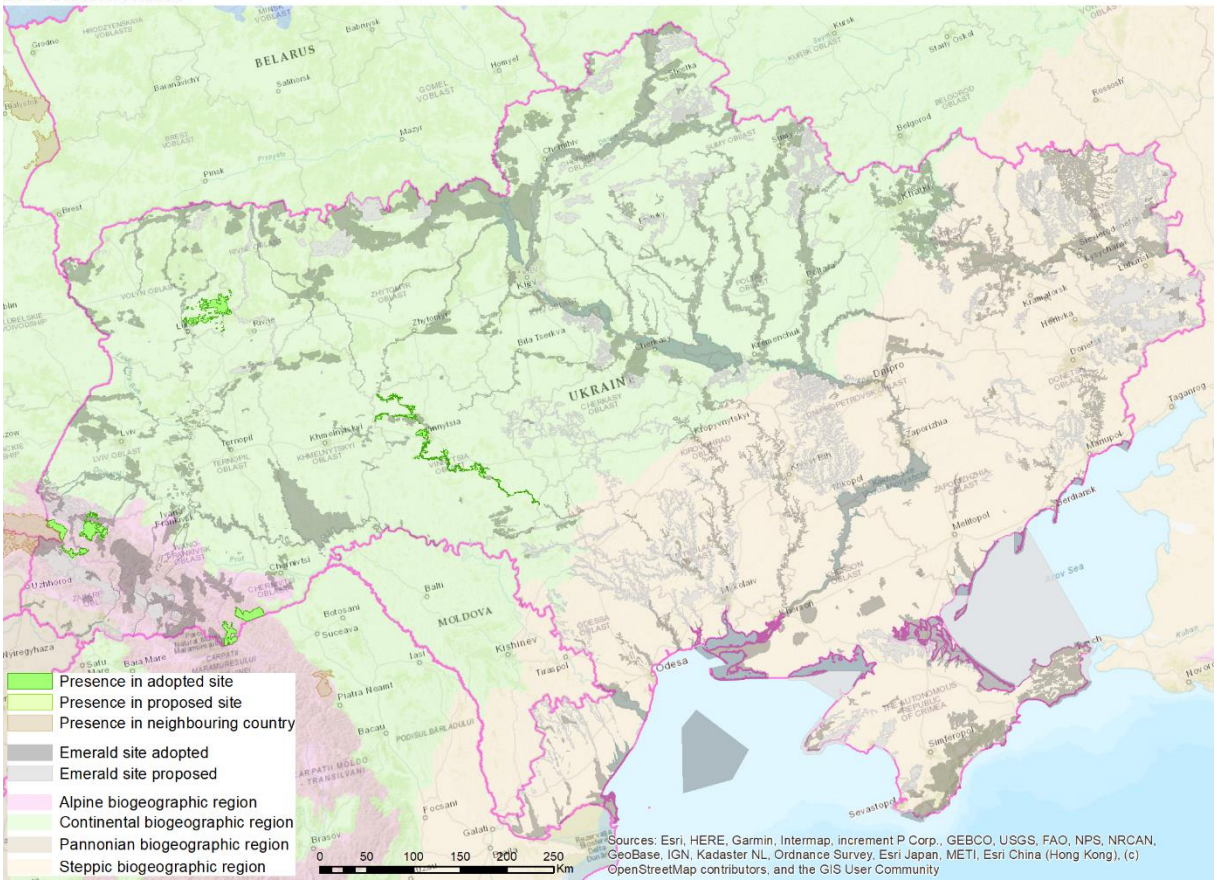
BGR	2635 Vormela peregusna	
STE	Num. of sites:	Adopted: 3 (C:2, D:1), Proposed: 6 (C:5, D:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN Luhanks, Doneck, and Kcharkivsk region
	Recommendation 2025:	Add to the site(s); consult recent reports from the front line.
	Comments from external experts:	Its coverage is insufficient (gaps in the central and northeastern part of the STE zone). According to Akimov and Radchenko (2009), species are recorded at several sites in the proposed areas; not covered by sites. Sirenko et al. (2015) demonstrate an increase in their abundance in Pryazovia and in the Central Donbas (southeastern Ukraine). Also, a small part of its population is covered by sites (less than 16%). The new site(s) should be added.
	Comments from local experts:	The current distribution is wider; consult recent reports from the front line.
	References:	Akimov and Radchenko 2009; Sirenko et al. 2015

2635 Vormela peregusna



BGR	2647 Bison bonasus	
CON	Num. of sites:	Adopted: 2 (B:1, D:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Add to site(s); Zaliska and Konopopska herds.
	Comments from external experts:	The restoration of the European bison (Bison bonasus) in Ukraine has resulted in seven herds with approximately 350 individuals (Smagol et al. 2022). The species is listed in two sites in the central part of the CON zone. The herds in the northeastern part of Ukraine are not covered by the site(s) (Zaliska and Konopopska herds) (Smagol et al. 2022); therefore, new site(s) should be added.
	Comments from local experts:	No expert was present.
	References:	Smagol et al. 2022

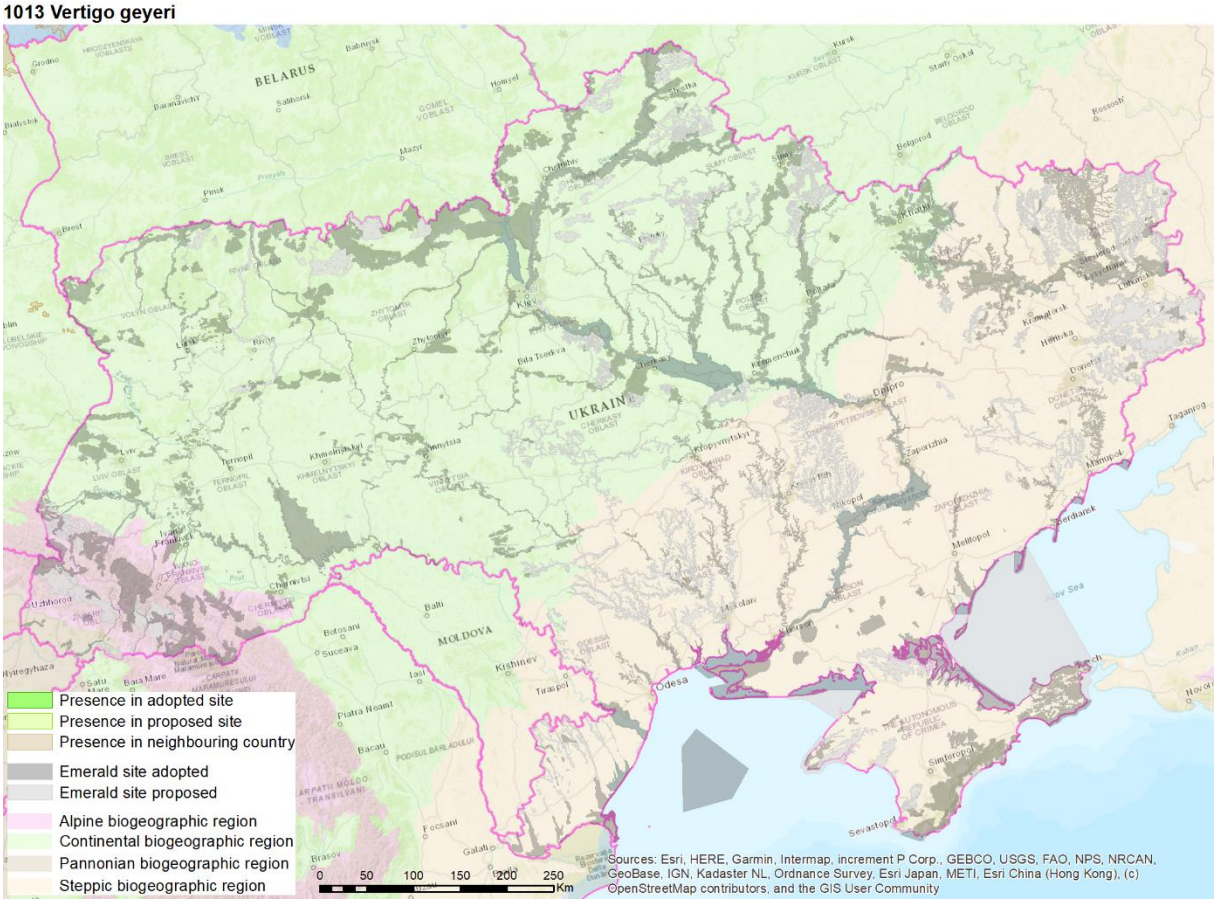
2647 Bison bonasus



Invertebrates

BGR	1013 Vertigo geyeri	
CON	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	The species is probably extinct in Ukraine. Further research is needed.
	Comments from external experts:	According to Coufal et al. (2024), the species is extinct in Ukraine. It is known from two locations at the beginning of the twentieth century, where this species could not be found during a search in 2015. Volhynia Region - Волынская область, Lviv Region - Львовская область. Additional research is needed (SR REF).
	Comments from local experts:	n/a
	References:	Balashov 2016; Coufal et al. 2024

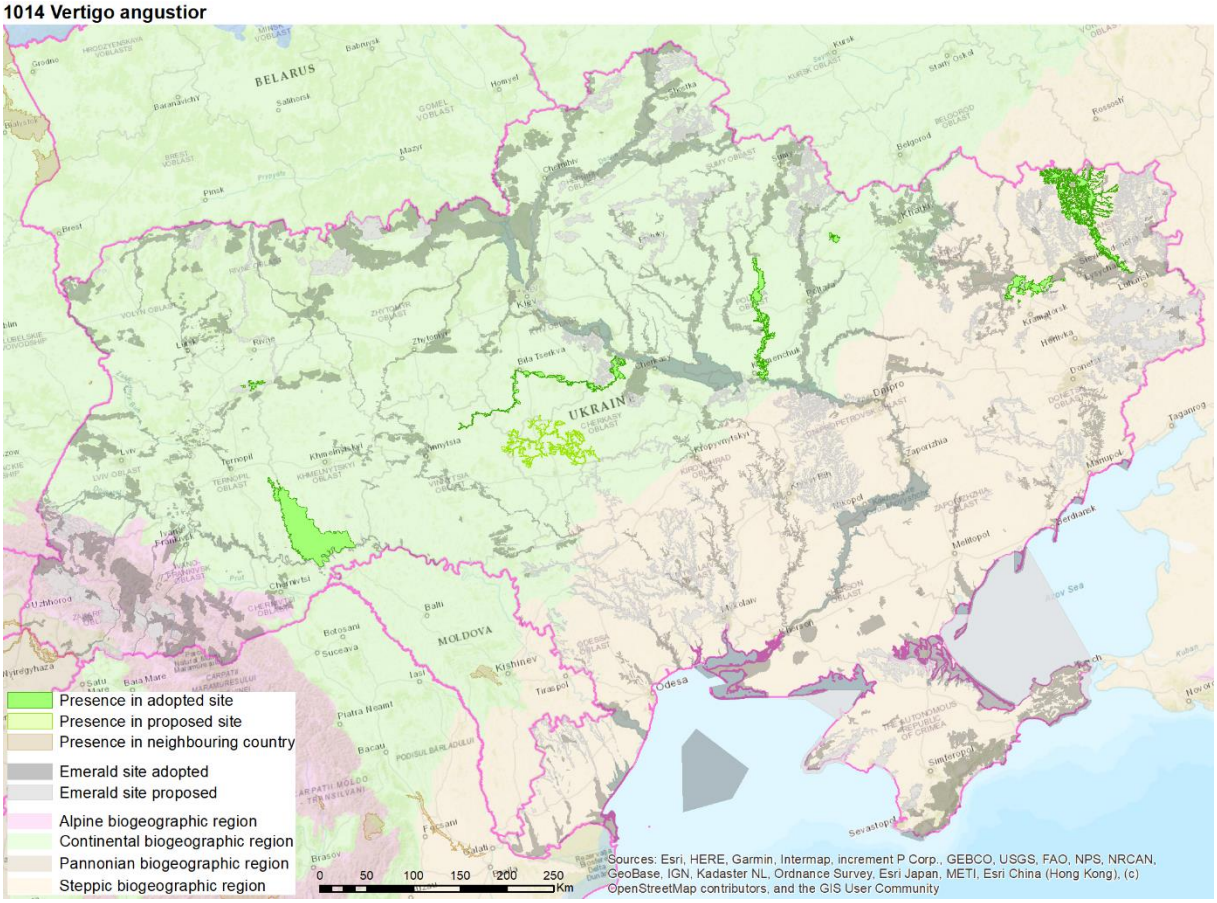
1013 Vertigo geyeri



BGR	1014 Vertigo angustior	
ALP	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Lack of concrete data; additional research is needed.
	Comments from external experts:	There is a lack of concrete data; additional research is needed. *V. angustior* is sporadically distributed across almost all the country and considered to be "Near Threatened" on the national level (Balashov 2016a, 2016b; Balashov et al. 2017).
	Comments from local experts:	n/a
	References:	Balashov et al. 2017
CON	Num. of sites:	Adopted: 6 (C:3, D:3), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Add to site(s).
	Comments from external experts:	Species was added to the 1C new site and the remaining 1C, 1D sites. Currently, it is in 4C, 3D sites. Generally, in UA is in 5C and 4D sites, which is insufficient (coverage of population less than 10%). *V. angustior* is sporadically distributed across almost the country and is considered to be "Near Threatened" on the national level (Balashov 2016a, 2016b; Balashov et al. 2017). To add another site(s).
	Comments from local experts:	n/a
	References:	Balashov et al. 2017
STE	Num. of sites:	Adopted: 2 (C:1, D:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Add to the site, Dvorichna NNP; there is a lack of concrete data; additional research is needed.
	Comments from external	Species is recorded in Oskol River in Dvorichna NNP (Balashov and

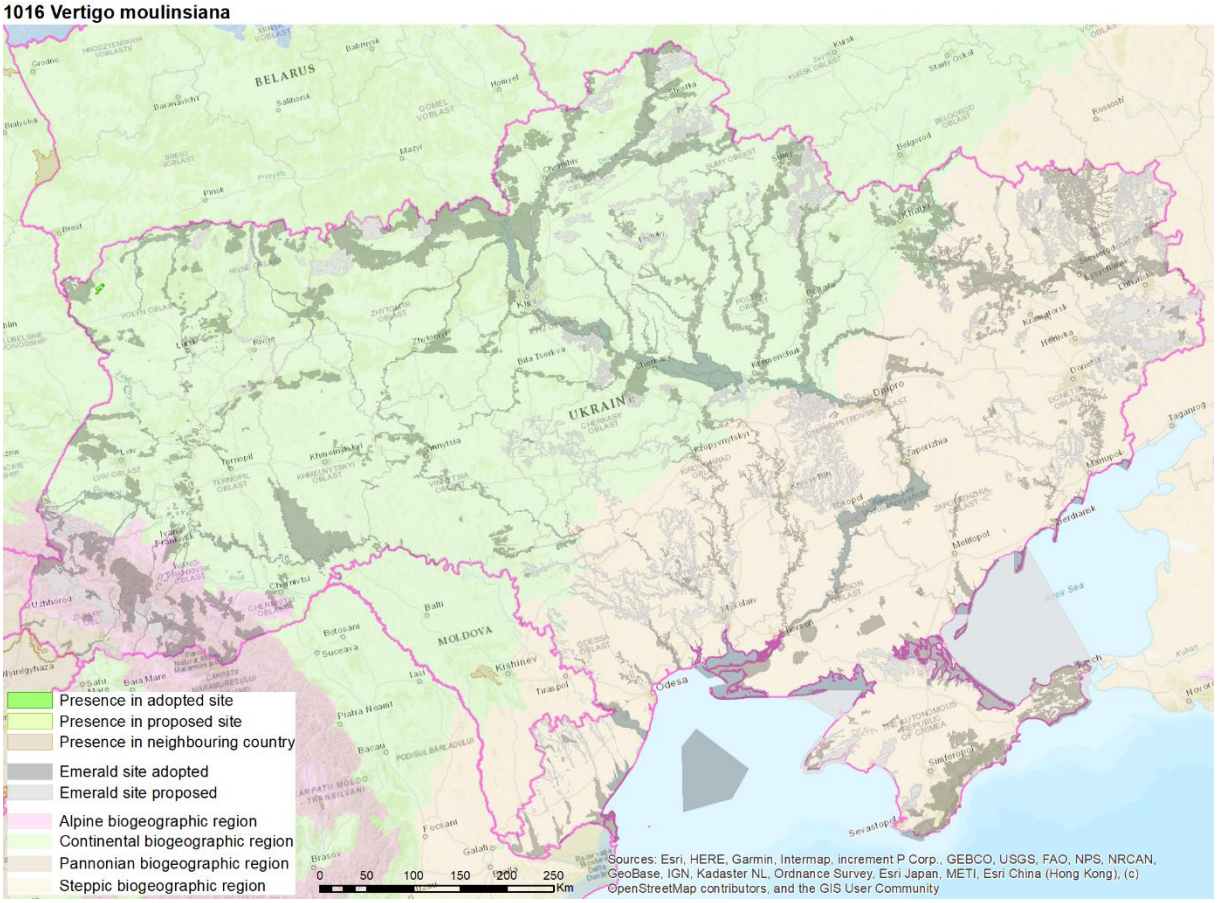
	experts:	Kryvokhyzha 2015). *V. angustior* is sporadically distributed across almost all the country and considered to be "Near Threatened" on the national level (Balashov 2016a, 2016b; Balashov et al. 2017).
	Comments from local experts:	n/a
	References:	Balashov and Kryvokhyzha 2015; Balashov et al. 2017

1014 Vertigo angustior



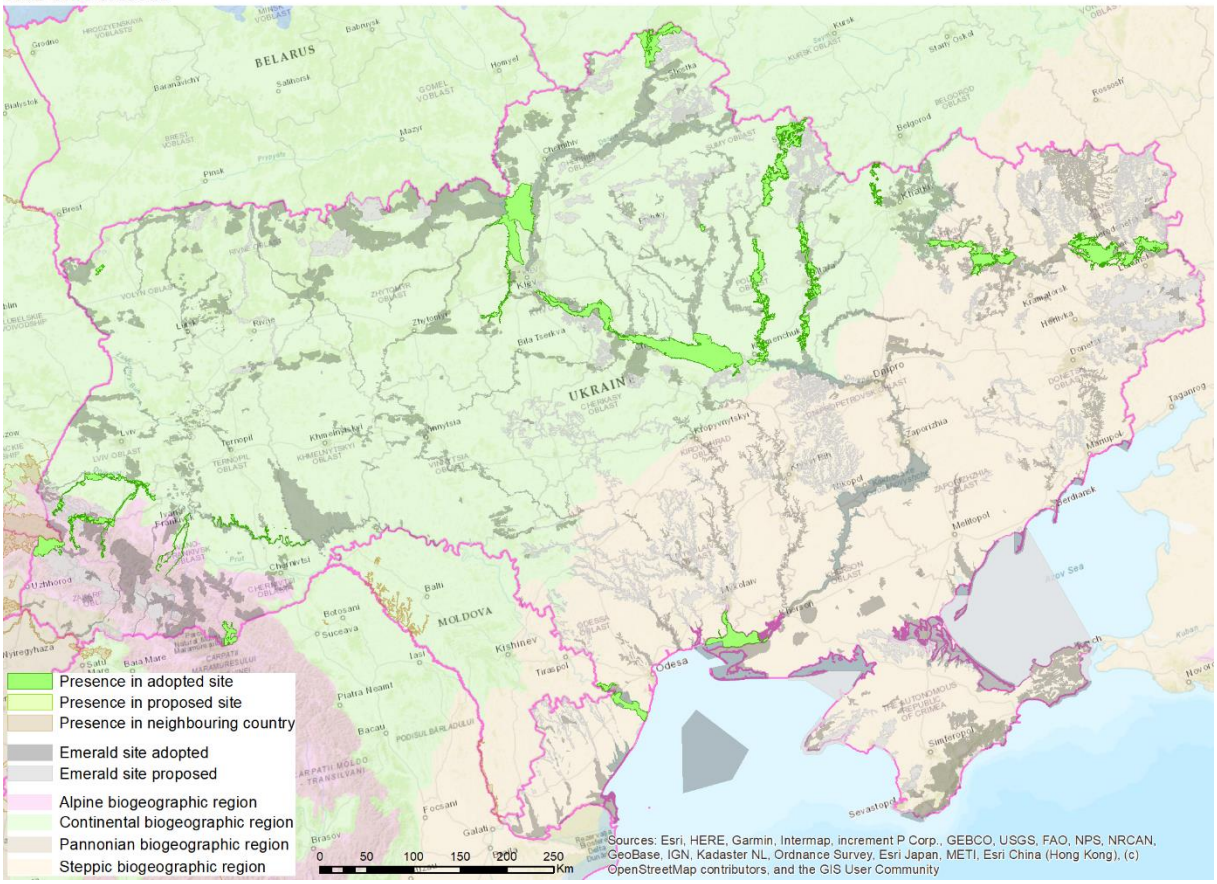
BGR	1016 Vertigo moulinsiana	
CON	Num. of sites:	Adopted: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD/CD
	Recommendation 2025:	Add species in sites in Liubeshiv District of Volyn Region.
	Comments from external experts:	Species was recorded in Liubeshiv District of Volyn Region, namely a fen near Velyka Glusha, 51°50'26.64" N 25°7'4.57" E; another fen near Velyka Glusha, 51°50'19.34" N 24°59'52.08".
	Comments from local experts:	n/a
	References:	Balashov 2013; Balashov et al. 2017

1016 Vertigo moulinsiana



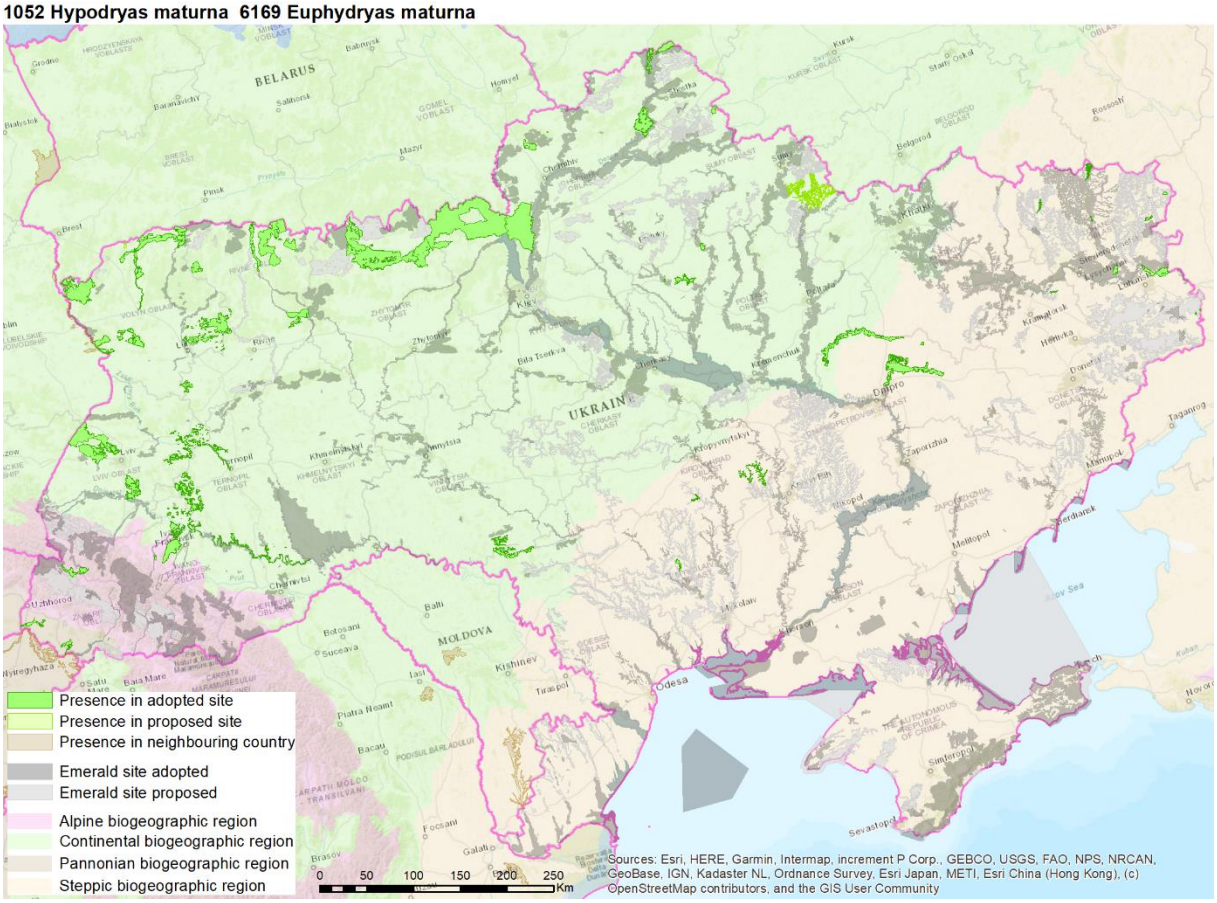
BGR	1032 Unio crassus	
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	The species lives in UA/PAN. Check proposed sites where the species was recorded (population assessment) and add to the site(s).
	Comments from external experts:	No site. Add to adopted sites - UA0000270 (48°07'17.0"N 22°42'39.0"E), UA0000113 (48°27'13.0"N 22°09'57.0"E). Create new sites - Vil'khivka 48°15'49.0"N 23°04'32.0"E, Sil'tse 48°17'14.0"N 22°59'50.0"E, Mukachevo 48°26'14.0"N 22°41'18.0"E, Stare Davydkovo (near Mukachevo) 48°27'52.0"N 22°38'02.0"E, Chabanivka 48°29'18.0"N 22°32'51.0"E.
	Comments from local experts:	Not sure if occurring in UA/PAN. Further research is needed.
	References:	Shevchuk et al. 2021
STE	Num. of sites:	Adopted: 3 (C:1, D:2)
	BGR seminar 2019 conclusion:	SR - Check distribution
	Recommendation 2025:	Additional research is needed, especially areas specified below. Check the population assessment at the mouth of the Sinyukha River to Yuzhnoukrainsk City, site UA0000040 Bugzkyi Gard NNP.
	Comments from external experts:	Species is listed in 1C, 2D sites. Add to proposed site - UA0000565. From the mouth of the Sinyukha River to Yuzhnoukrainsk City, the species is widespread in the main channel, forming clusters in the rapids, as well as on artificial solid substrates near bridges, water mills, and so on. One record from the adopted site UA0000040 Bugzkyi Gard NNP.
	Comments from local experts:	Disappearing. The species was revised—6 new species. Siverski Donets basin. Maybe Azov, close to the border with Russia, Mius River, Buzkyj Gard NP. Pivdennyj Bug - good population.
	References:	The Mohamed bin Zayed Species Conservation Fund (accessed February 19, 2025), https://www.speciesconservation.org/

1032 Unio crassus



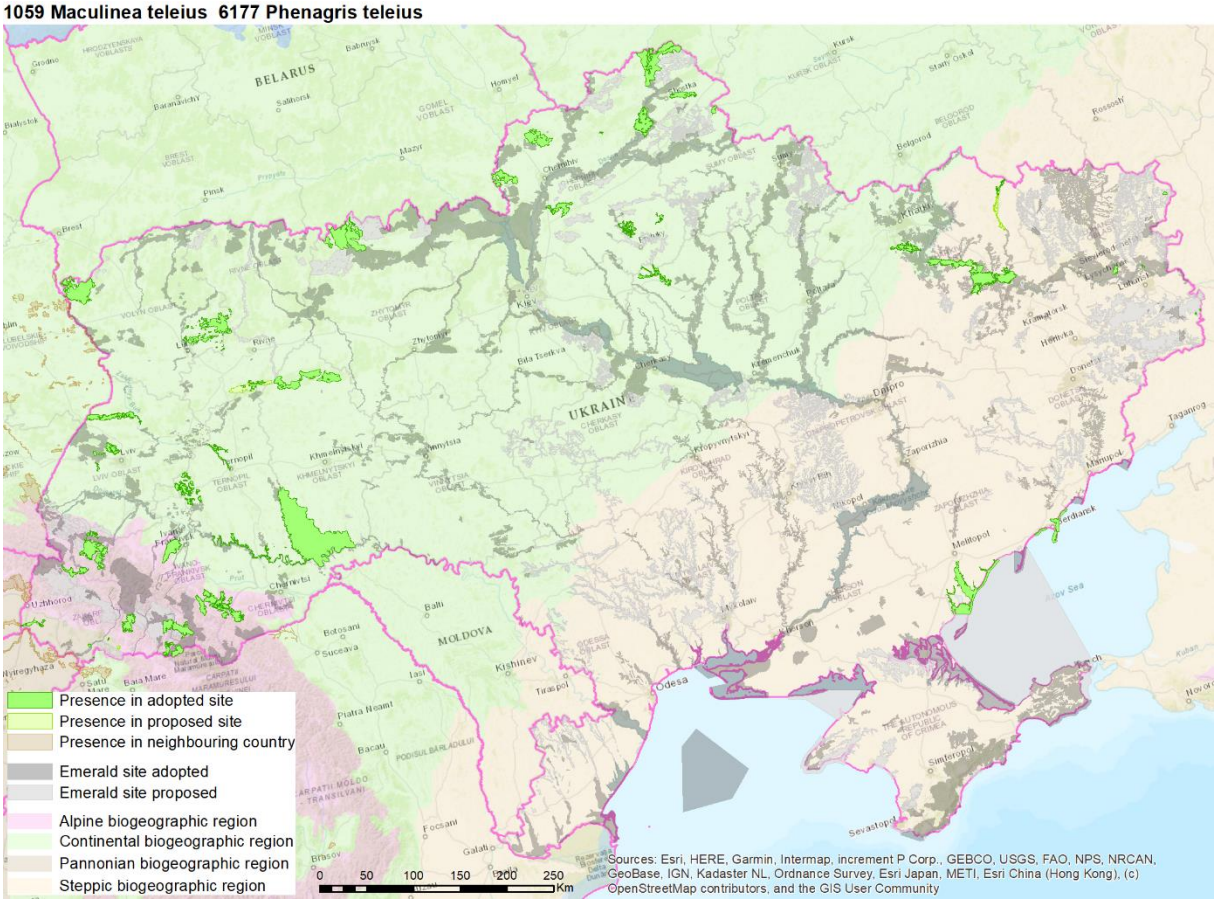
BGR	1052 Hypodryas maturna 6169 Euphydryas maturna	
PAN	Num. of sites:	Adopted: 2 (A:2)
	BGR seminar 2019 conclusion:	SR/CD SR distribution
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	A species of forest habitats with a semiopen structure, sunlit forest roads, and clearings. Typical of open deciduous forests in lowlands and highlands, it requires early successional stages with many young trees up to 7 m tall and an open canopy. Isolated populations are also found in eastern Slovakia, making their occurrence in Ukraine likely. The species was found in the adopted site UA0000113 in 1999 by observation. The dataset is from iNaturalist Research-grade Observation (citizen science) and may not be 100% valid. The species needs to be further researched.
	Comments from local experts:	Need to update the distribution map as it does not reflect the current situation. It could potentially be in lowland forests.
	References:	The IUCN Red List of Threatened Species (accessed February 19, 2025), https://www.iucnredlist.org/en

1052 Hypodryas maturna 6169 Euphydryas maturna



BGR	1059 Maculinea teleius 6177 Phenagris teleius	
STE	Num. of sites:	Adopted: 3 (C:2, D:1)
	BGR seminar 2019 conclusion:	SR/CD
	Recommendation 2025:	Add to sites and review citizen science records.
	Comments from external experts:	Currently in 2C and 1D sites. Correct species name: Phengaris teleius. Added to site: UA0000465. Multiple observations were made at the adopted site UA0000317 and the proposed site UA0000465 (citizen science). Scientific records are from the Kharkiv region, near Mohnach, and the Lugansk region, near Ilienko (probably data already recorded in sites - UA0000074 and UA0000020). Are the data from Pryazovskyi NNP valid?
	Comments from local experts:	Luhansk Nature Reserve, Striltsivskyi Steppe. Priazovski Park is probably a mistake.
	References:	The IUCN Red List of Threatened Species (accessed February 19, 2025), https://www.iucnredlist.org/en

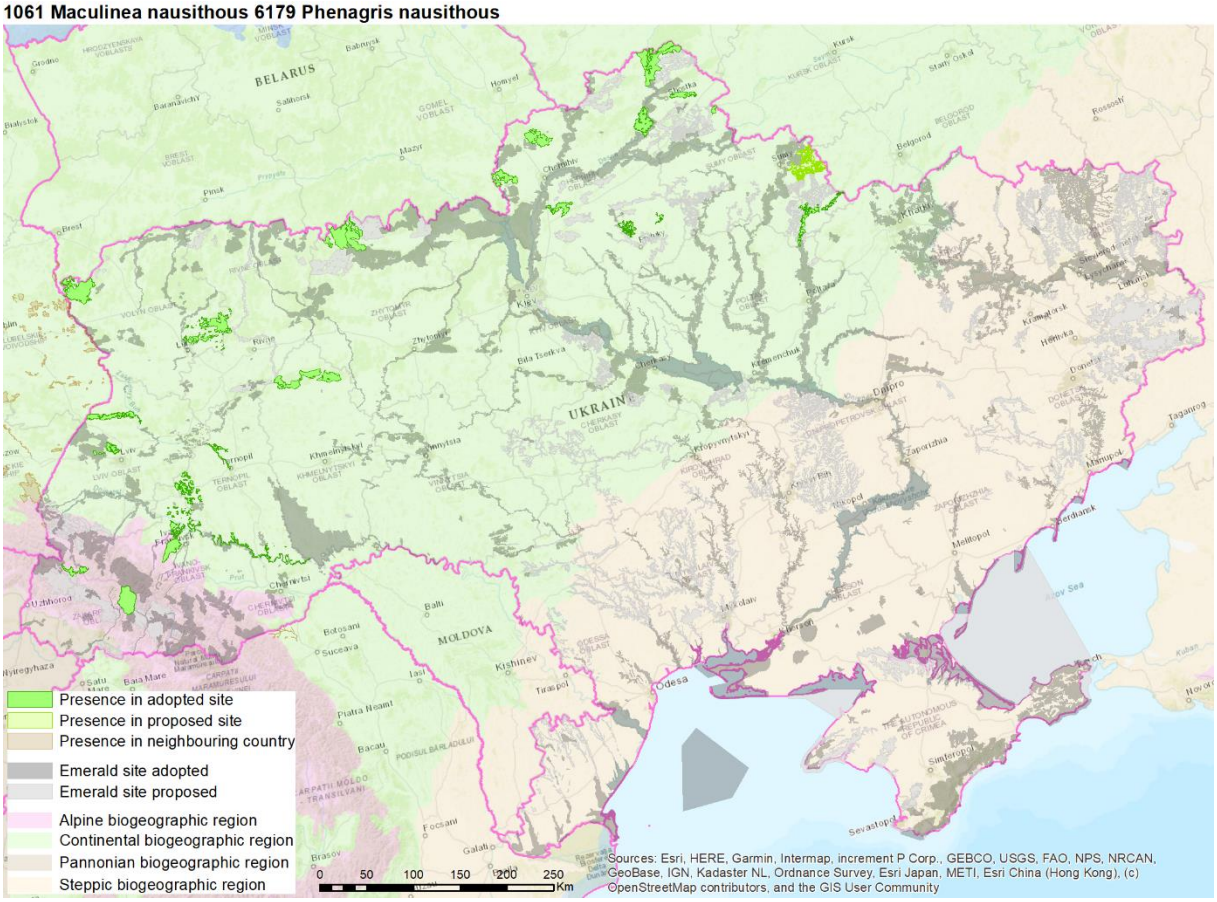
1059 Maculinea teleius 6177 Phenagris teleius



BGR	1061 Maculinea nausithous 6179 Phenagris nausithous	
ALP	Num. of sites:	Adopted: 4 (C:2, D:2)
	BGR seminar 2019 conclusion:	IN MOD/CD
	Recommendation 2025:	Check the occurrence in Kosovanka and Stari Broskivci. Add to new sites specified below.
	Comments from external experts:	Correct species name: Phengaris nausithous. Species were found close to the site UA0000033 (citizen science). No site was added after the seminar. Currently, it is listed on 2C and 2D sites. Species is recorded from Kosovanka (48°13´N; 25°28´E), Stari Broskivci (48°14´N; 25°48´E) (Witek et al. 2008).
	Comments from local experts:	Local occurrence in forests Skoliv Beskyd, Verchnodnistrivski Beskydy, Kosiv, Ivano-Frankivsk - Bohročany. A substantial number of sites could be added.
	References:	The IUCN Red List of Threatened Species (accessed February 19, 2025), https://www.iucnredlist.org/en; Witek et al. 2008
CON	Num. of sites:	Adopted: 24 (C:9, D:15)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN/CD
	Recommendation 2025:	Check the areas near Kosovanka, Stari Broskivci, and sites/regions specified below. Additional research is needed.
	Comments from external experts:	Correct species name: Phengaris nausithous. Added to site: UA0000172, UA0000428, UA0000585. According to the IUCN, the species is a resident of the country. If possible, then harmonize the species names in all records. Change to 6179 Phengaris nausithous. Species were deleted from the 1D site after the seminar and are currently listed in 9C and 16D sites. Species is recorded from Kosovanka (48°13´N; 25°28´E) and Stari Broskivci (48°14´N; 25°48´E) (Witek et al. 2008), which are located on the border with the ALP zone. The species may be present and lives in the CON part of these areas. Additional research is needed.
	Comments from local	Roztočia Biosphere Reserve, close to Lviv, Bilohorščа Regional Landscape

	experts:	Park, Male Polissya, Šatski, Pripjať, Kyiv region. Volyň, Tzumensko NP, Rivne reserve, Pivnične Podillia NP.
	References:	The IUCN Red List of Threatened Species (accessed February 19, 2025), https://www.iucnredlist.org/en; Witek et al. 2008
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Lack of concrete data; additional research is needed.
	Comments from external experts:	Correct species name: Phengaris nausithous. No site and no record from this region; therefore, research is needed.
	Comments from local experts:	n/a
	References:	The IUCN Red List of Threatened Species (accessed February 19, 2025), https://www.iucnredlist.org/en; Witek et al. 2008

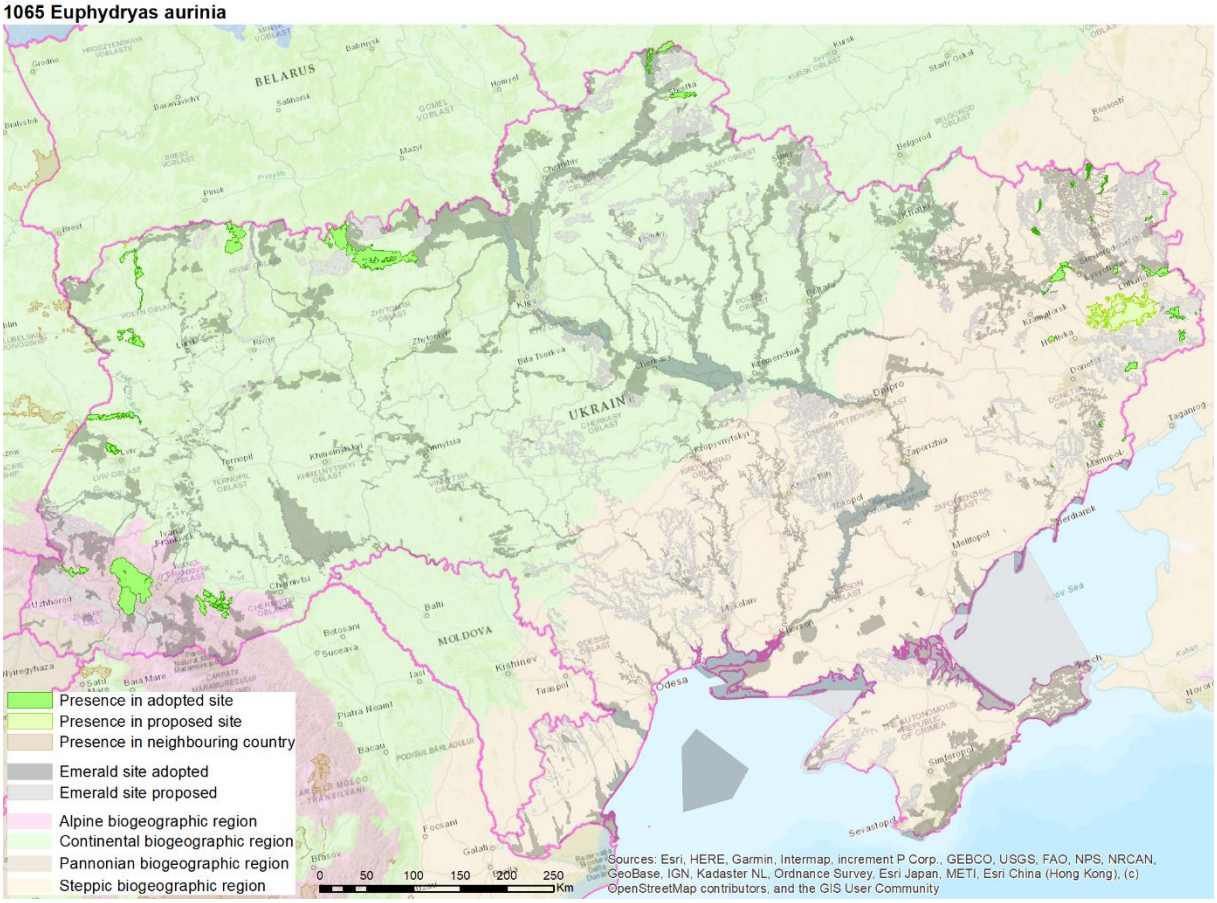
1061 Maculinea nausithous 6179 Phenagris nausithous



BGR	1065 Euphydryas aurinia	
ALP	Num. of sites:	Adopted: 4 (C:1, D:3)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	There is some sign of the presence of this species in Romania, but is it really present in UA_ALP? Record from citizen science close to site UA0000326 (49°06'00.000"N 23°54'00.000"E), UA0000365 (48°36'00.000"N 24°12'00.000"E), UA0000116 (48°48'00.000"N 24°18'00.000"E).
	Comments from local experts:	Locally represented. Vysokyi Verkh, close to Slavski and Volosianka, Užanski NP, Sinevir NP, Sinehora NP, Gorgany region, Bojkivšina NP.
	References:	Mihai et al. 2022; Global Biodiversity Information Facility (accessed February 19, 2025), https://www.gbif.org/
CON	Num. of sites:	Adopted: 9 (C:2, D:7), Proposed: 1 (C:1)

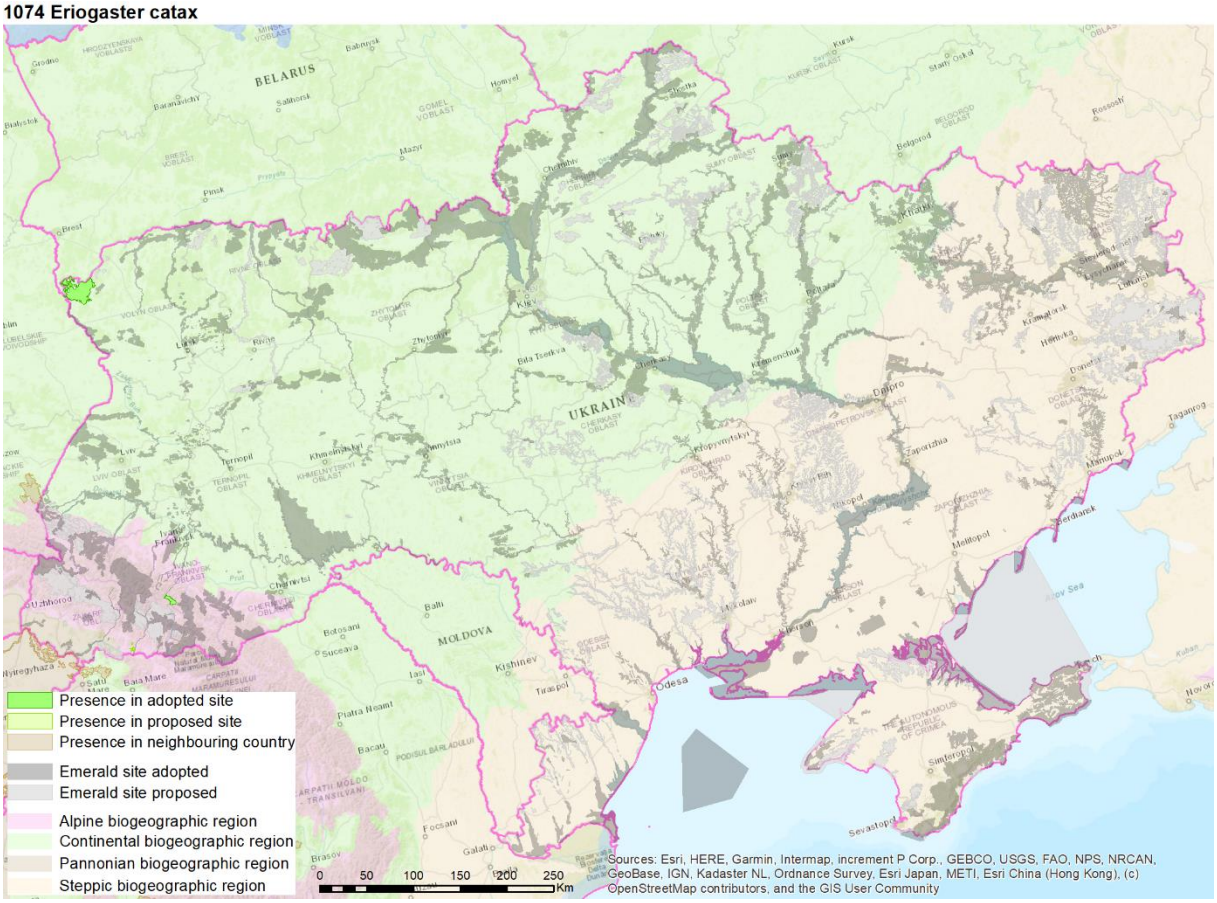
	BGR seminar 2019 conclusion:	IN MOD/CD
	Recommendation 2025:	Add to sites specified below. Population assessment is needed.
	Comments from external experts:	The species has been added to the 1C site and deleted from the 1D site after the seminar. Currently, it is listed in 3C and 7D sites, which are insufficient (population coverage less than 6%). Added to sites: UA0000172, UA0000477. Data from citizen science - near adopted site UA0000055 (51°54'00.000"N 31°06'00.000"E); UA0000332 (49°24'00.000"N, 23°54'00.000"E); UA0000179 (49°48'00.000"N 23°54'00.000"E); UA0000335 (50°06'00.000"N 27°42'00.000"E); UA0000342 (50°24'00.000"N 30°06'00.000"E); UA0000133 (51°54'00.000"N 31°12'00.000"E); UA0000044 (51°48'00.000"N 25°30'00.000"E); UA0000058 (51°36'00.000"N 32°47'59.999"E); in adopted site UA0000121; near proposed site UA0000598 (48°42'00.000"N 31°18'00.000"E). According to the IUCN, the species is sufficiently covered regarding UA_CON (Lviv, Volyn, Rivne, and Kharkiv regions).
	Comments from local experts:	Polisia, Šatski NP, Pripjať, Stohid, Male Polisia, Maľovanka Regional Landscape Park, Rivne NR, Poliski zapovednik, close to Kyiv.
	References:	Global Biodiversity Information Facility (accessed February 19, 2025), https://www.gbif.org/

1065 Euphydryas aurinia



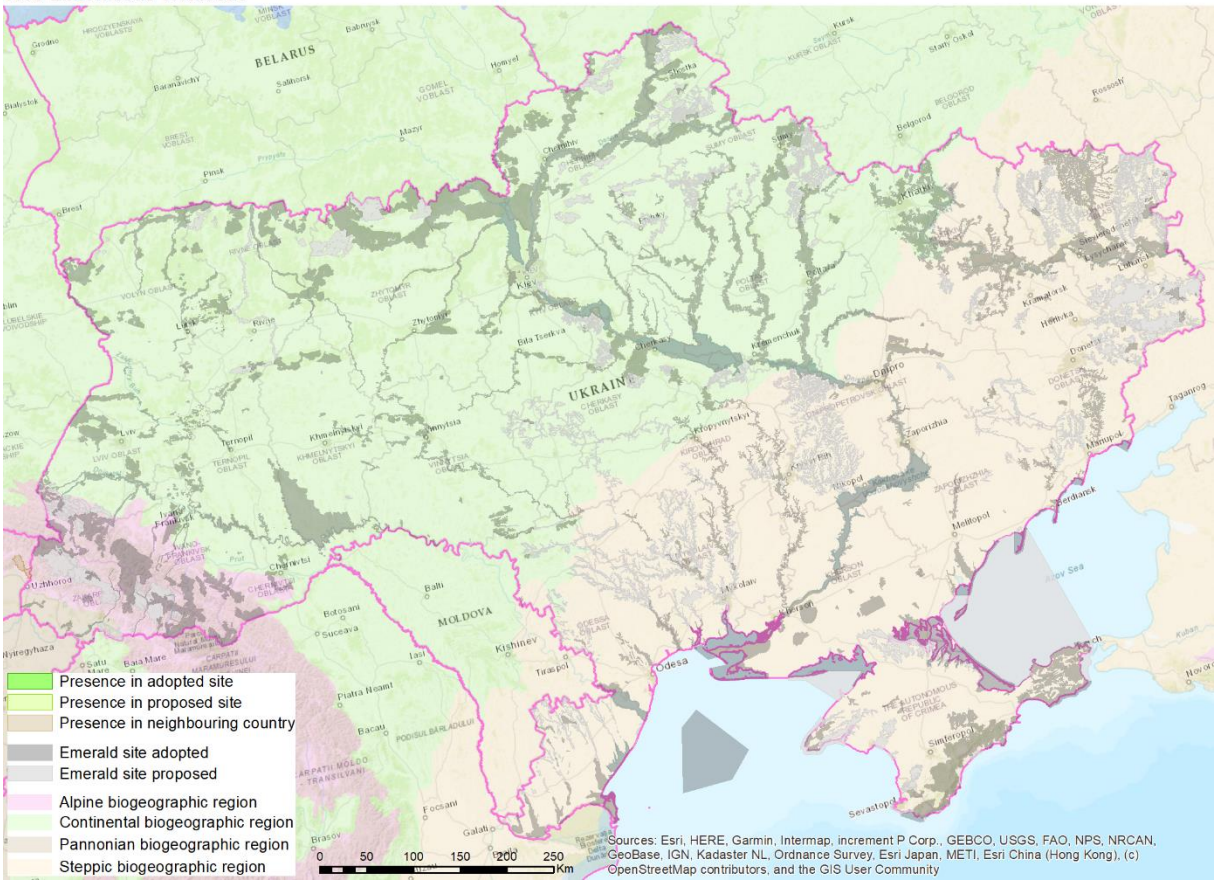
BGR	1074 Eriogaster catax	
CON	Num. of sites:	Adopted: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Further research is needed; revise occurrence in site UA0000025 Shatskyi.
	Comments from external experts:	No change. There are doubts about its occurrence. Is this species really present on the border with Poland.
	Comments from local experts:	No recent record in CON—only in PAN and ALP. It was never found in Volyň.
	References:	n/a

1074 Eriogaster catax



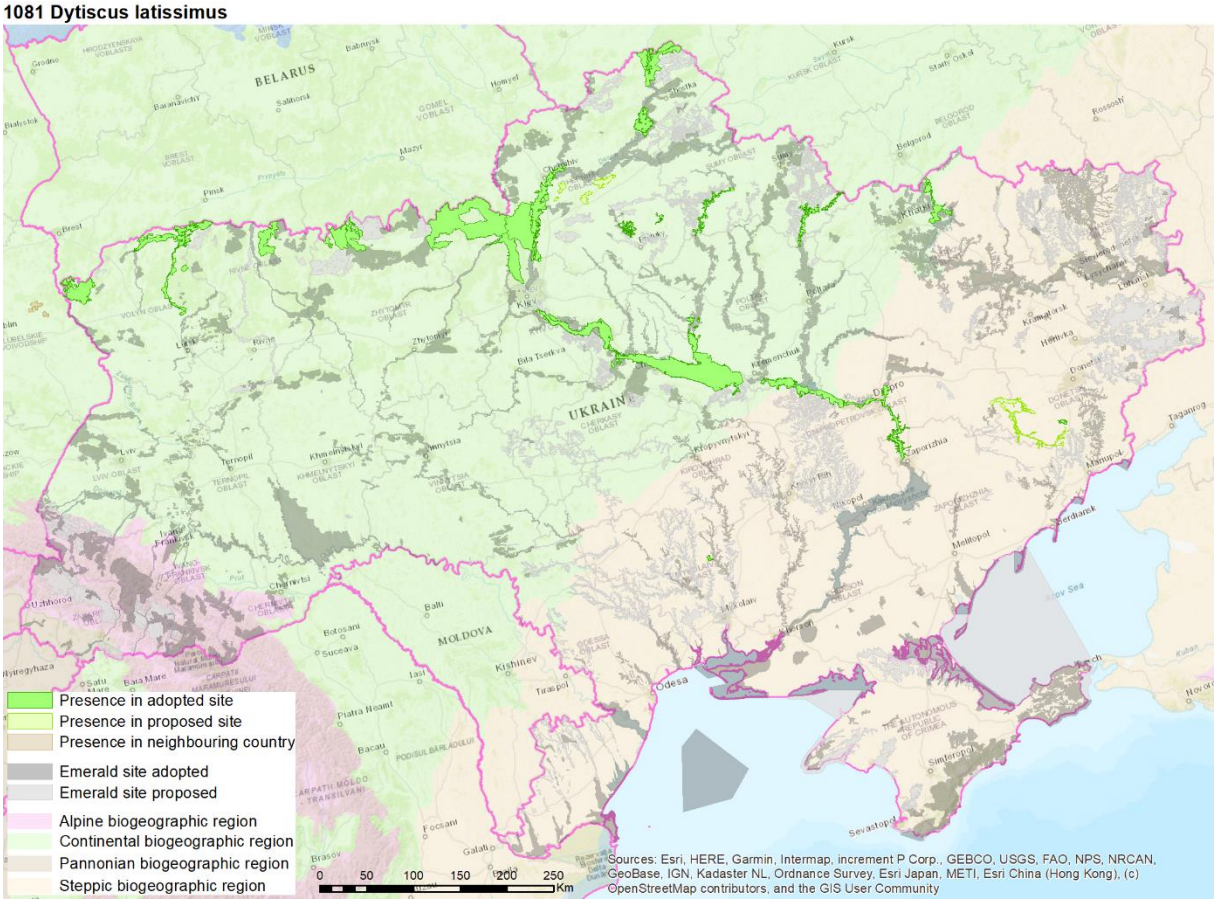
BGR	1079 Limoniscus violaceus	
ALP	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	The first record is from 2009, in the Zakarpatia region, Perechyn, Vorochevo, and Plishka Mountain, and it was in the larval stage. The other record is from 2017 (citizen science) from the adopted site UA0000006. It would need to be further researched and documented (SR REF).
	Comments from local experts:	Information about the occurrence in sites Perechyn, Vorochevo, and Plishka Mountain is correct.
	References:	Mertlík and Samek 2009; Global Biodiversity Information Facility (accessed February 19, 2025), https://www.gbif.org/; Gouix et al. 2012
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	No site. A record from 2009 in the Zakarpatia region (ALP region) by Mertlík and Samek (2009) is from the ALP region but near the PAN region. The species may also live in the PAN region; therefore, research is useful.
	Comments from local experts:	No record
	References:	Mertlík and Samek 2009; Global Biodiversity Information Facility (accessed February 19, 2025), https://www.gbif.org/; Gouix et al. 2012

1079 Limoniscus violaceus



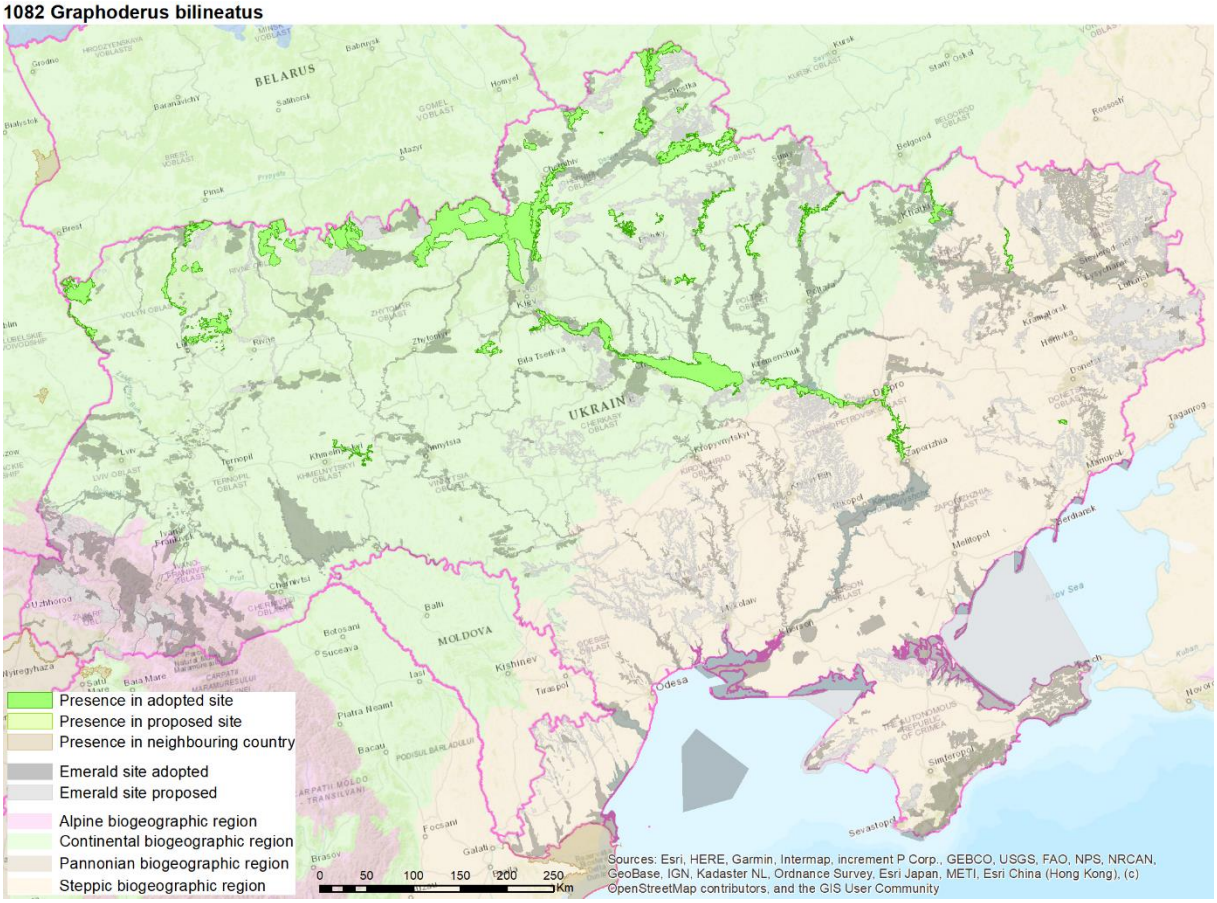
BGR	1081 Dytiscus latissimus	
CON	Num. of sites:	Adopted: 24 (A:1, D:23), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD/CD
	Recommendation 2025:	The coverage seem to be sufficient. Check presence in the sites indicated below; a few sites could be added.
	Comments from external experts:	Added to the site: UA0000470. Some new records from citizen science near the adopted site UA0000365 (48°54'00.000"N 24°42'00.000" E); near adopted site UA0000189 (49°36'00.000"N 25°36'00.000" E); near adopted site UA0000036 (50°42'00.000"N 32°54'00.000" E); near adopted site UA0000133) (51°54'00.000"N 31°12'00.000" E); near proposed site UA0000470 (51°18'00.000"N 32°17'59.999"E); near proposed site UA0000469 (51°00'00.000"N 31°54'00.000" E). They are mainly located north and northeast of Kyiv, but a few are also located west of this country. Species was added to 1C site. Currently listed in 1A, 1C, 23D sites. According to its distribution map in the Red Book of Ukraine, only 5 locations (2 current and 3 historical records) are presented. CD: population assessment.
	Comments from local experts:	Shatski NP, Stochid, Chernobyl', Polissia, Rivna Reserve, close to Zhytomyr, Rivne. A few sites to be added.
	References:	Aikimov and Radchenko 2009; Markowski and Buczyński 2020; Global Biodiversity Information Facility (accessed February 19, 2025), https://www.gbif.org/

1081 Dytiscus latissimus



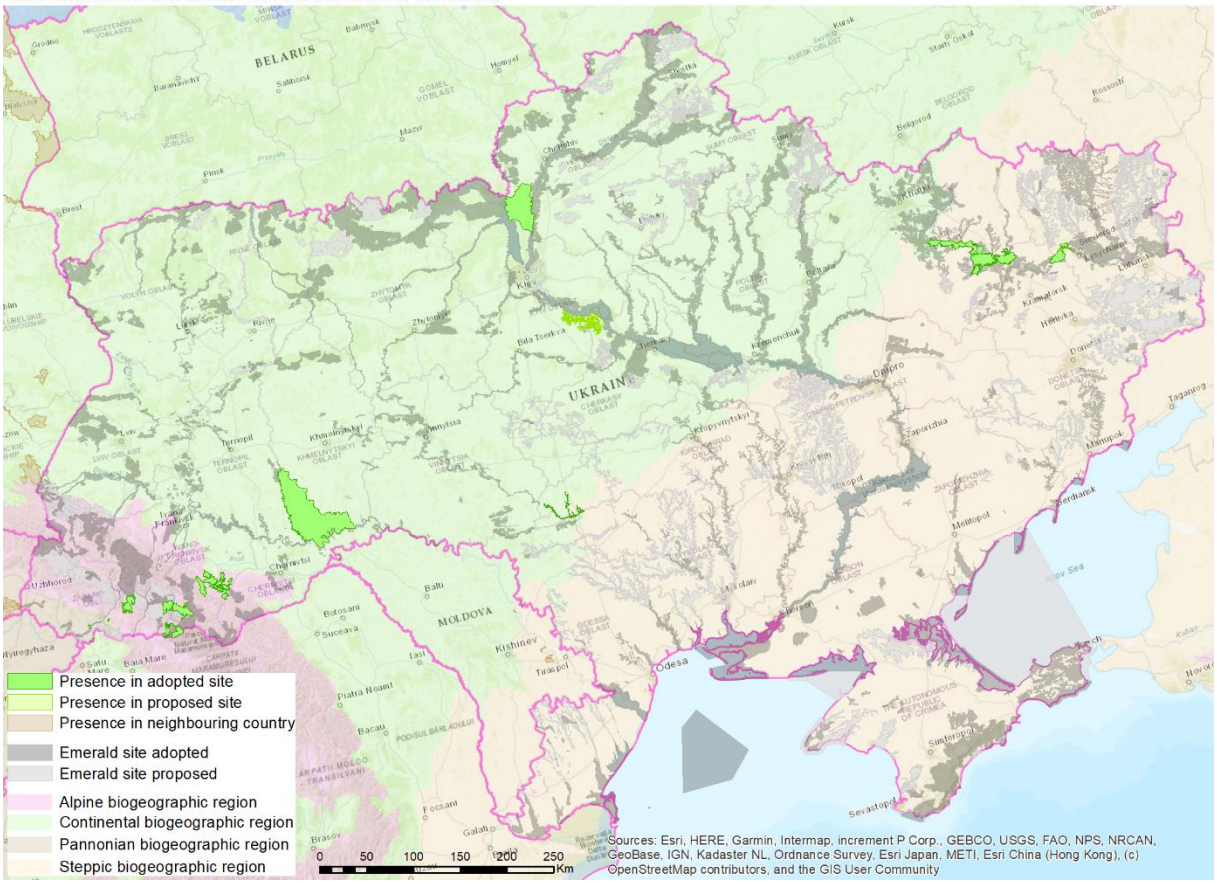
BGR	1082 Graphoderus bilineatus	
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Check two current locations from the southern part of the region according to the Red Book. Additional research is needed.
	Comments from external experts:	No site. According to the distribution map in the Red Book of Ukraine, there are two current locations in the southern part of the region. They are known from Transcarpathia (Aikimov and Radchenko 2009). Additional research is needed (SR on REF).
	Comments from local experts:	No current record. Probably could be deleted from the Reference list.
	References:	Aikimov and Radchenko 2009
STE	Num. of sites:	Adopted: 4 (D:4)
	BGR seminar 2019 conclusion:	SR/CD
	Recommendation 2025:	Additional research is needed, especially in Polissia.
	Comments from external experts:	The species listed in 4D sites is not a viable population. According to its distribution map in the Red Book of Ukraine, only one current location is from the region's eastern part. It occurs from Polissia on the south to Montane subzones of the steppe zone. It is known from Transcarpathia. Additional research is needed (SR on REF).
	Comments from local experts:	No known sites, but species could occur in Polissia; a study of this region is needed.
	References:	Aikimov and Radchenko 2009

1082 Graphoderus bilineatus



BGR	1084 Osmoderma eremita 5378 Osmoderma barnabita	
CON	Num. of sites:	Adopted: 3 (D:3), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD/CD
	Recommendation 2025:	Consider addition to specified site, but further research is needed. Correct population assessment for some records.
	Comments from external experts:	Species added to the 1D site, currently listed in the 4D sites, are not viable populations. According to the distribution of the map in the Red Book of Ukraine, there are many locations in the CON zone, and other new sites with viable populations should be added. The geographical gaps are in the northwestern and eastern parts of the region. CD: population assessment is needed. There are some records from GBIF - in adopted site UA0000038, UA0000034; near adopted site UA0000085 (48°24'00.000"N 25°36'00.000"E); UA0000035 (49°06'00.000"N 24°42'00.000"E); UA0000365 (48°54'00.000"N 24°42'00.000"E); UA0000361 (48°36'00.000"N 25°18'00.000"E); UA0000043 (50°24'00.000"N 30°30'00.000"E).
	Comments from local experts:	Further research is needed. Podilski Tovtry NPP, Dnistrovs'kyi kan'ion, Halyčskyj NPP, Chernobyl Biosphere Reserve. Clarify the occurrence in Kaniv and central Ukraine.
	References:	Aikimov and Radchenko 2009; Audisio et al. 2007; Global Biodiversity Information Facility (accessed February 19, 2025), https://www.gbif.org/

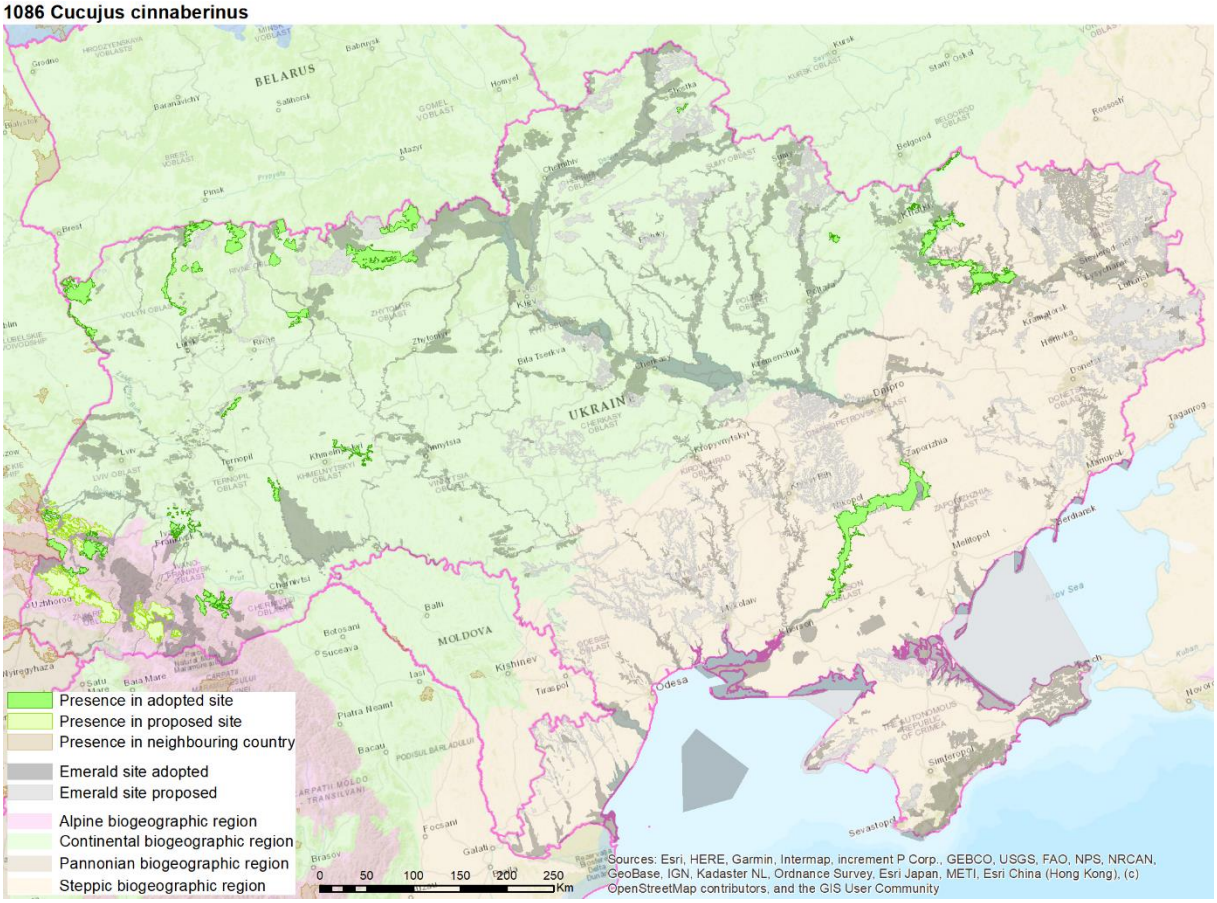
1084 Osmoderma eremita 5378 Osmoderma barnabita



BGR	1086 Cucujus cinnaberinus	
ALP	Num. of sites:	Adopted: 6 (D:6), Proposed: 6 (C:4, D:2)
	BGR seminar 2019 conclusion:	IN MOD/CD
	Recommendation 2025:	SUF
	Comments from external experts:	Species was added to sites UA0000602, UA0000606, UA0000607, UA0000608, UA0000609, UA0000610. New record near adopted site UA0000365 (48°36'50.21"N 24°34'25.33"E). The new record (from GBIF) is between adopted site UA0000041 and proposed site UA0000610 (48°18'00.000"N 23°12'00.000"E). New record (GBIF) from adopted site UA0000006 (48°18'00.000"N 23°36'00.000"E). New record (GBIF) under the site UA0000006 (48°12'00.000"N 23°42'00.000"E). New record (GBIF) close to proposed site UA0000610 (48°42'00.000"N 22°24'00.000"E). New record (GBIF) near under the adopted site UA0000269 (48°18'00.000"N 23°30'00.000"E). Species found (GBIF) in adopted site UA0000013 (49°00'00.000"N 23°30'00.000"E).
	Comments from local experts:	Species is broadly distributed; sufficient.
	References:	Aikimov and Radchenko 2009; Global Biodiversity Information Facility (accessed February 19, 2025), https://www.gbif.org/; Ukrainian Biodiversity Information Network (accessed February 19, 2025), https://ukrbin.com/
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	According to the distribution map in the Red Book of Ukraine, there is no occurrence in the region. Due to the lack of data, additional research is needed (SR REF).
	Comments from local experts:	Species can occur, but knowledge is missing.
	References:	Aikimov and Radchenko 2009; EUNIS Database (accessed February 19, 2025), https://eunis.eea.europa.eu/; Global Biodiversity Information Facility

		(accessed February 19, 2025), https://www.gbif.org; Ukrainian Biodiversity Information Network (accessed February 19, 2025), https://ukrbin.com/
STE	Num. of sites:	Adopted: 2 (B:1, D:1)
	BGR seminar 2019 conclusion:	SR/CD
	Recommendation 2025:	More research is needed. No new records. Absence of present findings.
	Comments from external experts:	More research is needed.
	Comments from local experts:	Additional research needed; Chortica (Zaporiżżia), locally Dnipro river.
	References:	n/a

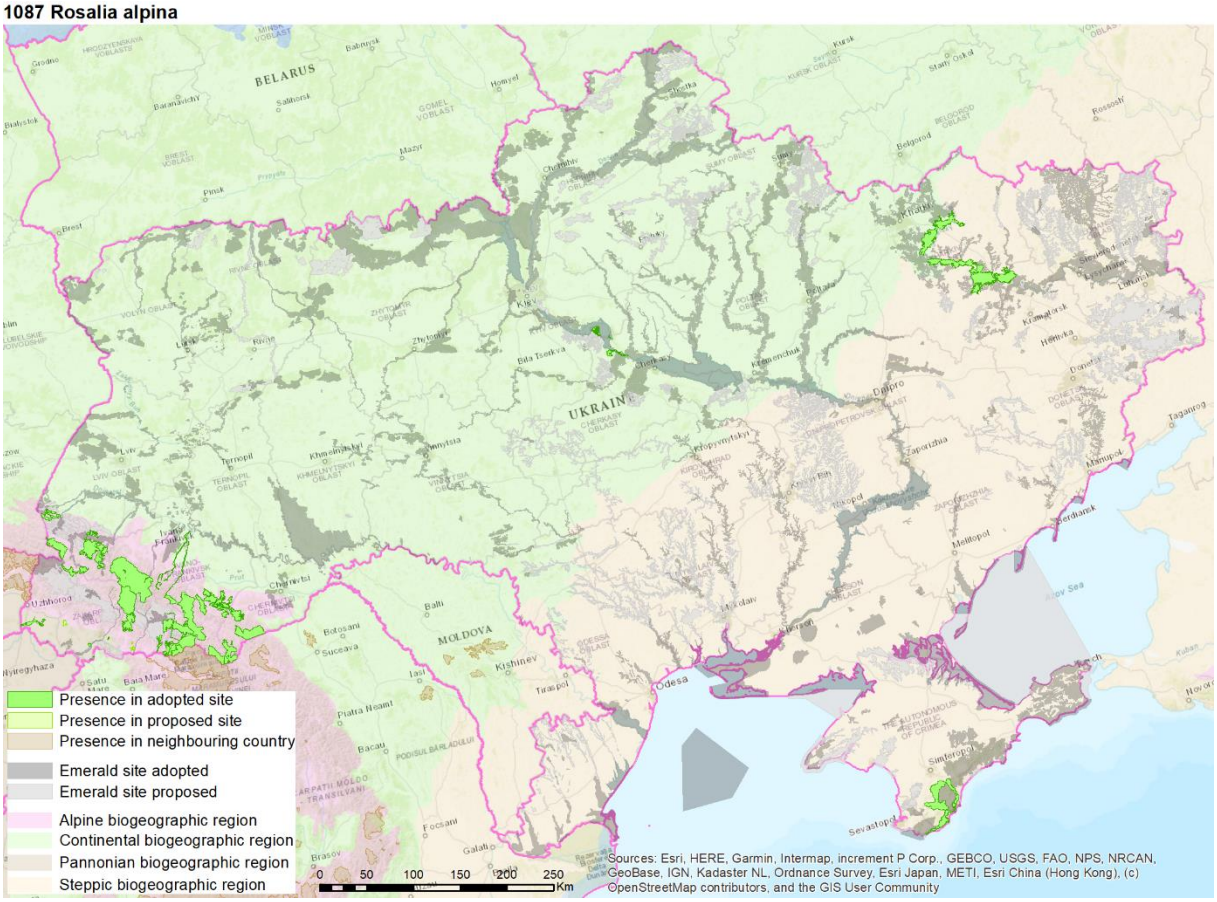
1086 Cucujus cinnaberinus



BGR	1087 Rosalia alpina	
CON	Num. of sites:	Adopted: 4 (C:1, D:3)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	No site was added; it is currently listed in 1C and 3D sites. According to its distribution map in the Red Book of Ukraine, the CON zone presents only historical occurrences. Additional research is needed (SR).
	Comments from local experts:	SR correctly express the current situation.
	References:	Aikimov and Radchenko 2009; Plazi (accessed February 19, 2025), https://plazi.org/; Zamoroka and Ruslan 2011
PAN	Num. of sites:	Adopted: 2 (D:2), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	The species is found in areas such as the Volyn region, Mukachevo region, eastern part of the Zakarpattia region, eastern part of the Chernivtsi region, Chernihiv region, western part of Sumy, western part of Kyiv, western part of

		the Poltava region, western part of the Kharkiv region, western part of the Luhansk region, and the western part of the Donetsk region. Species added to the 1D site, currently listed in 3D sites, that are not viable populations. According to the map distribution in the Red Book of Ukraine, there are several locations in the PAN zone on the borders with Slovakia and Hungary. Other new sites with viable populations should be added; therefore, additional research is needed.
	Comments from local experts:	Insufficient knowledge. To check around Chust, close to Mukačevo, Vinogradov - volcanic ridge.
	References:	Aikimov and Radchenko 2009; Plaz (accessed February 19, 2025), https://plazi.org/

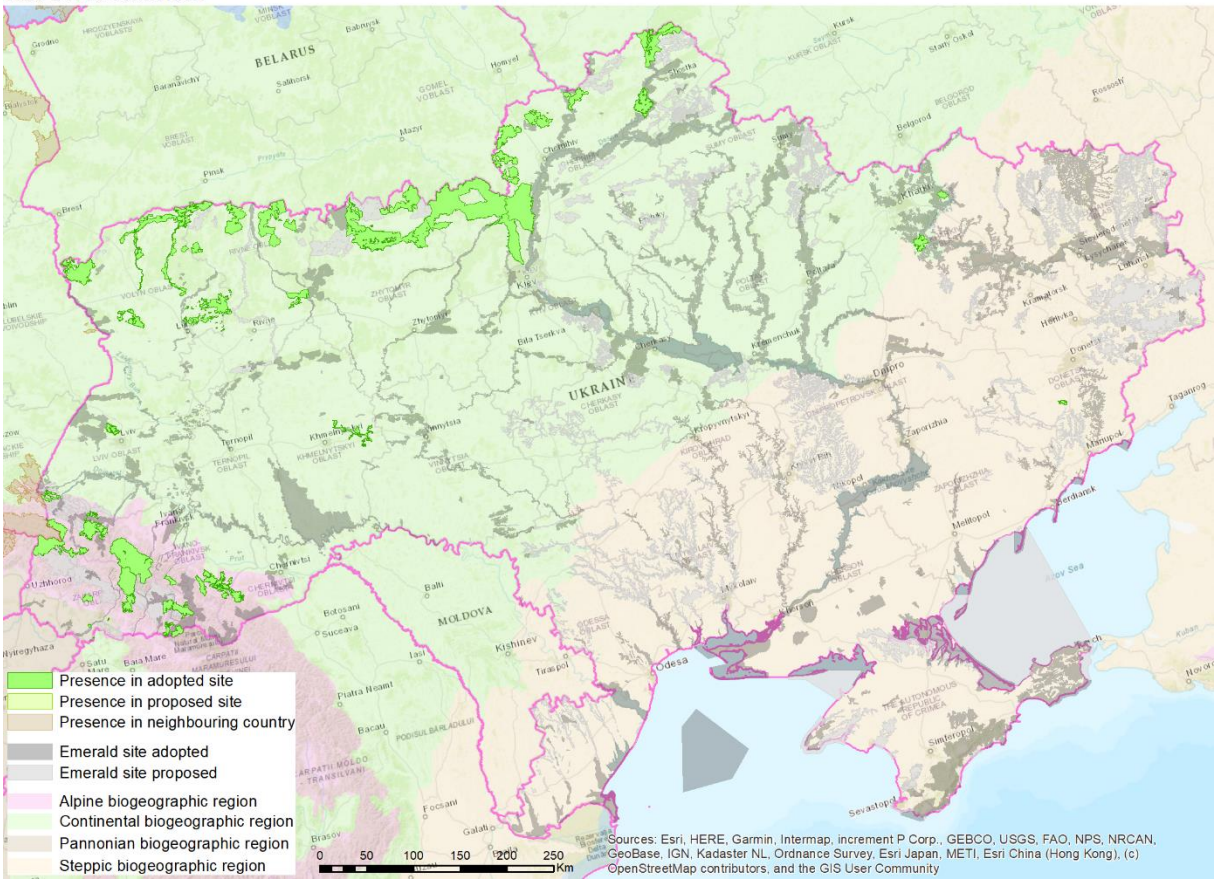
1087 Rosalia alpina



BGR	**1920 Boros schneideri**	
CON	Num. of sites:	Adopted: 32 (D:32)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Additional research is needed. Population assessment.
	Comments from external experts:	According to the IUCN Red List map, the distribution of the species in Ukraine appears to be limited. The species is mainly found in Central and Eastern Europe, with its presence in Ukraine likely restricted to the Carpathians or nearby mountainous areas. One record from citizen science (iNaturalist) has been documented near the adopted site UA0000123 (50°14’18.0”N 26°27’05.9”E). Additional records have been documented from citizen science (GBIF) in adopted sites UA0000043, UA0000001, UA0000091, UA0000038. There was no site after the seminar. The species is listed in 32D sites, which is insufficient (population coverage is near 0%). Also, in other regions (PAN, ALP), coverage is the same—only D sites (in ALP 12 sites, in PAN 1 site). Population assessment and additional research are needed.
	Comments from local experts:	It is often a mistake in identification; further research is needed.
	References:	The IUCN Red List of Threatened Species (accessed February 19, 2025),

		https://www.iucnredlist.org/en; iNaturalist (accessed February 19, 2025), https://www.inaturalist.org/; Global Biodiversity Information Facility (accessed February 19, 2025), https://www.gbif.org/
STE	Num. of sites:	Adopted: 0
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	It is found in Ukraine, but specific data are unknown; additional research is needed.
	Comments from external experts:	In 2025, the species was deleted from 9 adopted sites with D populations. The species is mentioned in several articles, which explicitly state that it is also found in Ukraine; however, specific data are not available. According to multiple literary sources, the species is considered a relic of the original forest, requiring the presence of dead trees with a trunk diameter of more than 40 cm and older than four years for its development. It inhabits only the most pristine submontane to montane mixed primaeval forests, characterized by the presence of fir, spruce, and beech.
	Comments from local experts:	Maybe Donets basin, Dnipro
	References:	Jerzy et al. 2014; The IUCN Red List of Threatened Species (accessed February 19, 2025), https://www.iucnredlist.org/en; Natura Bohemica (accessed February 19, 2025), http://www.naturabohemica.cz/

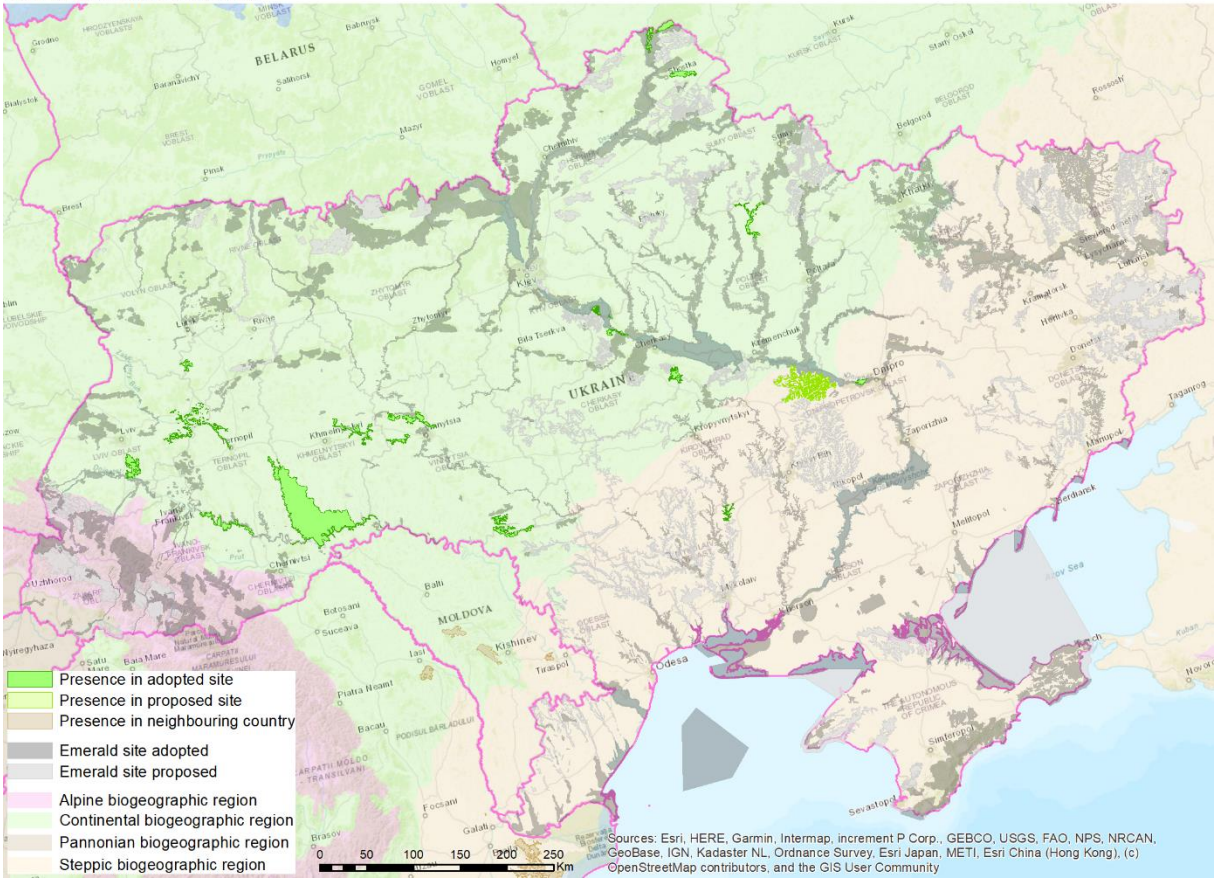
1920 Boros schneideri



BGR	**4011 Bolbelasmus unicornis**	
STE	Num. of sites:	Adopted: 2 (D:2), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN/SR
	Recommendation 2025:	Further research is needed; CD: population assessment.
	Comments from external experts:	The species was added to one D site, which is insufficient. Currently, it is only in 3D sites. According to its distribution map in the Red Book of Ukraine, only 5 locations (2 current and 3 historical records) are presented. CD: population

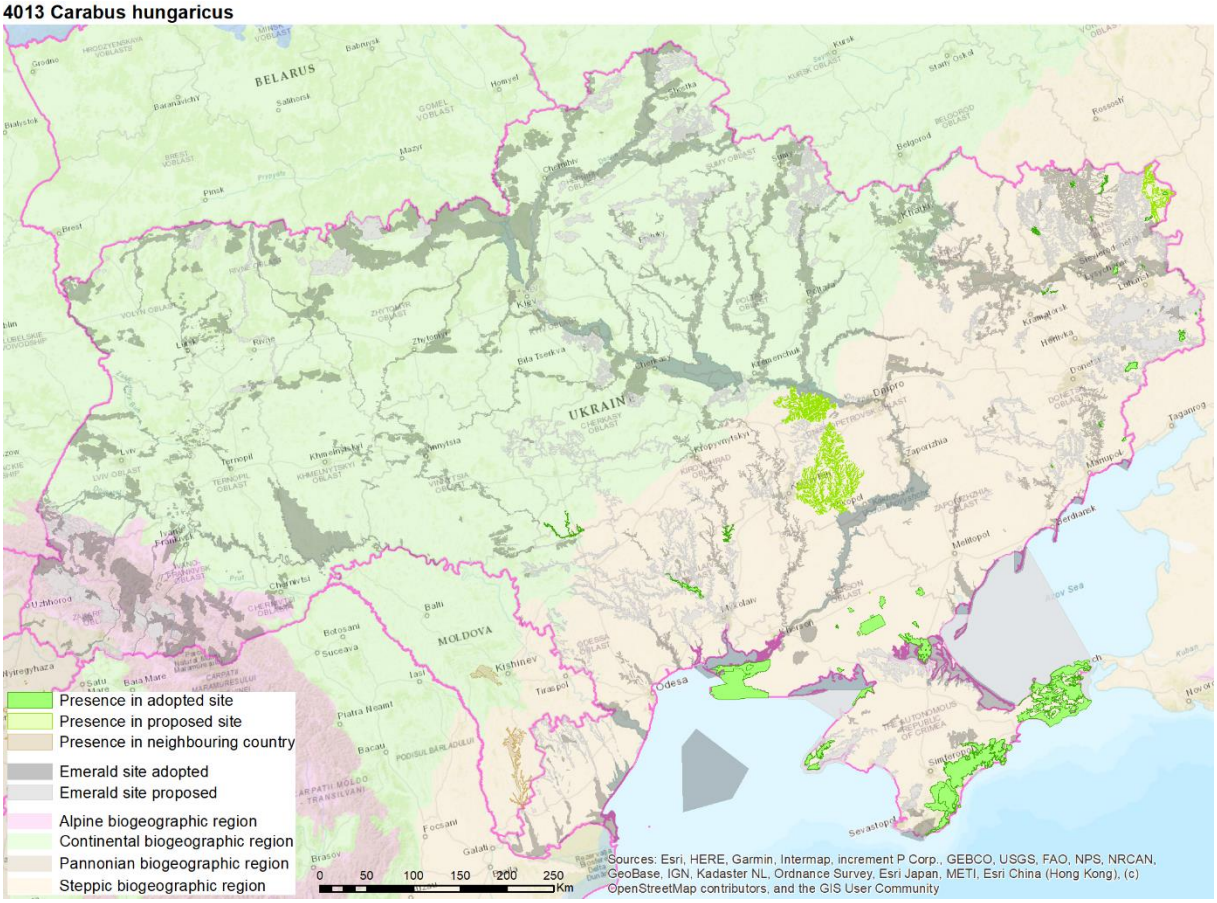
		assessment. Generally, all UA species are listed only in 20D sites (in CON 17 sites and in STE 3 sites); therefore, they are also CD for the CON region.
	Comments from local experts:	In the Dnipro region, close to Zaporožia, further research is needed.
	References:	Aikimov and Radchenko 2009; Juřena 2022

4011 Bolbelasmus unicornis



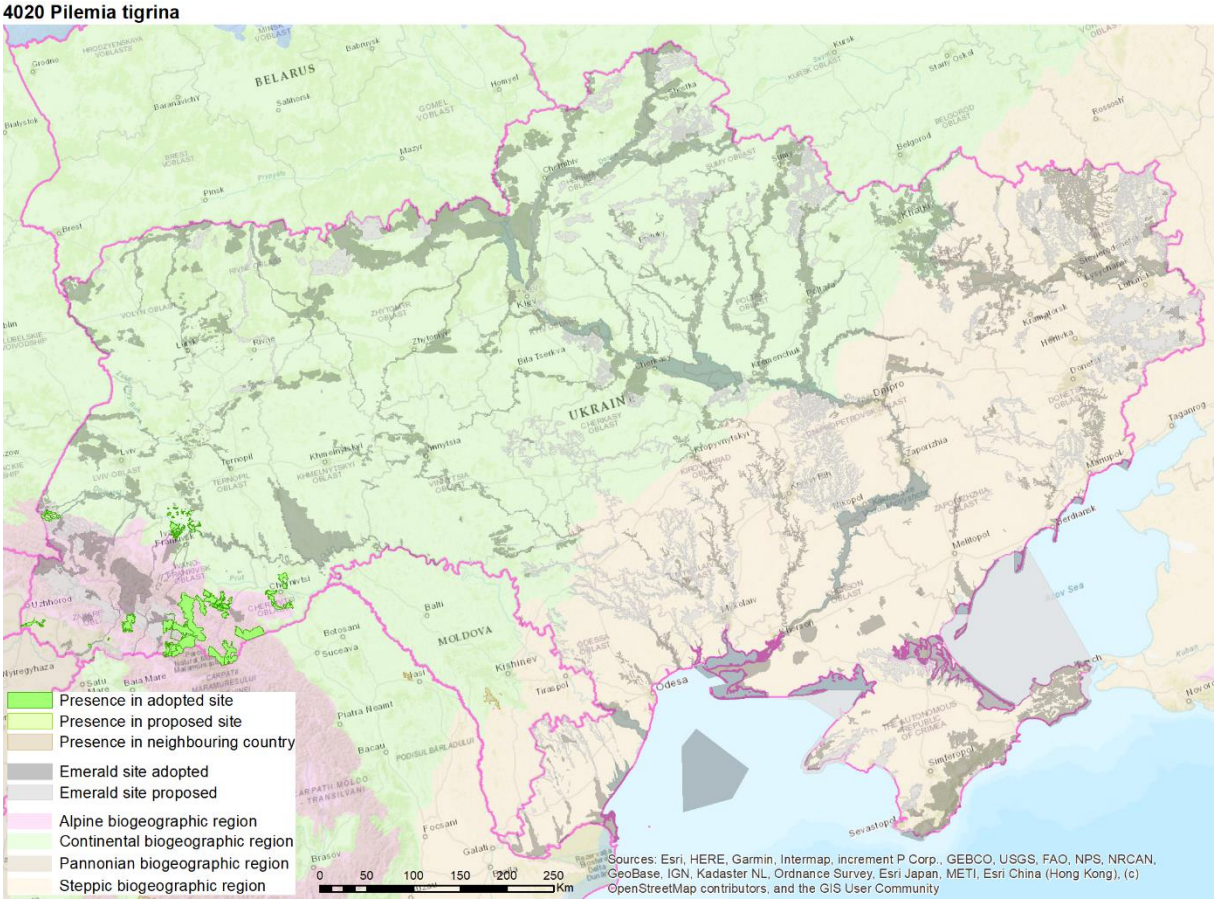
BGR	4013 Carabus hungaricus	
CON	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	There is no site. According to its distribution map in the Red Book of Ukraine, only 2 historical records are from the central region. Additional research is needed (SR on REF).
	Comments from local experts:	Species occurs in the steppe zone but is disappearing.
	References:	Aikimov and Radchenko 2009

4013 Carabus hungaricus



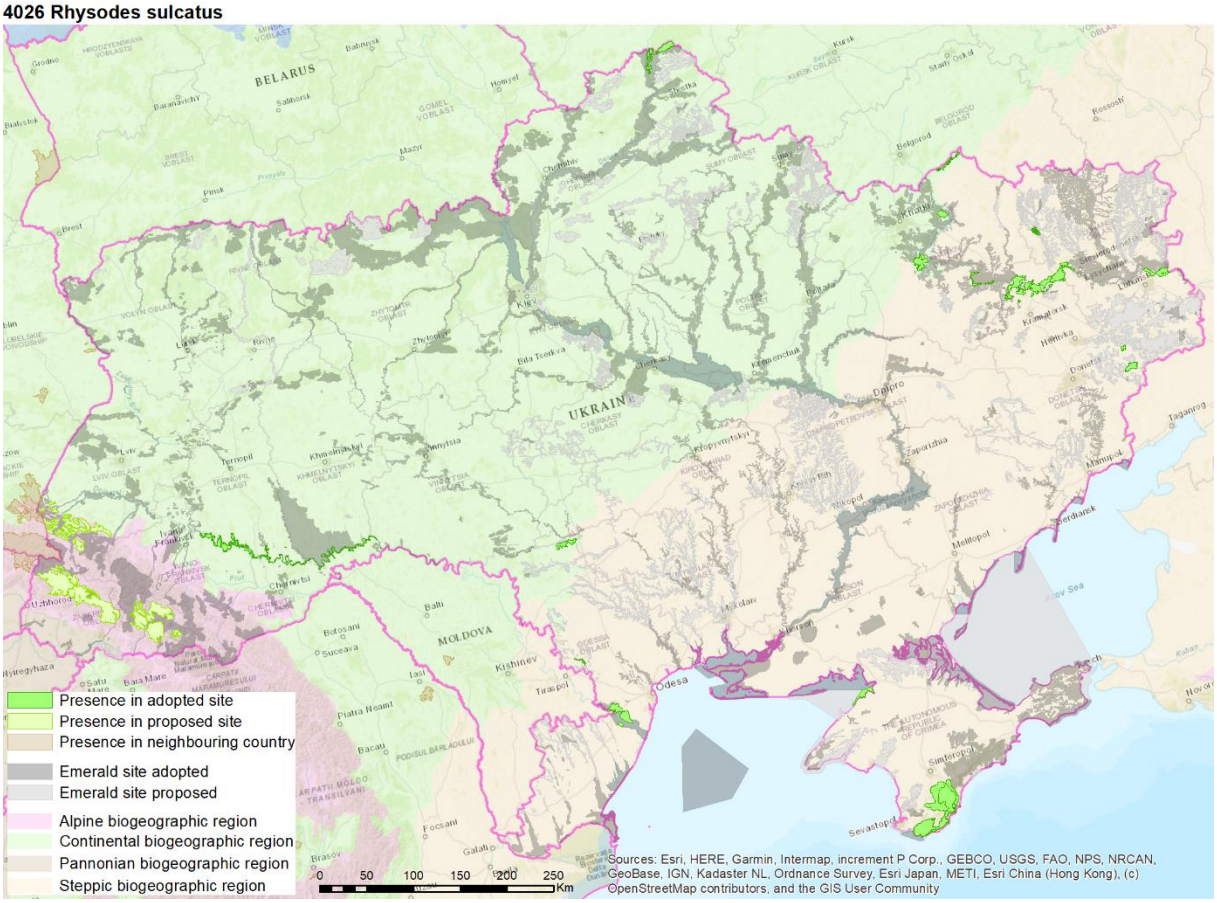
BGR	4020 Pilemia tigrina	
CON	Num. of sites:	Adopted: 2 (D:2)
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	Add to site(s) in West Podillya Highland; consider sites specified by local experts. Revision of occurrence in the field is needed.
	Comments from external experts:	Ponto-Pannonic species. It spreads within the Pannonian (Zakarpattia) Plane and West Podillya Highland in Ukraine. The species was also observed in iNaturalist (citizen science).
	Comments from local experts:	Halyčskyj NPP. Ivano-Frankivsk region: Semenivka, Pidpechory, Junaškiv, Oleshiv, Burshtyn, Harasymiv (48,765410 25,233890).
	References:	iNaturalist (accessed February 19, 2025), https://www.inaturalist.org/; Zamoroka 2022
PAN	Num. of sites:	Adopted: 2 (D:2)
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	The species lives in the Pannonian (Zakarpattia) Plane; additional research is needed to determine the detailed location of the site(s).
	Comments from external experts:	Ponto-Pannonic species. It spreads within the Pannonian (Zakarpattia) Plane (add to adopted site: UA0000006 [48°08'52.4"N 23°04'09.6"E]) and the West Podillya Highland in Ukraine. The species was also observed in iNaturalist (citizen science).
	Comments from local experts:	Carpathian Biosphere Reserve, Čorna Hora near Vinogradiv, 10 individuals
	References:	iNaturalist (accessed February 19, 2025), https://www.inaturalist.org/; Zamoroka 2022

4020 Pilemia tigrina



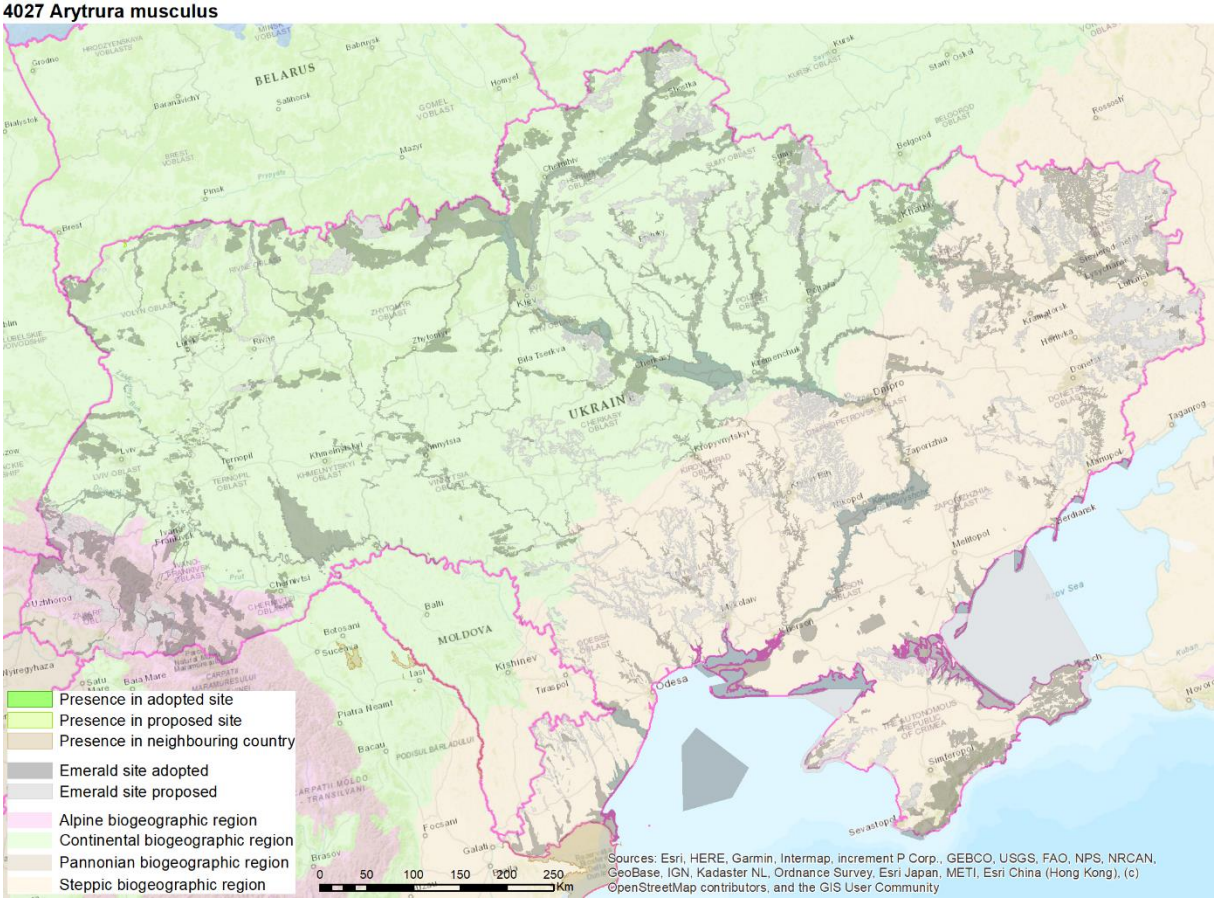
BGR	4026 Rhysodes sulcatus	
CON	Num. of sites:	Adopted: 8 (C:1, D:7)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Check location and add to site(s). Further research is needed.
	Comments from external experts:	The IUCN map indicates distribution along the region's western, northwestern, and northern borders. Additionally, certain Natura 2000 sites in Poland highlight the need for a continuous habitat. Currently, species are listed in 1C and 7D sites, which is insufficient (less the 2% population). Other site(s) should be added. There are some specimens in the collection of the Lviv museum, namely historical findings: Ukraine. State Province: Lvivska. District: Lvivskyi. Municipality: Lviv. Georegion: FZB: ROp: Roztochchia. Locality: Maryówka. Ternopilska: District: Chortkivskyi. Municipality: Markova. Ivano-Frankivska. District: Ivano-Frankivskyi. Municipality: Ivano-Frankivsk Ukraine. State Province: Lubelskie województwo. District: - . Municipality: Zwierzyniec. Current findings: Date: 05-22-2016. Province: Lvivska. District: Sambirskyi. Municipality: Hubychi. Georegion: Ukrainian Carpathians:Outer Carpathians: Eastern Beskids: Upperdnister Beskydy. Locality: Shliamuvka River valley, an isolated border zone between Poland and Ukraine. Habitat: hornbeam-fir-beech forest.
	Comments from local experts:	Confirmed in 2024 in one suite—Huta-Mežyricska in the Cherkasy region. Further research is needed, especially in the Kharkiv region.
	References:	EUNIS Database (accessed February 19, 2025), https://eunis.eea.europa.eu/; The IUCN Red List of Threatened Species (accessed February 19, 2025), https://www.iucnredlist.org/en; Rizun and Diedus 2023

4026 Rhysodes sulcatus



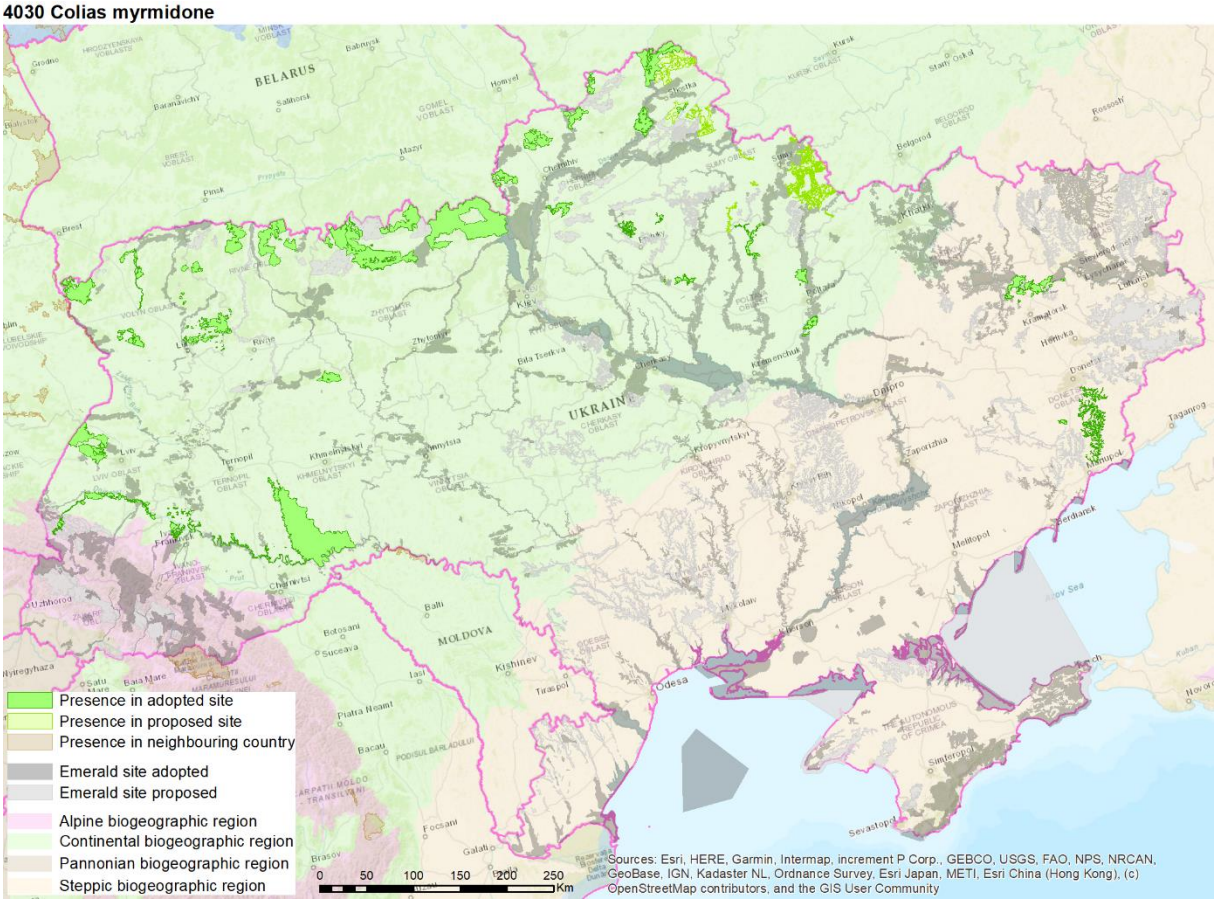
BGR	4027 Arytrura musculus	
CON	Num. of sites:	Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Check occurrence in Chernihiv region and site UA0000477.
	Comments from external experts:	Based on the published data, the species reaches its western area boundary in the Carpathian Basin; eastbound from this, it appears in the Romanian Dobrudga, Danube Delta, Moldova, and in Ukraine on the coastal territory of the Black Sea.
	Comments from local experts:	Confirmed in all the Polisia region. Chernihiv and Sumy regions, locally occurring. Chernobyl, Cherkasy, Kharkiv, Poltava, Pripjať-Stochid NPP, Zamglaj (Chernihiv region), Krynia (close to Kyiv), Poliski NR, Rivne Reserve.
	References:	Baranyi et al. 2006
STE	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ Harkov region 1 site
	Recommendation 2025:	Add the site(s) in the coastal territory of the Black Sea. Check occurrence in specified regions and sites.
	Comments from external experts:	Based on the published data, the species reaches its western area boundary in the Carpathian Basin; eastbound from this, it appears in the Romanian Dobrudga, Danube Delta, Moldova, and in Ukraine on the coastal territory of the Black Sea. No occurrence in the Harkov site is recorded in the literature.
	Comments from local experts:	Dolina Siverski Donets, Luhanski NR, Severodoneck, Dvorichna NP. In Kharkiv region: Strilecký step NNP. Cherson region.
	References:	Geryak et al. 2023; Tamás et al. 2006

4027 Arytrura musculus



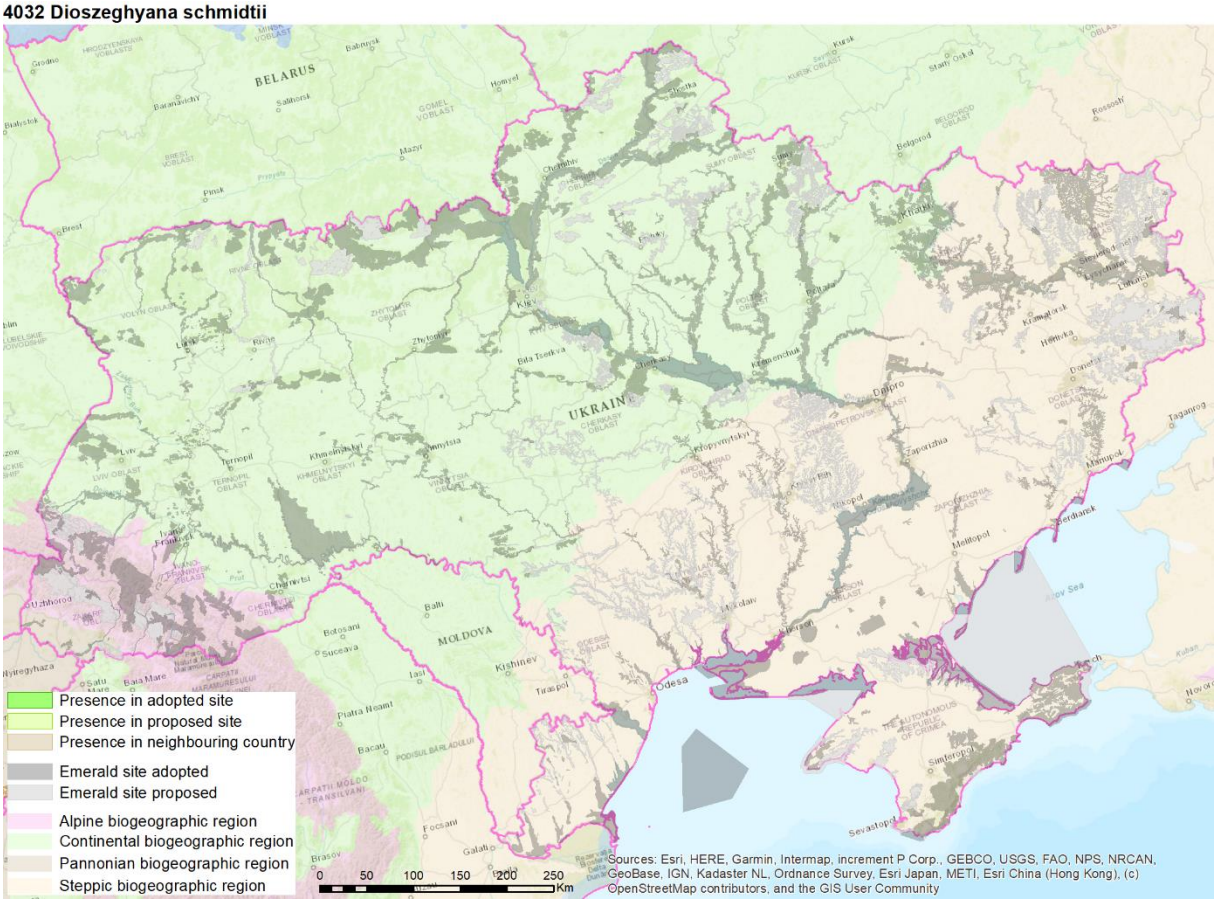
BGR	4030 Colias myrmidone	
STE	Num. of sites:	Adopted:2 (D:2)
	BGR seminar 2019 conclusion:	IN MOD Zaporoziaj and Doneck regions
	Recommendation 2025:	Revise records of occurrence; further research is needed.
	Comments from external experts:	Zaporizhia Region: Zaporizhia District, region with. Augustinovka, 28.5.1988 – 1 ♂ (V. G. Mushinsky); Lviv Region: Zhydachevskii District, okr. with. Selection, 20.08 and 10.09.2009 - 3 specimens (leg. Heryak Y. N., Panin R. Yu.). Registered for the first time on the territory of the Zaporozhye region.
	Comments from local experts:	Probably extinct. Could be found in the Luhansk region close to Russia: Severodonetsk, Lysičansk.
	References:	Hager et al. 1999; Loos et al. 2021; Мартынов and Плющ 2013, 63–72

4030 Colias myrmidone



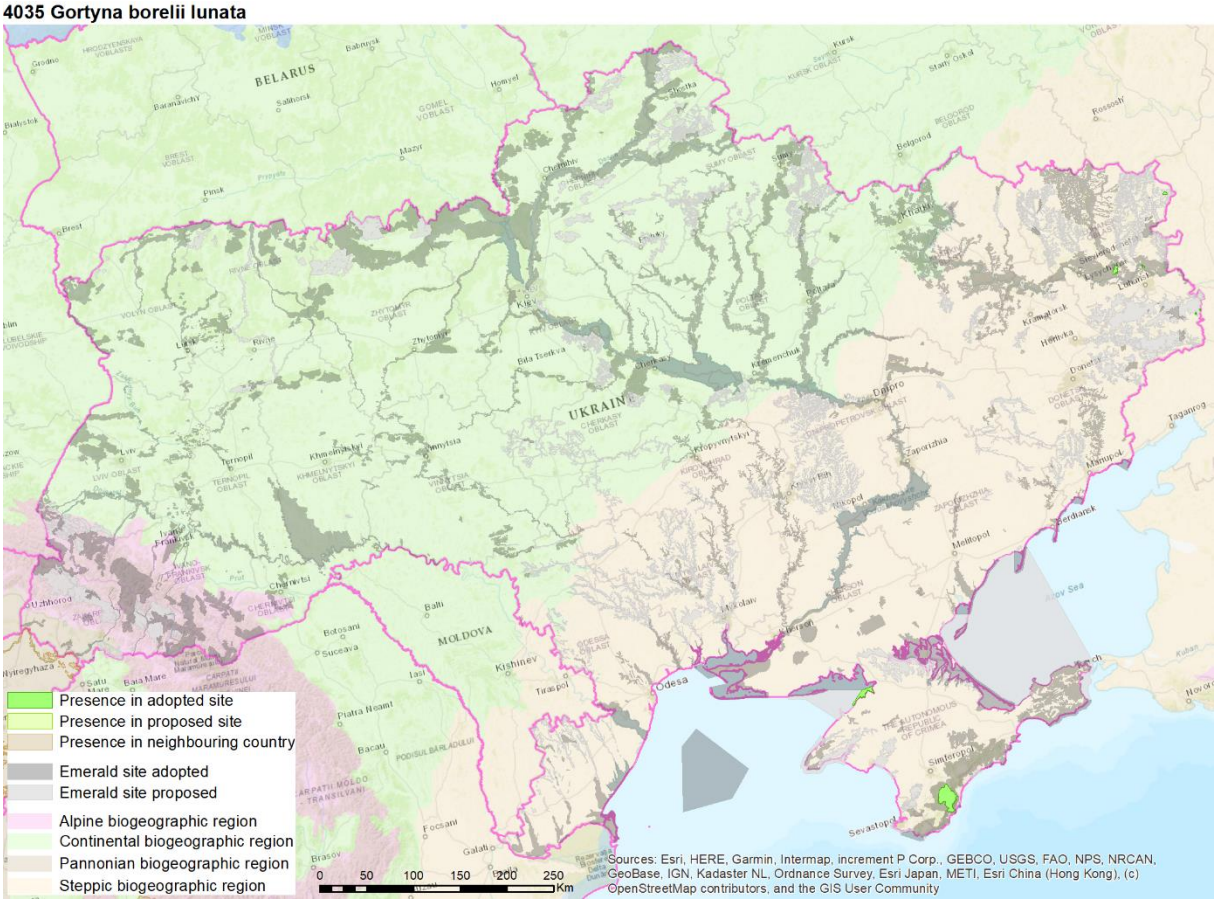
BGR	4032 Dioszeghyana schmidtii	
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	Additional research is needed. Check locality Beregszász.
	Comments from external experts:	The species cannot be searched in the database by code or name. In any case, there is one record about the species from the locality: Beregszász, Zakarpattia, Ukraine. There are no other records of its occurrence in Ukraine.
	Comments from local experts:	Recently confirmed in Berehove
	References:	Geryak, Kanarskyi, and Lyashenko 2011; Szanyi et al. 2023

4032 Dioszeghyana schmidtii



BGR	4035 Gortyna borelii lunata	
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	Check which locations are in the region. Additional research is needed.
	Comments from external experts:	The species is presented in the Carpathian basin in Hungary and Romania. It is possible that the species also lives in the PAN region. Additional research is needed.
	Comments from local experts:	Two records from Transcarpathia; Čorna Hora near Vinogradov, Berehove.
	References:	Gyulai 1987

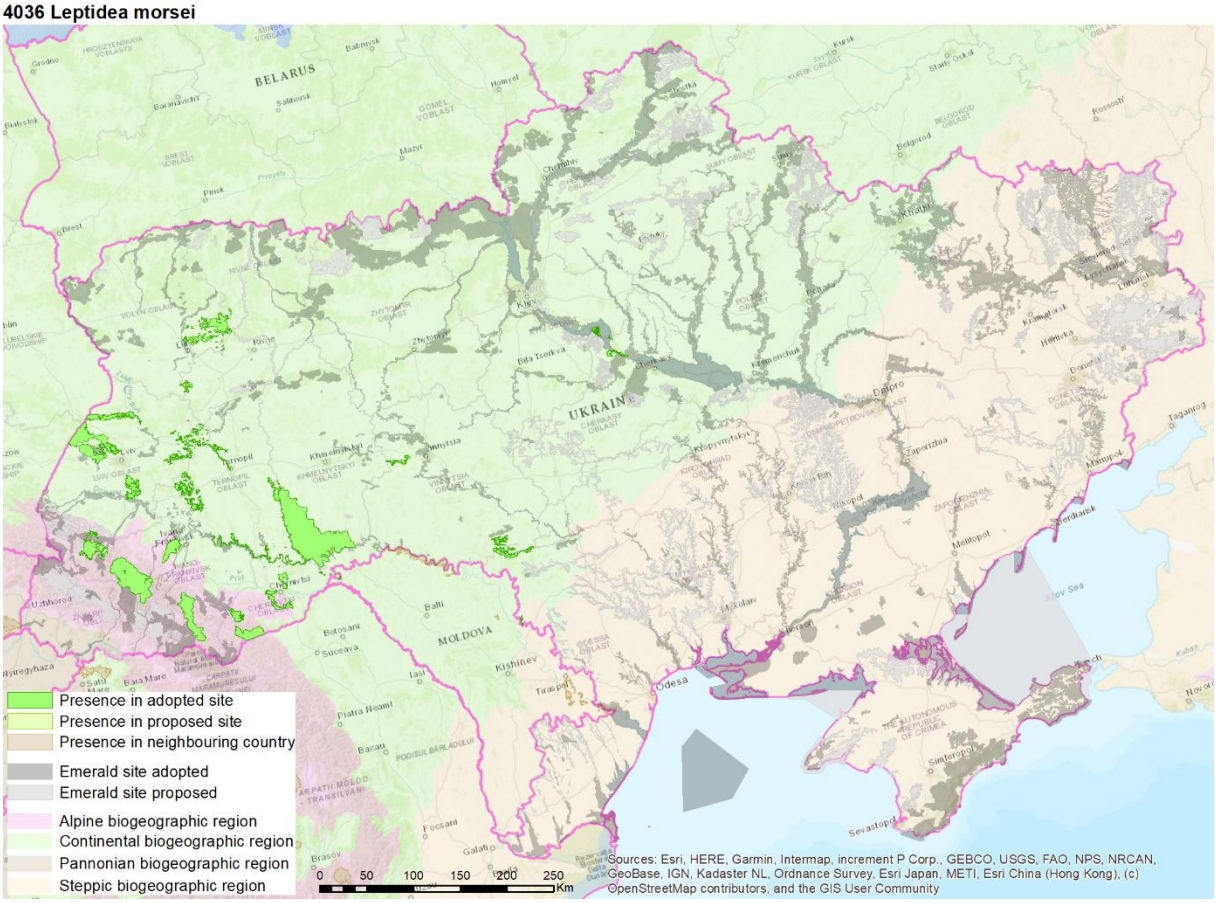
4035 Gortyna borelii lunata



BGR	4036 Leptidea morsei	
CON	Num. of sites:	Adopted: 19 (D:19)
	BGR seminar 2019 conclusion:	IN MOD/CD
	Recommendation 2025:	Check data from Transcarpathia and Transnistrian Podillia. Additional research is needed.
	Comments from external experts:	Leptidea morsei major Grund, 1905 Transcarpathia, Transnistrian Podillia, local, clearings and edges of floodplain forests, IV–VI, VII–VIII(2) (Kanarsky 2007).
	Comments from local experts:	Only Podilia. Chernivtsi - Kitsman district, Šipyrynci , Zališčyky - Dnister canyon NNP, Podilski Tovtri NNP.
	References:	Kanarsky 2007
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Lack of concrete data; additional research is needed
	Comments from external experts:	There is no site or record from this region; therefore, the research is necessary.
	Comments from local experts:	No information
	References:	n/a
STE	Num. of sites:	Adopted: 1 (D:1)
	BGR seminar 2019 conclusion:	SR/CD
	Recommendation 2025:	Add to the site(s); revise occurrence - additional research is needed.
	Comments from external experts:	Species was deleted from D site UA0000036, but no site exists for the species. Species is recorded from Donetsk region: Krasnolymanskyi district, okr. Kryvaya Luka village, 25.05.2012 - 10 specimens. (Martynov Vch. V.); region p. Yatskoye, 23.07.1990 - 4 specimens (Martynov Vch. V.); Slavyansky district, okr. Bogorodichnoe village, 2–7.09.2008, 6–9.05, and 11.08.2011 - 34 specimens (Martynov Vch. V.); region ss Tatyanovka, Yarovaya, and

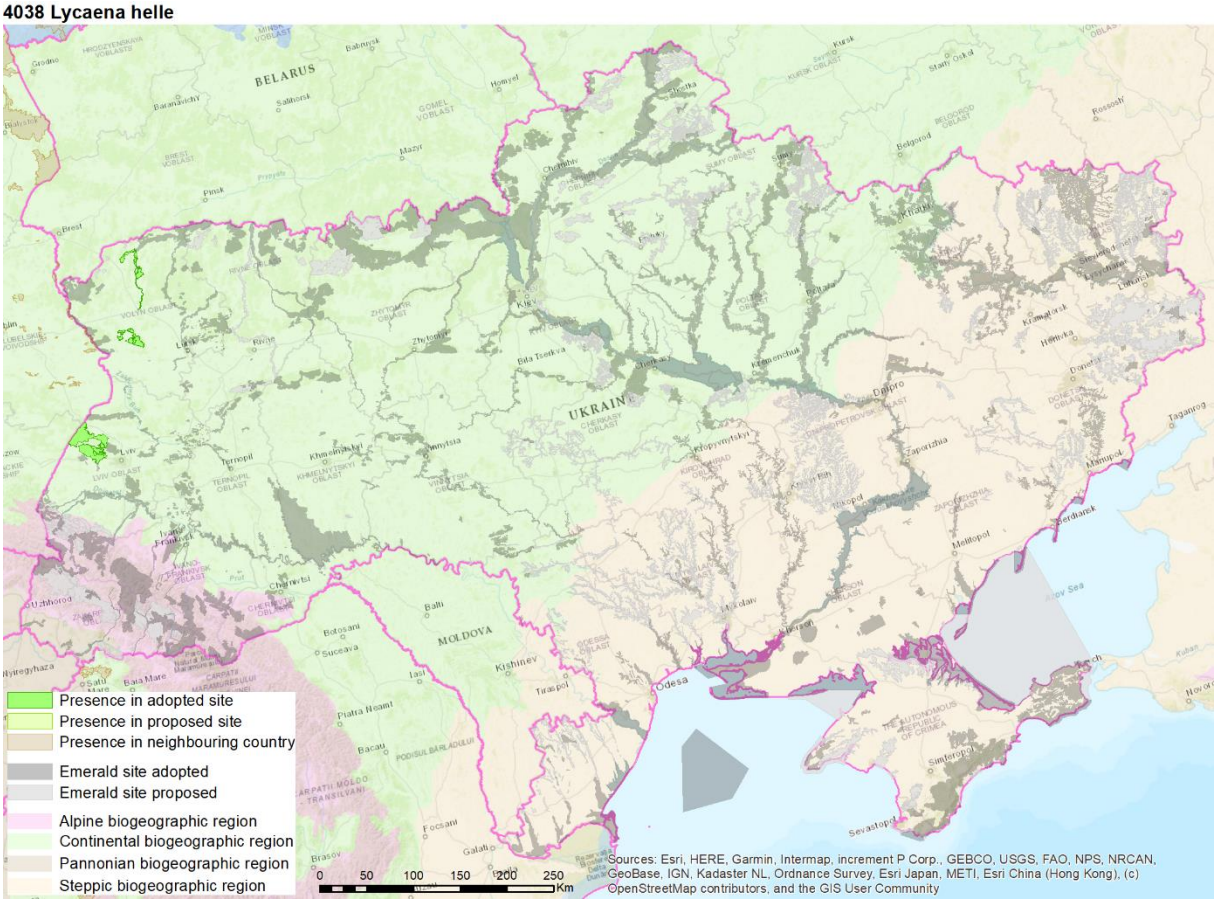
		Novoselovka, 23–24 and 28–29.05.2012 - 15 specimens (Martynov Vch. V.). Registered for the first time on the territory of Donetsk region.
	Comments from local experts:	It is not certain if the species was correctly identified in the specified publications. Needs to be confirmed.
	References:	Kanarsky 2007; Мартынов and Плющ 2013, 63–72

4036 Leptidea morsei



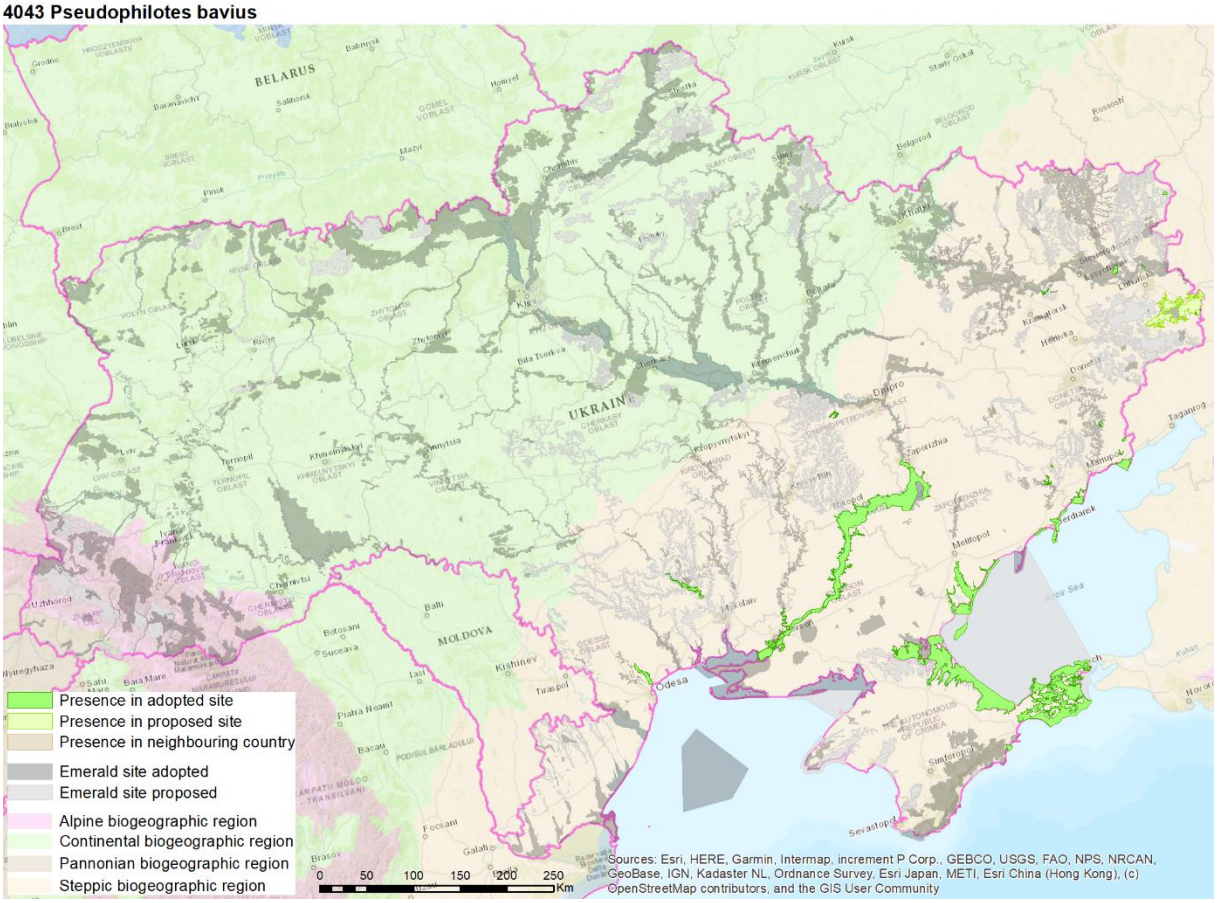
BGR	4038 Lycaena helle	
CON	Num. of sites:	Adopted: 5 (D:5)
	BGR seminar 2019 conclusion:	IN MOD/CD
	Recommendation 2025:	Add to sites. Population assessment is needed.
	Comments from external experts:	The species is listed only in 5D sites, which is insufficient (the population size is near 0%). A population assessment is needed. Other site(s) should be added. There are some reports from citizen science in UA_CON: between sites UA0000335 and UA0000124 (50°06'00.000"N 27°36'00.000"E) in the adopted site UA0000043.
	Comments from local experts:	It is reliable to add more sites. Shatskyi NP - Turijsk, Volyň region. Maľovanka Regional Landscape Park, Male Polisia NP, possibly Polissia Reserve. Kyiv - Irpiň suburb. Pripjať-Stochid NNP, Roztočia NR, Bilohirja - Lviv. Chernobyl Biosphere Reserve.
	References:	Global Biodiversity Information Facility (accessed February 19, 2025), https://www.gbif.org/

4038 Lycaena helle



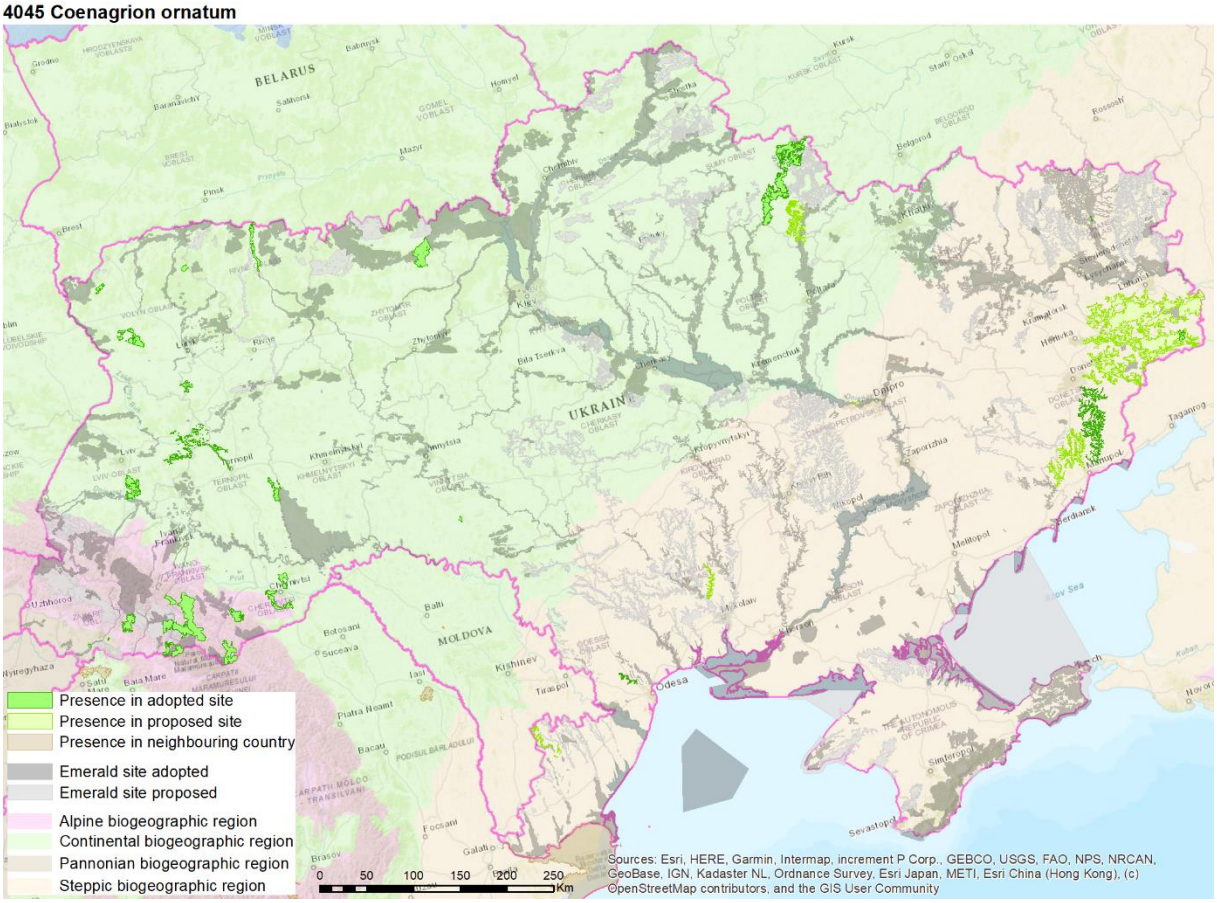
BGR	4043 Pseudophilotes bavius	
CON	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	Consider remoing from the Reference list for UA/CON.
	Comments from external experts:	Species is recorded at many localities in UA, but all of them are from STE.
	Comments from local experts:	No presence in CON; it should be removed from the Reference list.
	References:	Мартынов and Плющ 2013, 63–72

4043 Pseudophilotes bavius



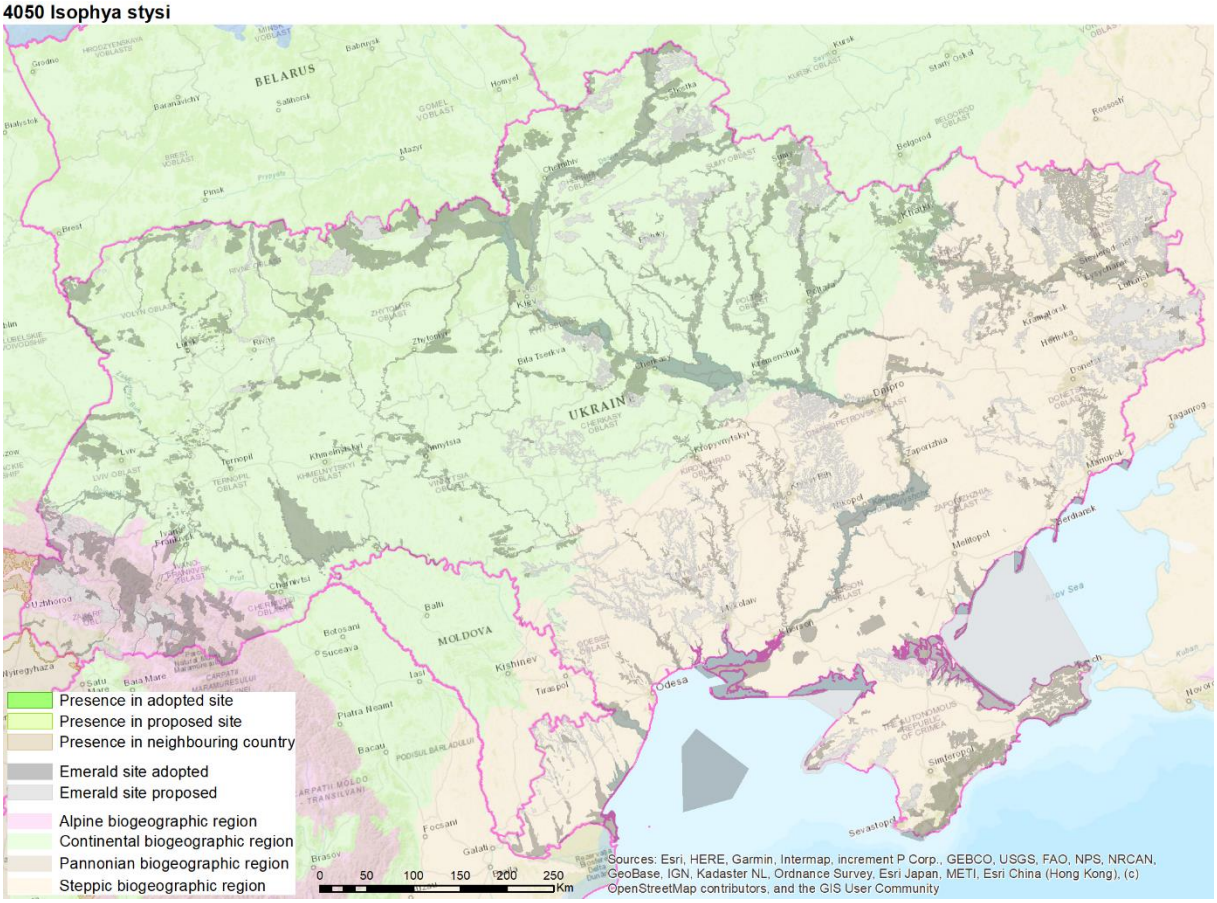
BGR	4045 Coenagrion ornatum	
STE	Num. of sites:	Adopted: 4 (B:2, D:2), Proposed: 11 (C:6, D:5)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN Luhansky, Donecky, Mikolajevsky, Odesky region
	Recommendation 2025:	Need to revise distribution; see comments of local experts. Otherwise, population and geographical coverage are sufficient.
	Comments from external experts:	Population and geographical coverage are sufficient. Due to the added sites (Mykolaivskyi sandy steppe and floodplains, Ravine forests of the Donetsk ridge, Steppes of the Donetsk ridge, Krynka river basin, Naholna river basin, Steppes of the Great Kamianka river basin, Hruzko-Lomivskyi, Karatysh river valley, Kalchyk river canyon, Sukhyi Yelanets river valley, Kohylnyk), it is sufficient. Species were added to 6C and 5D sites after the seminar and are currently listed in 2B, 6C, and 7D sites.
	Comments from local experts:	Locations specified above not confirmed in the last 10 years - need to update data. Tuzlivski Lymany, Odesa estuaries, Odesa and Mykolaiv regions, the surroundings of Dnipro City, possibly the Azov region - Sivaš.
	References:	n/a

4045 Coenagrion ornatum



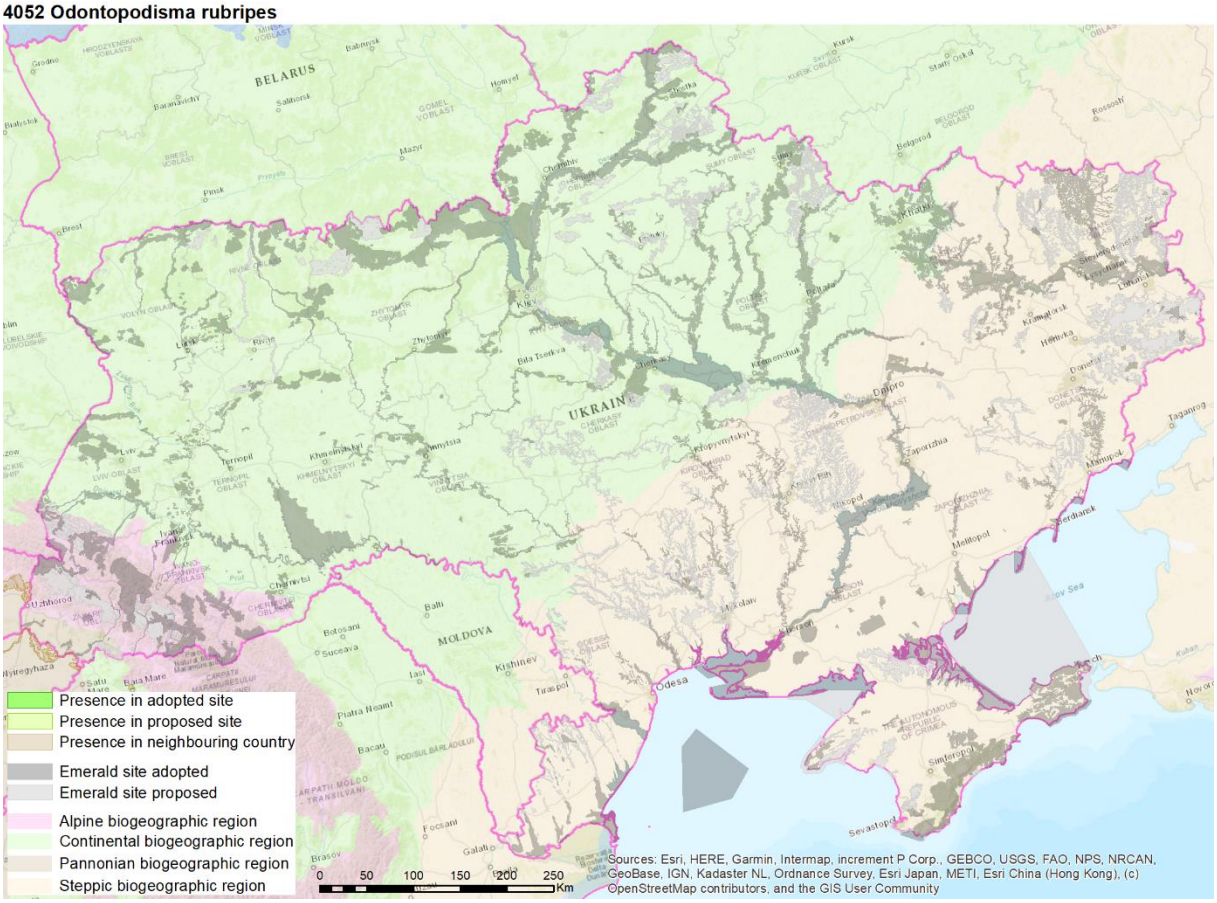
BGR	4050 Isophya stysi	
ALP	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	The species lives in the UA Carpathians, but detailed data are missing. Additional research is needed. Add to site(s).
	Comments from external experts:	Distribution: Carpathian mountains in Slovakia, Eastern Hungary, Poland, Romania, and Ukraine. Locations where the typical song was observed: Ukraine (near Uzhgorod; Zhantiev and Dubrovin 1977). So, there is a possible occurrence in UK_ALP.
	Comments from local experts:	No data. Should be in the surroundings of Užhorod but we need confirmation.
	References:	Heller et al. 2014; Krištín and Ștefan 2014
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Due to its occurrence at sites in Slovakia and Hungary, it is possibly present in UA_PAN. Additional research is needed.
	Comments from external experts:	Due to its occurrence at sites in Slovakia and Hungary, it is possibly present in UA_PAN.
	Comments from local experts:	No data. Should be in the surroundings of Užhorod, but we need confirmation.
	References:	Guzik and Guzik 2022; Heller et al. 2004

4050 Isophya stysi



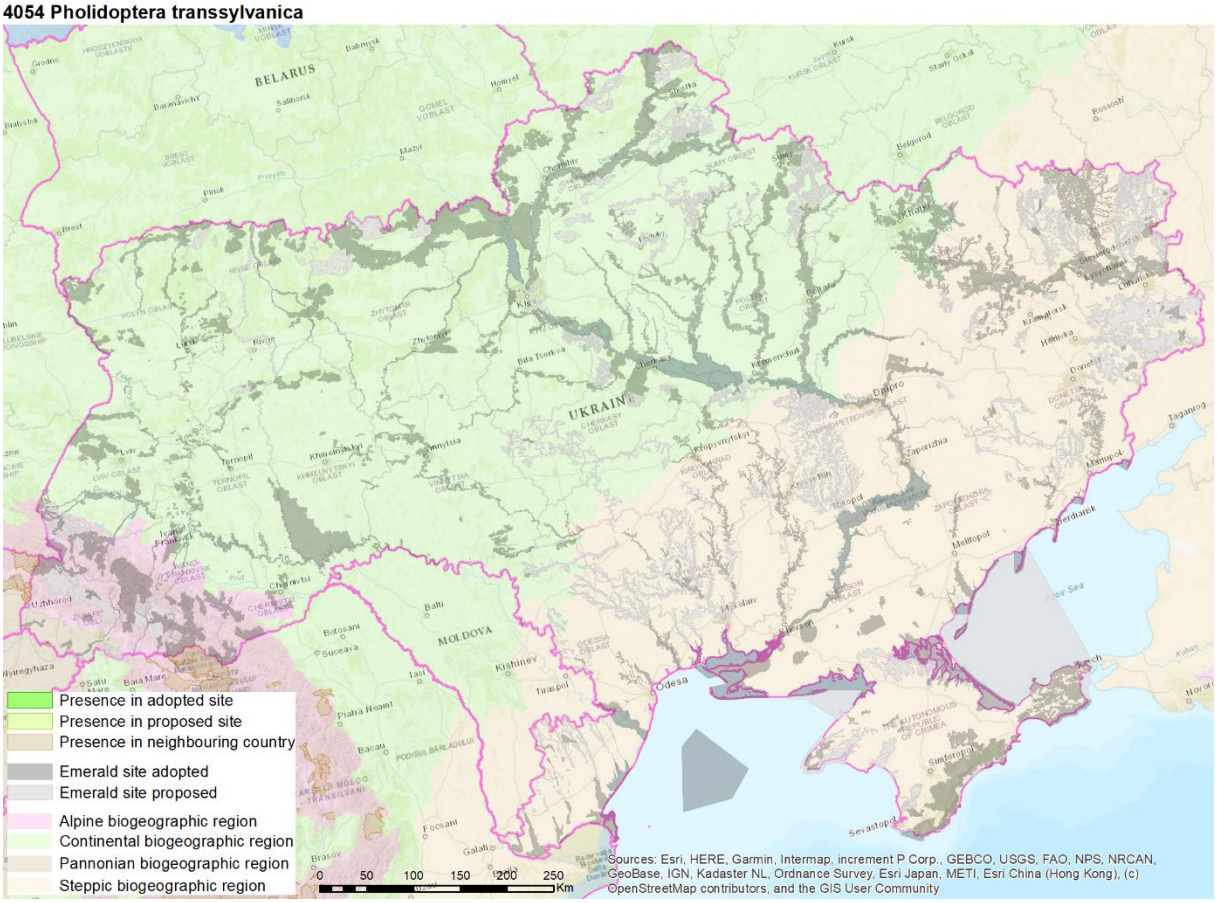
BGR	4052 Odontopodisma rubripes	
ALP	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Further research is needed.
	Comments from external experts:	No site. Odontopodisma rubripes has a Carpathian distribution (100–1,300 m). It is found in west Ukraine, northwest Romania, easternmost Hungary, and very locally in adjacent eastern Slovakia.
	Comments from local experts:	Further research is needed.
	References:	The IUCN Red List of Threatened Species (accessed February 19, 2025), https://www.iucnredlist.org/en; Lepidoptera and Their Ecology (accessed March 7, 2025), http://www.pyrgus.de/
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Consider addition to site UA0000006 Carpathian Biosphere Reserve; further study of species distribution is needed.
	Comments from external experts:	No site. Odontopodisma rubripes shows a Carpathian distribution (100–1,300 m). It is found in west Ukraine, northwest Romania, easternmost Hungary, and very locally in adjacent E-Slovakia. It also lives in the UA/PAN zone (Krištín, pers. comm., 2025).
	Comments from local experts:	Confirmed in Čorna hora near Vinogradov—probably inside the site UA0000006 - Carpathian Biosphere Reserve. Additional research on distribution is needed.
	References:	The IUCN Red List of Threatened Species (accessed February 19, 2025), https://www.iucnredlist.org/en; Lepidoptera and Their Ecology (accessed March 7, 2025), http://www.pyrgus.de/

4052 Odontopodisma rubripes



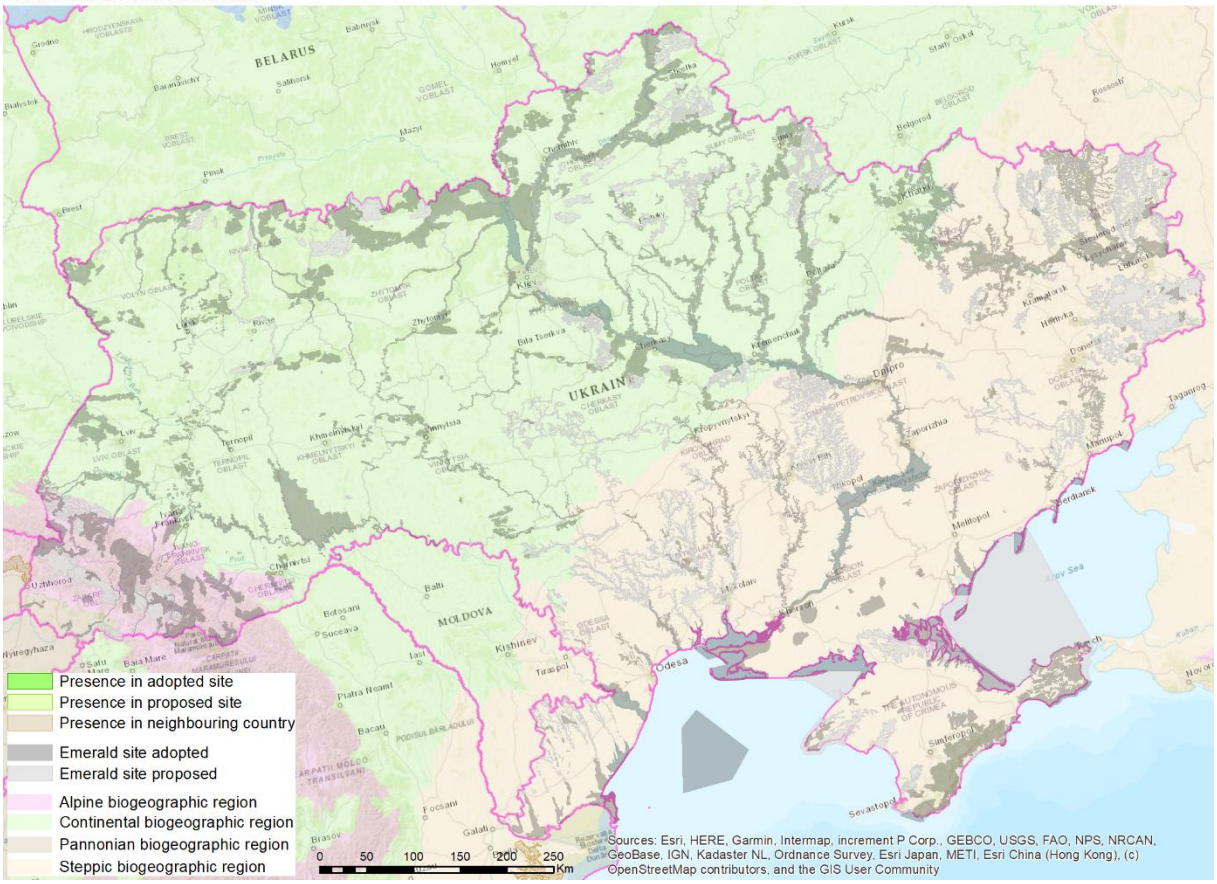
BGR	4054 Pholidoptera transsylvanica	
ALP	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Additional research is needed. Based on their results, add the site(s).
	Comments from external experts:	The UA Carpathians are at the center of species distribution, but detailed data are missing. Old records are known from the site UA0000610. Furthermore, Alpine locations in Slovakia and Romania suggest that it may also be present in the Ukrainian Carpathians. Some citizen science findings are also in adopted sites UA0000006 and UA0000263. The center of its distribution area is in the Carpathian Mountains in Romania (Harz 1969; Kis 1980; Iorgu et al. 2008) and Ukraine (Likovitch 1957; Storozhenko and Gorochov 1992).
	Comments from local experts:	Reliable occurrence in alpine meadows; further research is needed.
	References:	Global Biodiversity Information Facility (accessed February 19, 2025) https://www.gbif.org/; Krištín and Kanuch 2013; Lykovych and Kovalchuk 2019
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MAJ
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	Subendemic to the Carpathians and the Carpathian basin as it is known from Romania, Ukraine, Slovakia, Hungary, and Serbia (Krištín et al. 2019). The distribution area covered the UA PAN zone by Krištín and Kaňuch (2013). Therefore, its occurrence there is possible. Additional research is needed (SR REF). A record from the Pannonian BGR is in the middle between adopted sites UA0000041 and UA0000270 (48°18'00.000"N 23°00'00.000"E). The record is from GBIF (citizen science) and may not be 100% relevant.
	Comments from local experts:	Possibly, Chust and Mukačevo can be in volcanic regions.
	References:	Global Biodiversity Information Facility (accessed February 19, 2025), https://www.gbif.org/; Krištín and Kanuch 2013; Krištín et al. 2019

4054 Pholidoptera transsylvanica



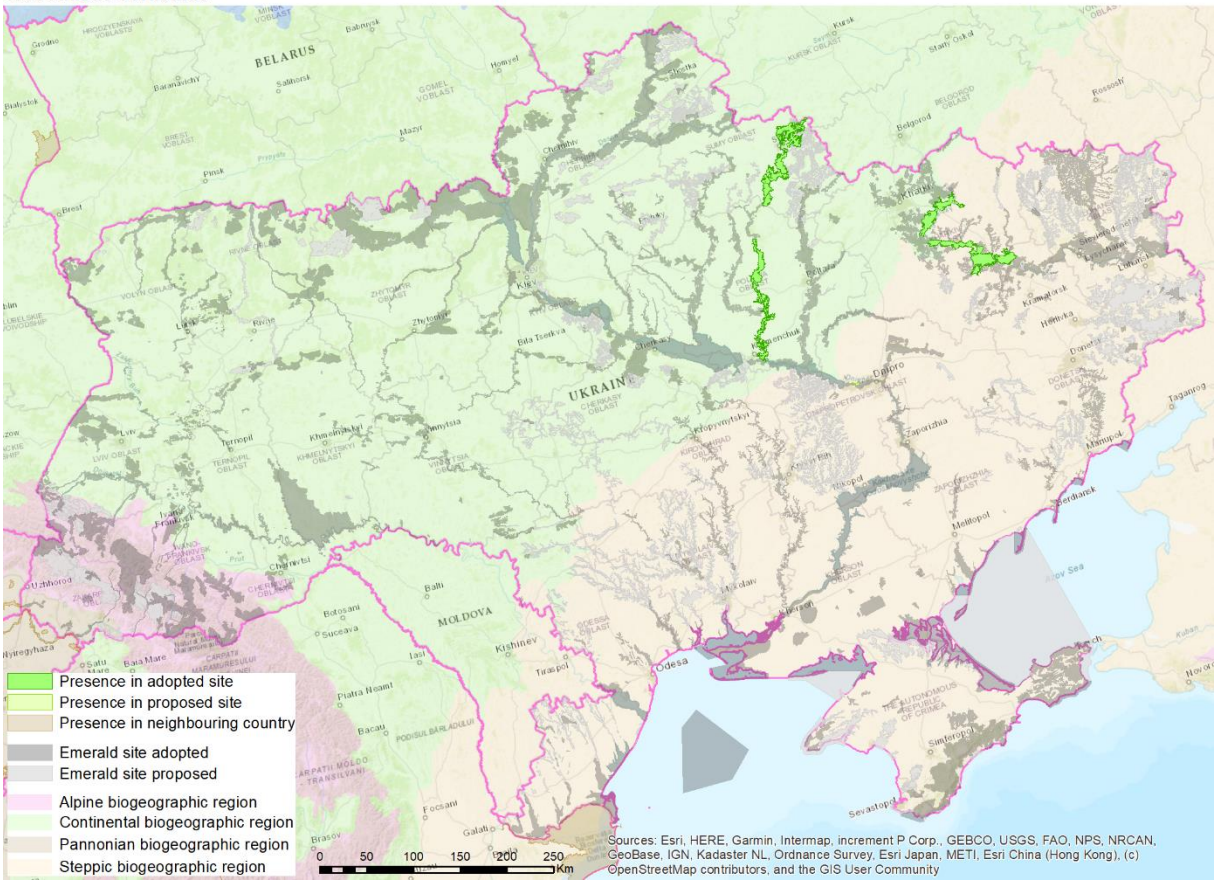
BGR	4055 Stenobothrus eurasius	
STE	Num. of sites:	0
	BGR seminar 2019 conclusion:	n/a
	Recommendation 2025:	Add to site(s); add to the Reference list; additional research is needed.
	Comments from external experts:	Species is recorded from Kherson region, Chernomorsky Reserve, Soljonoozerny uchastok, Kherson region, surroundings of Oleshky (formerly Tsiurupynsk), Aleshkovskie peski. Check locations and population sizes in proposed regions and sites. Based on their results, add site(s).
	Comments from local experts:	Record from Crimea only—found in 2013 in Sudak. No more records. Species can occur in the southern part of the region.
	References:	Tarasova et al. 2021

4055 Stenobothrus eurasius



BGR	4056 Anisus vorticulus	
PAN	Num. of sites:	0
	BGR 2019 seminar conclusion:	SR REF
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	In Slovakia, the species occurs along the border with Ukraine, in localities around the Latorica River, which flows from Ukraine. Probably, species also live on the UA side. Additional research is needed.
	Comments from local experts:	No record of species occurrence in UA so far.
	References:	The IUCN Red List of Threatened Species (accessed February 19, 2025), https://www.iucnredlist.org/en; biomonitoring.sk/InternalGeoportal/ProtectedSites/DetailSites/48

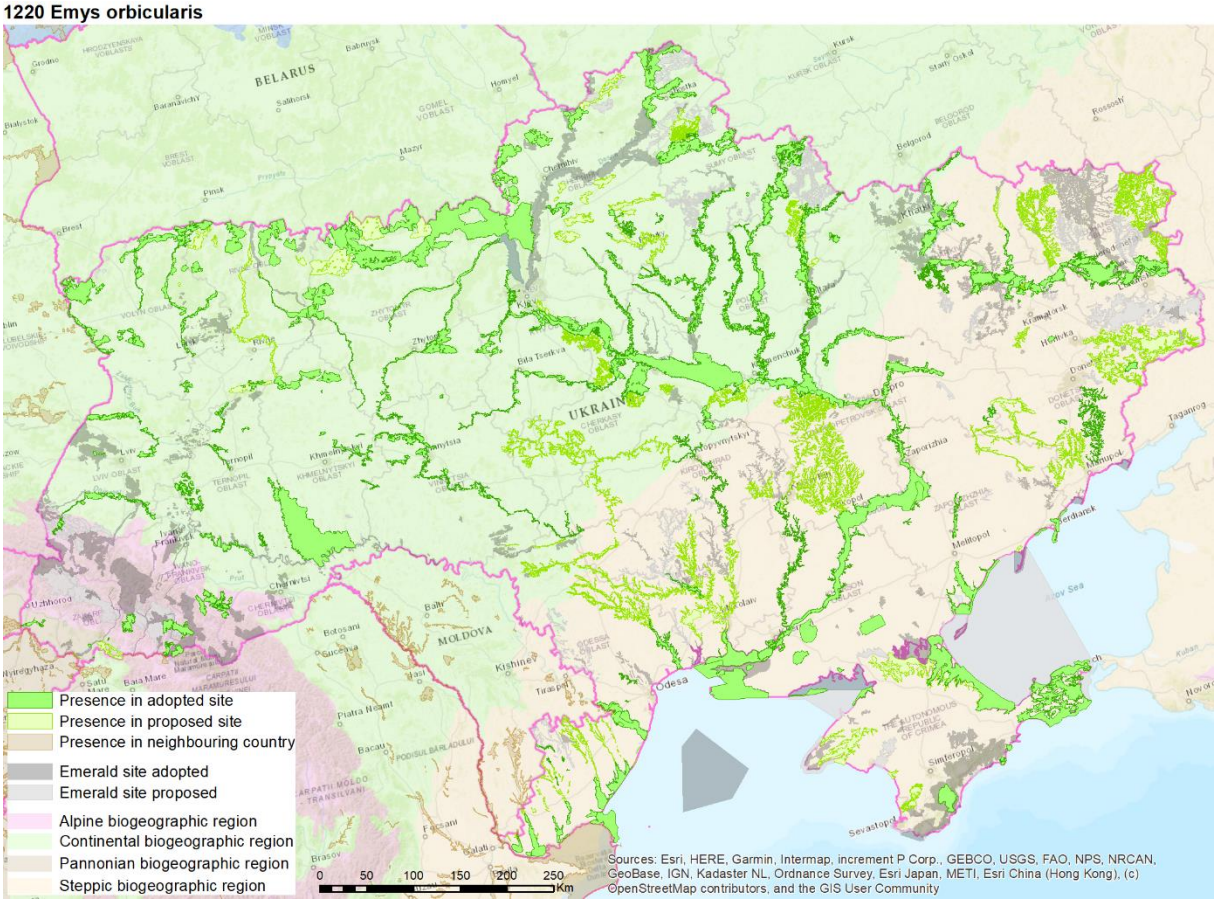
4056 Anisus vorticulus



Reptiles

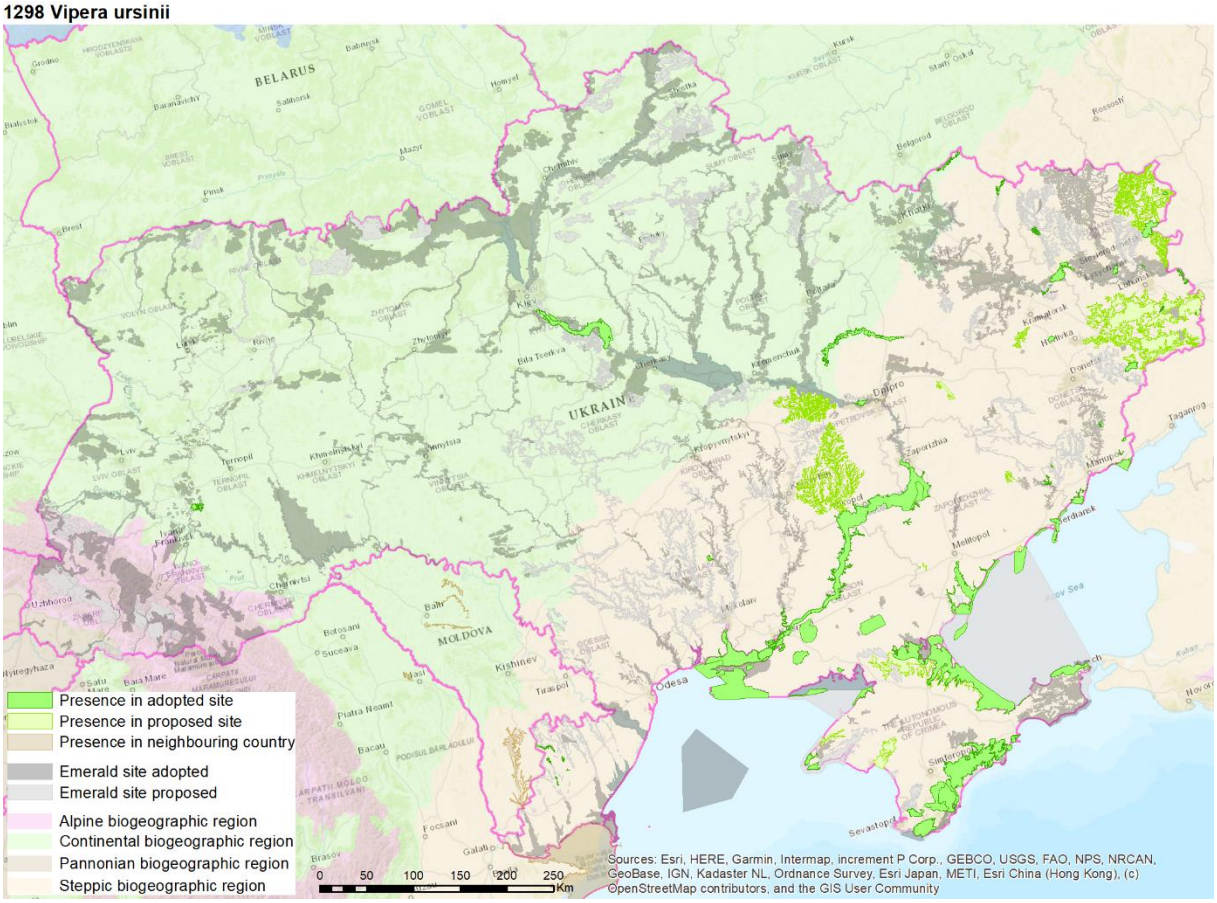
BGR	1220 Emys orbicularis	
PAN	Num. of sites:	Adopted: 2 (B:1, C:1), Proposed: 2 (D:2)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	More research is needed.
	Comments from external experts:	Lack of current locations of the species in the literature and few records from citizen science.
	Comments from local experts:	The species is declining due to competition with the red-eared terrapin; further research is needed.
	References:	iNaturalist (accessed February 19, 2025), https://www.inaturalist.org/
STE	Num. of sites:	Adopted: 55 (B:21, C:18, D:16), Proposed: 40 (C:6, D:34)
	BGR seminar 2019 conclusion:	IN MOD - Steppe Crimea and another steppe territory
	Recommendation 2025:	More research is needed. Baraboy, Odessa - extend the adopted site (UA0000039); create a new site - Sukhyi Lyman, area between Kovalivka and Andryivka [the Pivdenny (the Soäuthern) Bug]; add to the adopted site (UA0000150); add to the proposed site - Syrovo, Kodyma (UA0000459).
	Comments from external experts:	Species absent in the northwestern part of the Crimean Peninsula (waterless area).
	Comments from local experts:	The species is in decline due to competition with the red-eared terrapin; more is research needed.
	References:	Kotenko 2000

1220 Emys orbicularis



BGR	1298 Vipera ursinii	
STE	Num. of sites:	Adopted: 40 (B:12, C:11, D:17), Proposed: 16 (C:5, D:11)
	BGR seminar 2019 conclusion:	IN MOD Mikolaiv region
	Recommendation 2025:	It seems to be sufficient due to the added sites (Komyshna river valley, Crimean coast of Syvash, Tyligulskyi Lyman, Berezanskyi, Nyzhnie Pobuzhzhia, and so on) and proposed sites (Tylihul steppes, Chychyklia river basin, Voznesenske Pobuzhzhia, Hnylyi Yelanets river basin, Mykolaivske Pobuzhzhia, Lower Inhul river valley, Bokova and Bokovenka river, Bazavluk, Saksahan river basin, and Sicheslavskyi Krai.
	Comments from external experts:	Vipera renardi (ex. Vipera ursinii renardi)
	Comments from local experts:	Agree
	References:	The Reptile Database (accessed February 20, 2025), http://www.reptile-database.org/

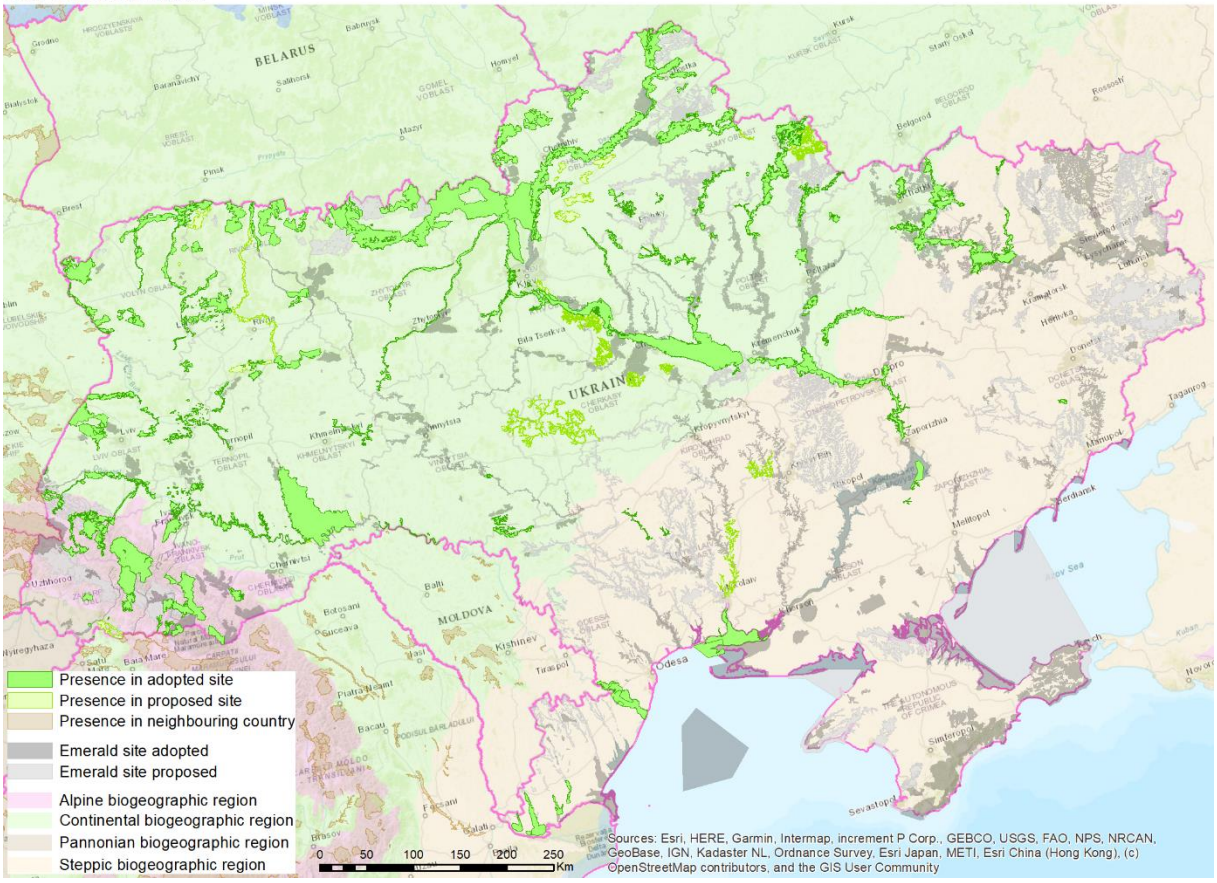
1298 Vipera ursinii



Amphibians

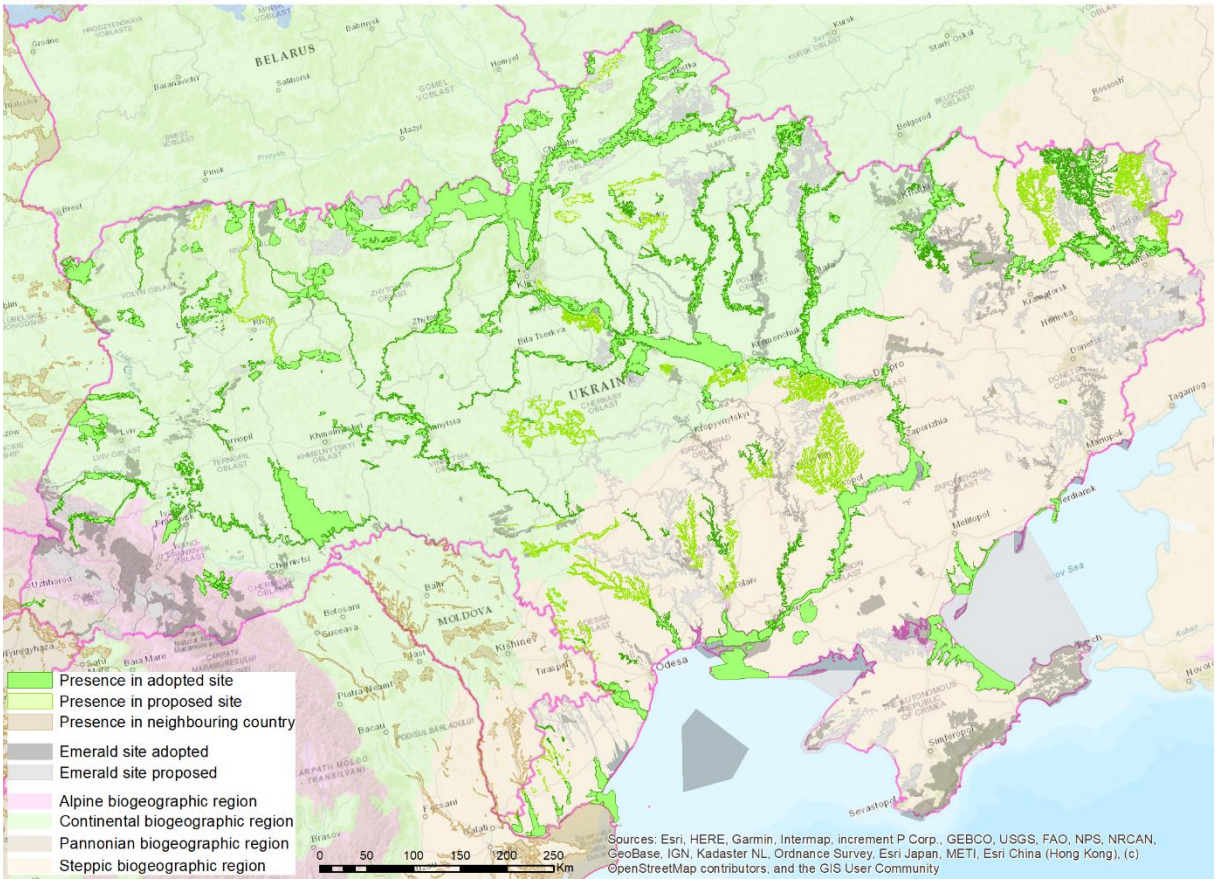
BGR	1166 Triturus cristatus	
CON	Num. of sites:	Adopted: 111 (B:72, C:21, D:18), Proposed: 17 (C:3, :14)
	BGR seminar 2019 conclusion:	IN MOD Central part
	Recommendation 2025:	The added sites (Rhyshchiv, Serebrianka, and Medianka Rivers; Tiasmyn; Malyovanka; and so on) seem to be sufficient to verify the population in the Kharkiv region.
	Comments from external experts:	A significant decline has been observed in the last decade in the Kharkiv region.
	Comments from local experts:	n/a
	References:	n/a
PAN	Num. of sites:	Adopted: 1 (D:1), Proposed:1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	The added sites (Avashski Hory, Tisza river basin) seem to be sufficient.
	Comments from external experts:	The largest population in the area of the proposed site is on the border with Romania (UA0000562).
	Comments from local experts:	Agree
	References:	Kurtyak and Mezhzherin 2005

1166 Triturus cristatus



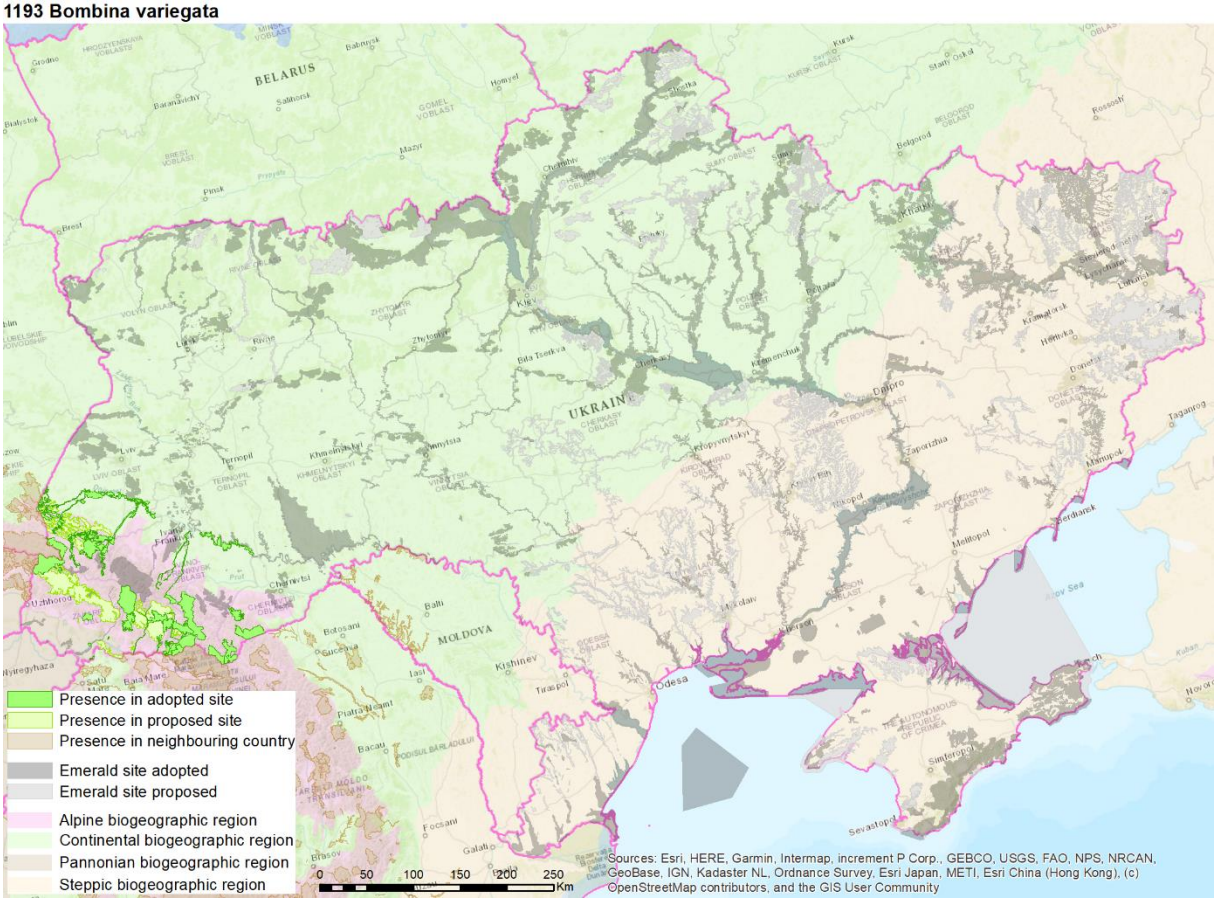
BGR	1188 Bombina bombina	
PAN	Num. of sites:	Adopted: 1 (B:1)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Create new sites in Uzhhorod, add to the adopted sites (UA0000270, UA0000269), and add to the proposed site (UA0000562).
	Comments from external experts:	Precise coordinates of the occurrence are not available.
	Comments from local experts:	Agree
	References:	Dufresnes et al. 2021

1188 Bombina bombina



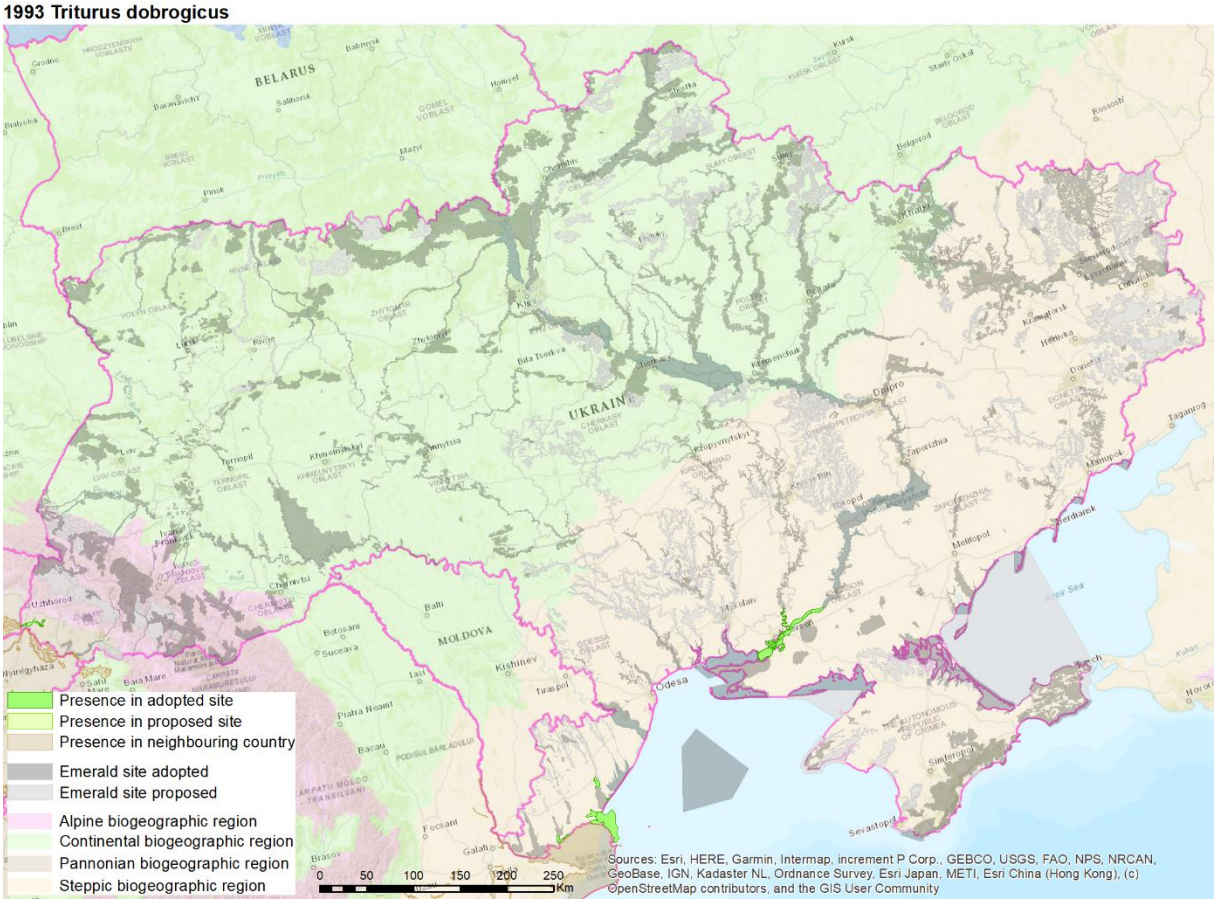
BGR	1193 Bombina variegata	
CON	Num. of sites:	Adopted: 8 (B:1, C:6, D:1)
	BGR seminar 2019 conclusion:	IN MOD southeastern part
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	Missing site-specific data
	Comments from local experts:	Verify with Dmytro Shabanov.
	References:	Aikimov and Radchenko (2009)
PAN	Num. of sites:	Adopted: 2 (B:1, C:1), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	Suitable areas in lowland regions, in the Pannonian Basin
	Comments from local experts:	Agree
	References:	Boyer et al. 2021

1193 Bombina variegata



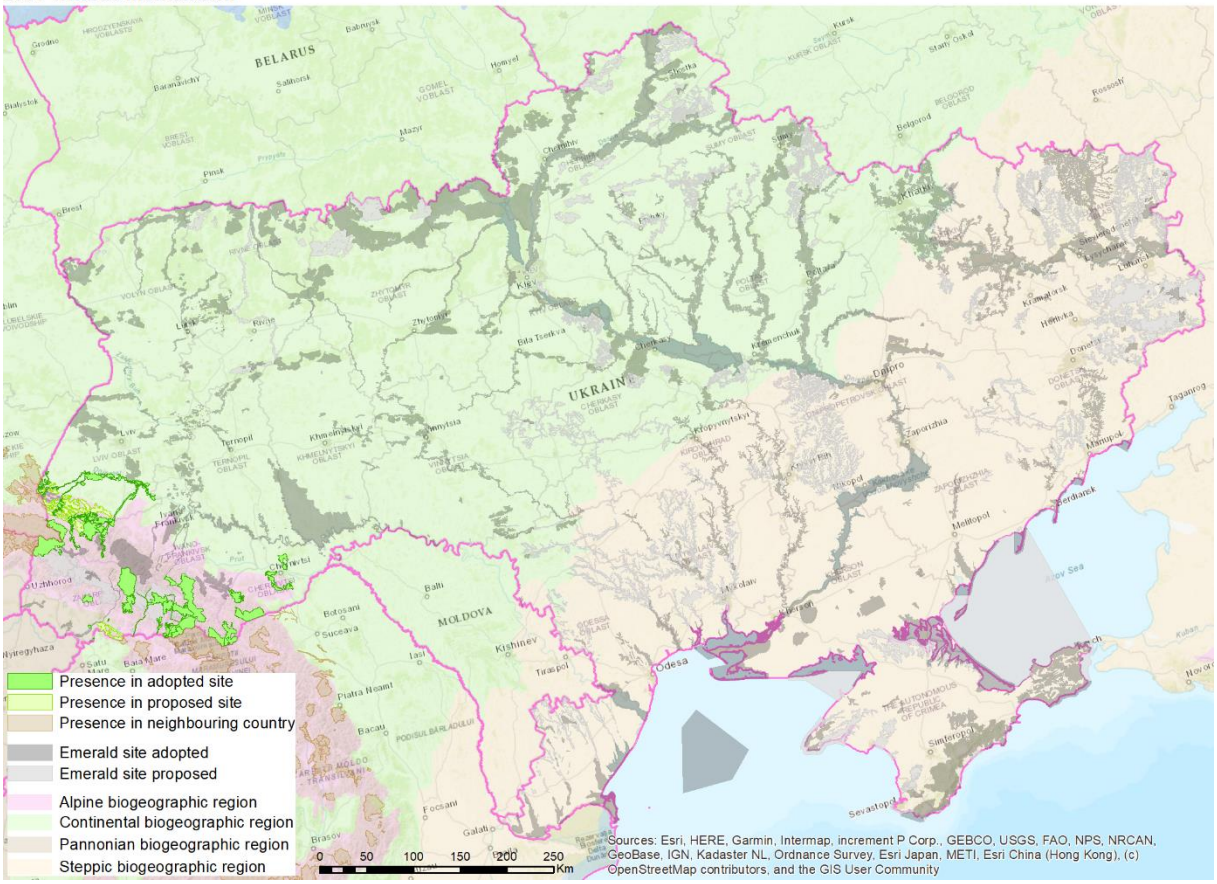
BGR	**1993 Triturus dobrogicus**	
STE	Num. of sites:	Adopted: 3 (B:2, D:1)
	BGR seminar 2019 conclusion:	Consult with the recent publications (Litvinchuk et al. 2003; Litvinchuk et al. 2005)
	Recommendation 2025:	Contact zone on the Transcarpathia border: Vynohradiv, Irshava, Mukachevo, Serednie, Uzhorod - (site: UA0000269 - northern part, UA0000041)
	Comments from external experts:	Isolation of *T. dobrogicus* from *T. cristatus* - different habitat preferences (ecological differentiation): T. dobrogicus steppe, T. cristatus forests. Probable limitation of hybridization due to the eco-morphological divergence of these species.
	Comments from local experts:	Consult with the recent publications (Litvinchuk et al. 2003; Litvinchuk et al. 2005)
	References:	Kurtyak and Mezhzherin 2005; Mikulíček et al. 2012; Morozov-Leonov 2003

1993 Triturus dobrogicus



BGR	2001 Triturus montandoni	
PAN	Num. of sites:	Adopted: 1 (C:1), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Create new sites on Uzhhorod, Poroshkovo.
	Comments from external experts:	n/a
	Comments from local experts:	Agree
	References:	Litvinchuk et al. 2003; Smirnov and Skilsky 2011

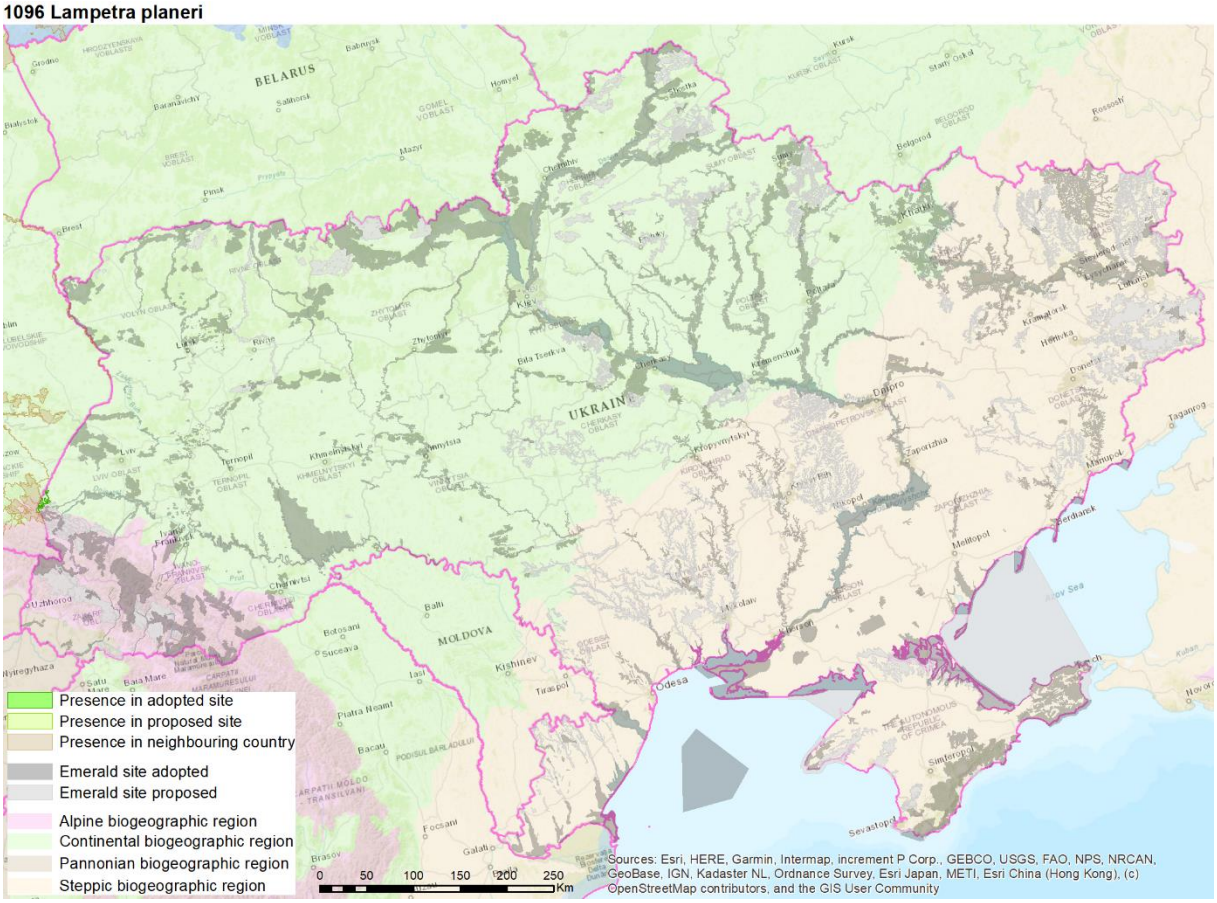
2001 Triturus montandoni



Fish

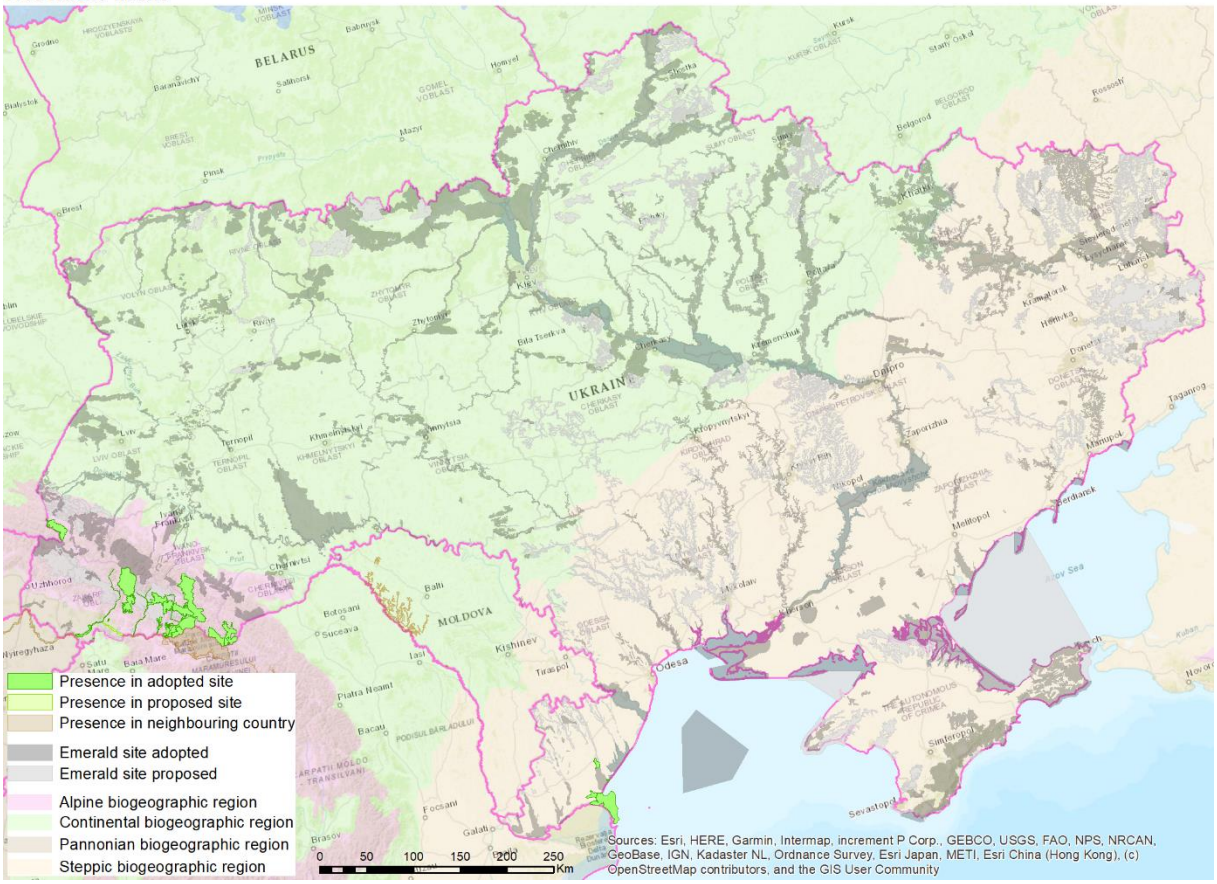
BGR	1096 Lampetra planeri	
ALP	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Remove from the Reference list.
	Comments from external experts:	Probable occurrence only in the Lviv region without site-specific data.
	Comments from local experts:	It is generally accepted that this species does not occur in Ukraine; its records should be excluded, as they may represent misidentifications of L. fluviatilis as L. planeri.
	References:	Bracken 2014
CON	Num. of sites:	Adopted: 1 (C:1)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Remove from the Reference list.
	Comments from external experts:	Probable occurrence only in the Lviv region without site-specific data.
	Comments from local experts:	It is generally accepted that this species does not occur in Ukraine; its records should be excluded, as they may represent misidentifications of L. fluviatilis as L. planeri.
	References:	Bracken 2014

1096 Lampetra planeri



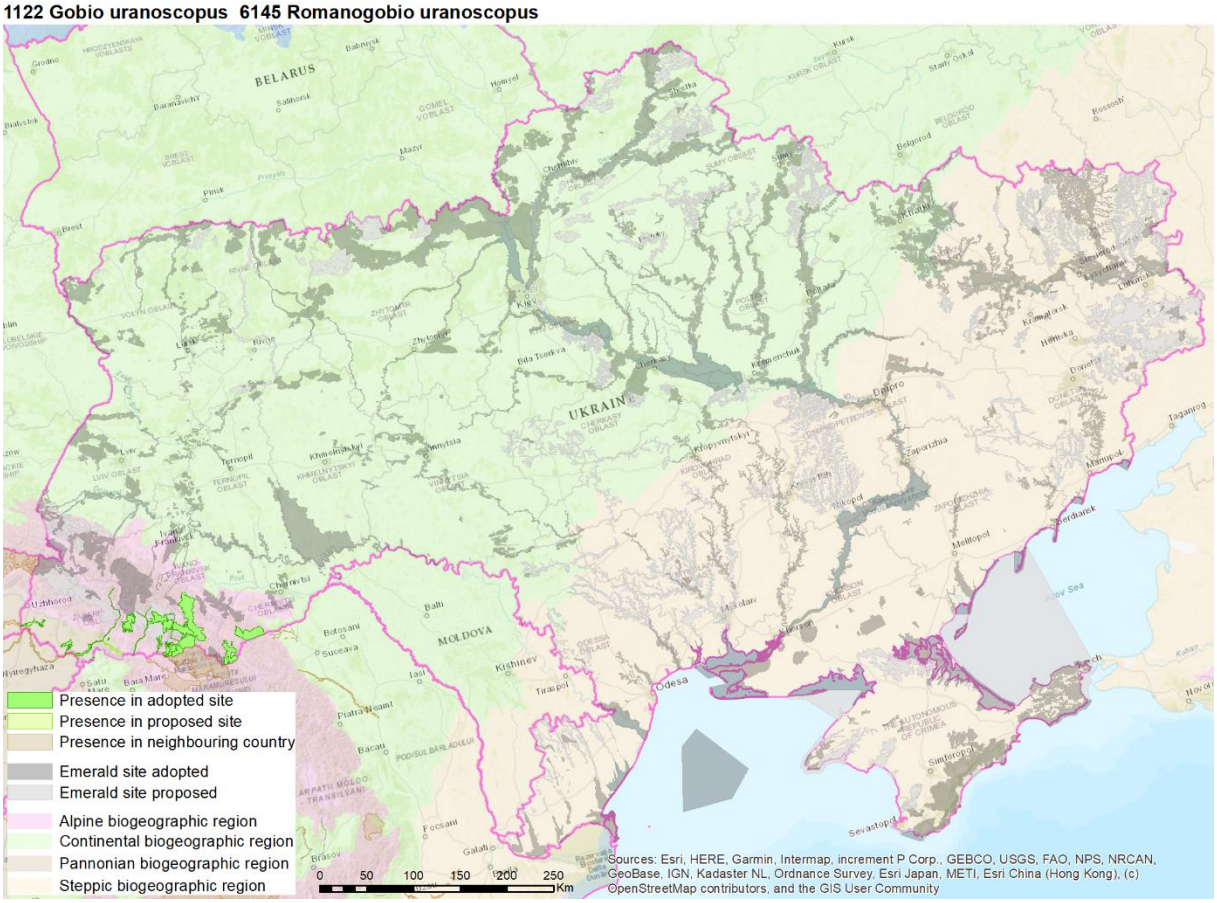
BGR	1105 Hucho hucho	
ALP	Num. of sites:	Adopted: 10 (A:7, B:2, C:1), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN western part
	Recommendation 2025:	Remove from Avashskii Hory, add to the Tisza River floodplain.
	Comments from external experts:	Added sites will likely cover the area's most suitable sites for this species.
	Comments from local experts:	It occurs in the Tisza River and its tributaries. The Avashskii Hory site has no rivers; therefore, another site including the Tisza River should be added.
	References:	Witkowski et al. 2013
PAN	Num. of sites:	Adopted: 2 (A:1, B:1), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Add the Tisza River floodplain
	Comments from external experts:	One added site - Tisza river floodplain. For some years, this flood species has not been widespread, though never abundant, in Ciera and Biela Tisa, the Terebla, Teresva, Rika, and some other streams (Vlasová 1956).
	Comments from local experts:	Lives in the Tisza basin
	References:	Koščo et al. 2004; Witkowski et al. 2013

1105 Hucho hucho



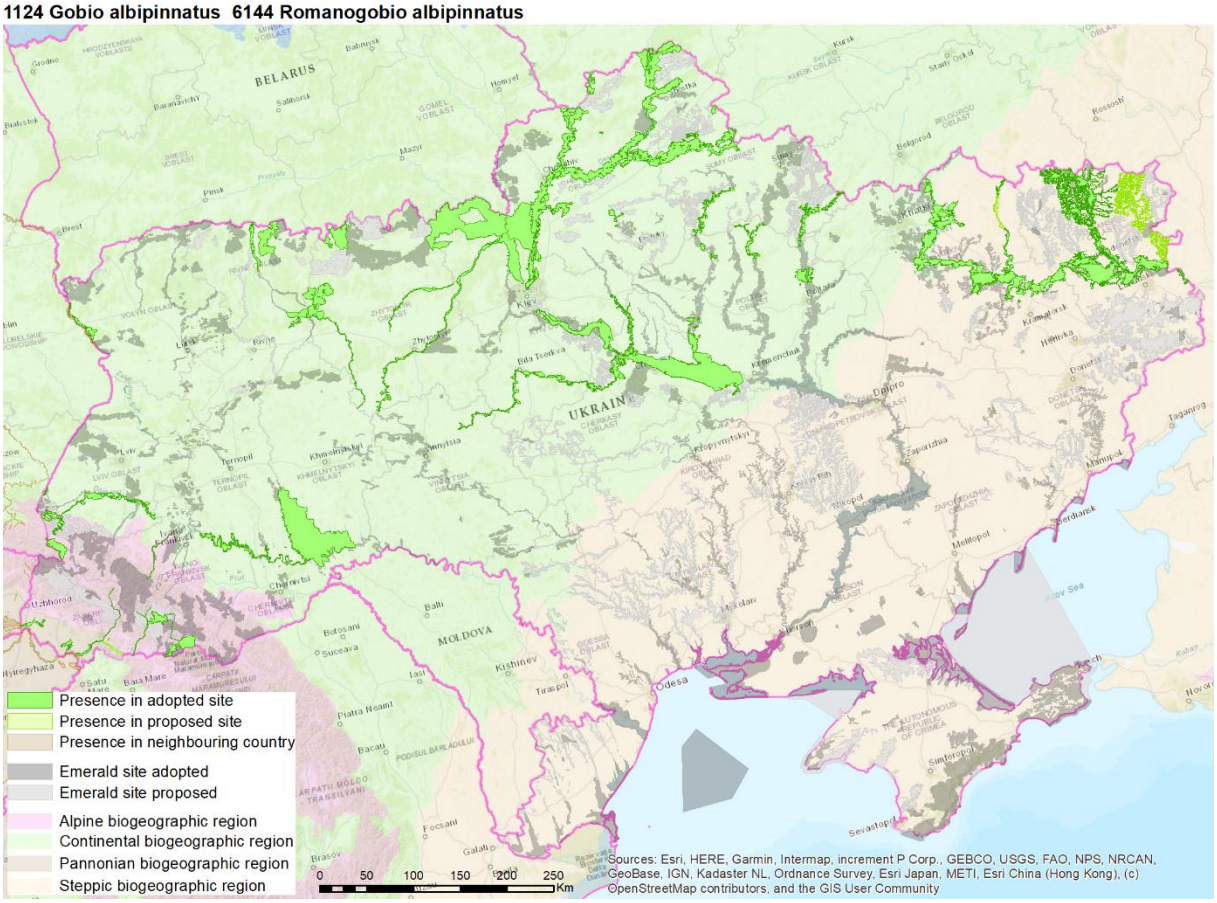
BGR	1122 Gobio uranoscopus 6145 Romanogobio uranoscopus	
PAN	Num. of sites:	Adopted: 3 (A:1, B:2)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Additional sites should be included in the Tysa River floodplain, Prytysianskyi, as well as along the Tereblia, Uh, and Ulička Rivers.
	Comments from external experts:	Terebľa, Uh, and Ulička Rivers without site-specific data (but the most widespread species of the genus in the Transcarpathian territory)
	Comments from local experts:	Agree
	References:	Koščo et al. 2004

1122 Gobio uranoscopus 6145 Romanogobio uranoscopus



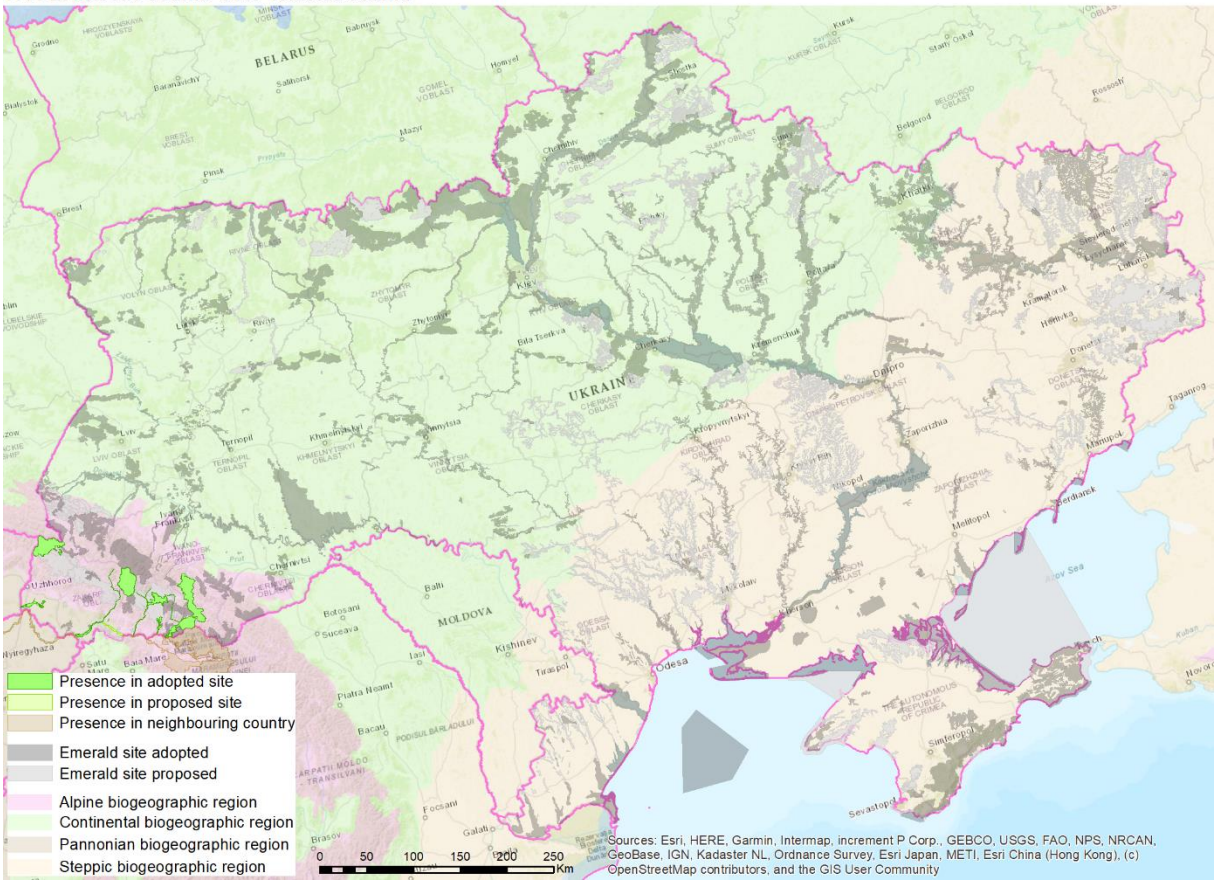
BGR	1124 Gobio albipinnatus 6144 Romanogobio albipinnatus	
PAN	Num. of sites:	Adopted: 1 (B:1)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	This species was recently added to the two sites (Tysa River floodplain, Prytysianskyi, Ponyzzia Borzhavy). It also occurs in the rivers Ublianka and Uh (Pannonian region) without site-specific data. Due to the relatively late description of this species, much of the literature data is uncertain (it may include other species), so further research is needed.
	Comments from local experts:	Agree
	References:	Koščo et al. 2004
STE	Num. of sites:	Adopted: 7 (C:7)
	BGR seminar 2019 conclusion:	SR Kirovogradsky region. Reevaluation is needed in occupied areas, especially in the contact zone.
	Recommendation 2025:	It seems sufficient due to the added sites (Siverskyi Donets river valley in Luhansk Oblast, Derkul river valley, Oskol). Missing data from the more southern part of the STE region probably do not occur there.
	Comments from external experts:	n/a
	Comments from local experts:	Occurrence needs to be reevaluated due to hostilities and pollution from military activities. Emerald sites in occupied territories, particularly along the contact line, do not provide sufficient protection.
	References:	Naseka et al. 1999

1124 Gobio albipinnatus 6144 Romanogobio albipinnatus



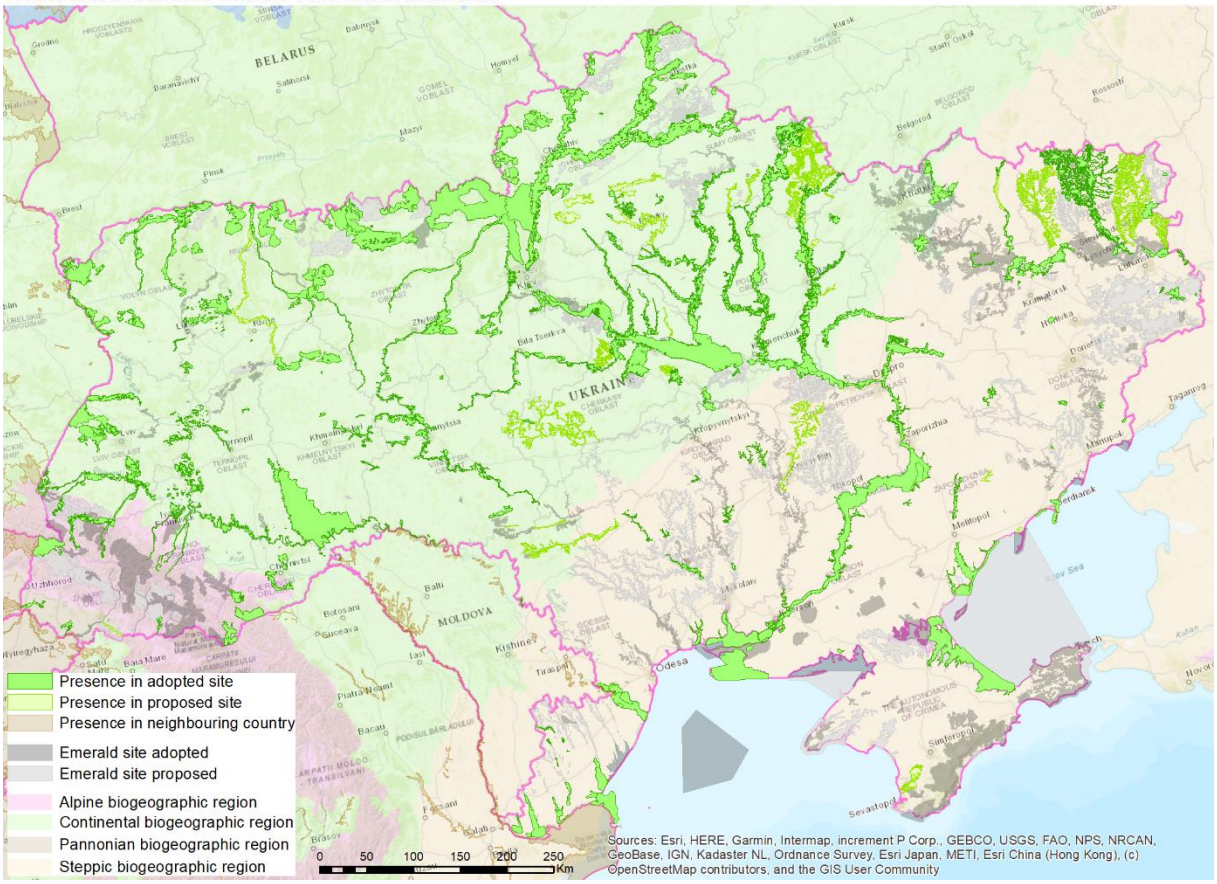
BGR	1131 Leuciscus souffia 6147 Telestes souffia	
PAN	Num. of sites:	Adopted: 2 (B:1, C:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN/CD Tisza basin
	Recommendation 2025:	Due to the added site (Tysa River floodplain), it is sufficient. Verify the population.
	Comments from external experts:	Only in the direct tributaries of the Tisza River (Vladykov 1931; Vlasova 1956) + Tereblya
	Comments from local experts:	Agree; verify the population.
	References:	Aikimov and Radchenko 2009; Koščo et al. 2004

1131 Leuciscus souffia 6147 Telestes souffia



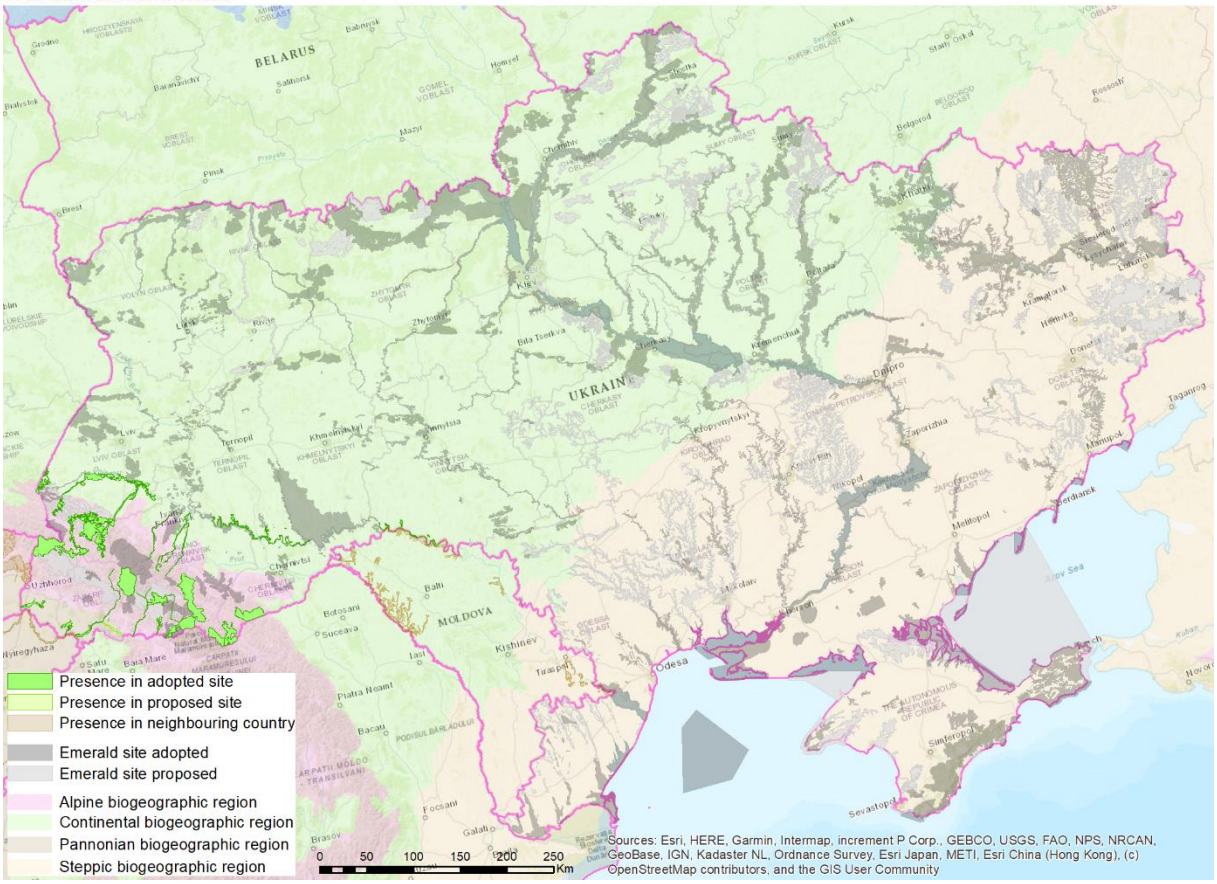
BGR	1134 Rhodeus sericeus amarus 5339 Rhodeus amarus	
PAN	Num. of sites:	Adopted: 2 (C:2)
	BGR seminar 2019 conclusion:	IN MOD/CD Tisza basin
	Recommendation 2025:	Add to the site (UA0000269); create new sites for the Tereblia River and the Uzh River.
	Comments from external experts:	n/a
	Comments from local experts:	Agree
	References:	Koščo et al. 2004

1134 Rhodeus sericeus amarus 5339 Rhodeus amarus



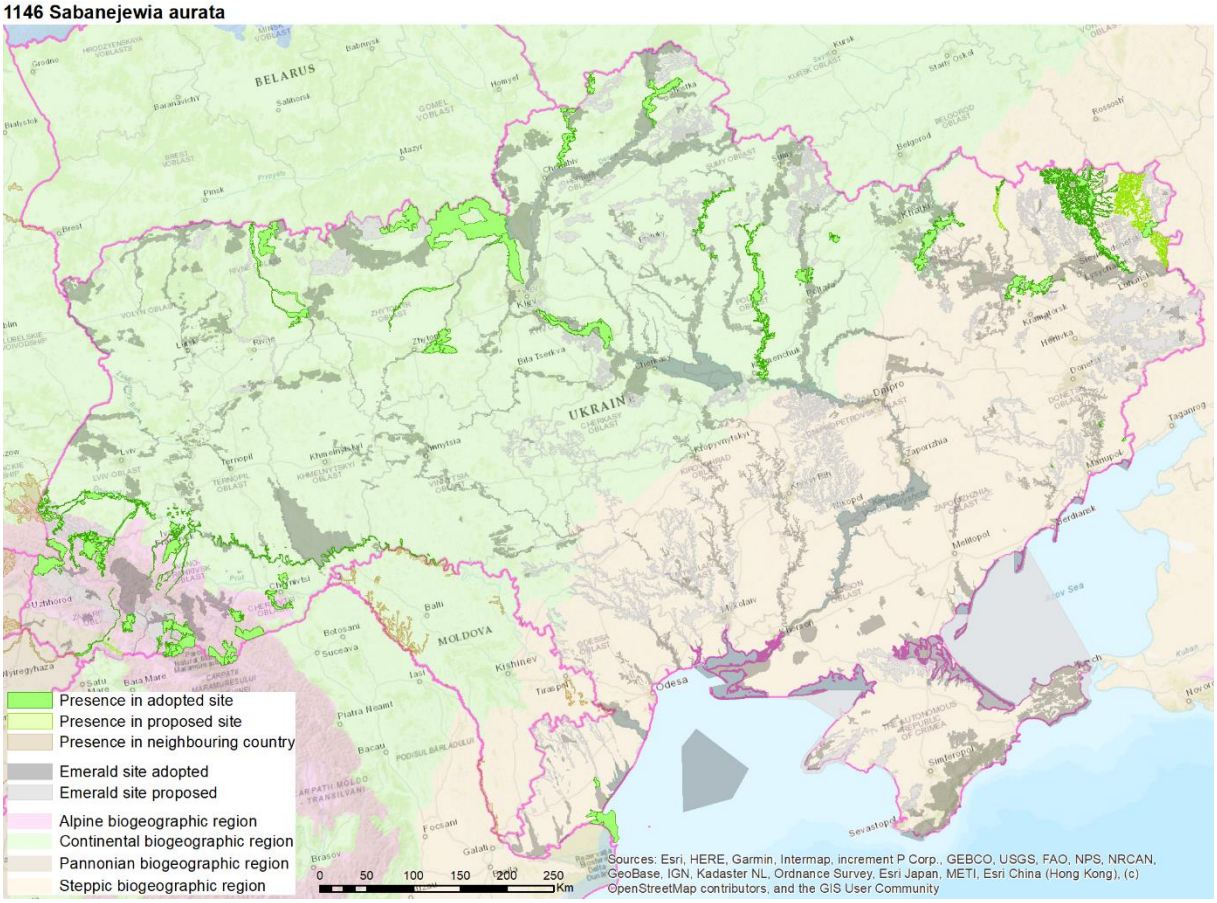
BGR	1138 Barbus meridionalis	
PAN	Num. of sites:	Adopted: 3 (B:1, C:2), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN Tisza basin
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	Taxonomically complicated species. Subspecies *B. meridionalis petenyi* is sometimes classified as a separate species and sometimes as a subspecies of *B. carpathicus*. The systematics of this species complex require clarification.
	Comments from local experts:	Now is commonly named *Barbus carpathicus*.
	References:	Червона книга України [Red Book of Ukraine] (accessed February 19, 2025), https://redbook-ua.org/

1138 Barbus meridionalis



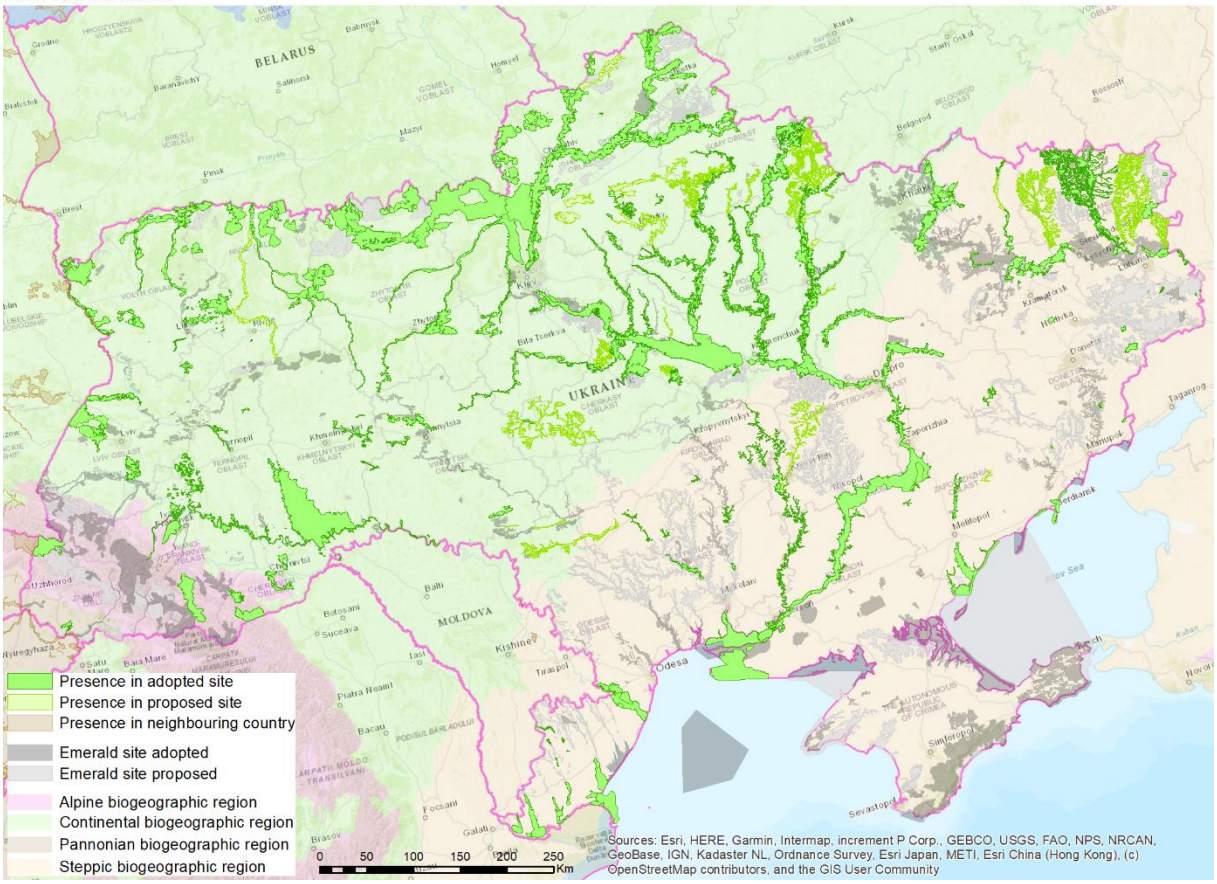
BGR	1146 Sabanejewia aurata	
PAN	Num. of sites:	Adopted: 2 (B:1, C:1), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN Latorica, Uzh
	Recommendation 2025:	Create new site - Uzh River
	Comments from external experts:	*S. balcanica* occurs in the area, particularly in the middle reaches of rivers, where it is a common species.
	Comments from local experts:	Agree
	References:	Koščo et al. 2004

1146 Sabanejewia aurata



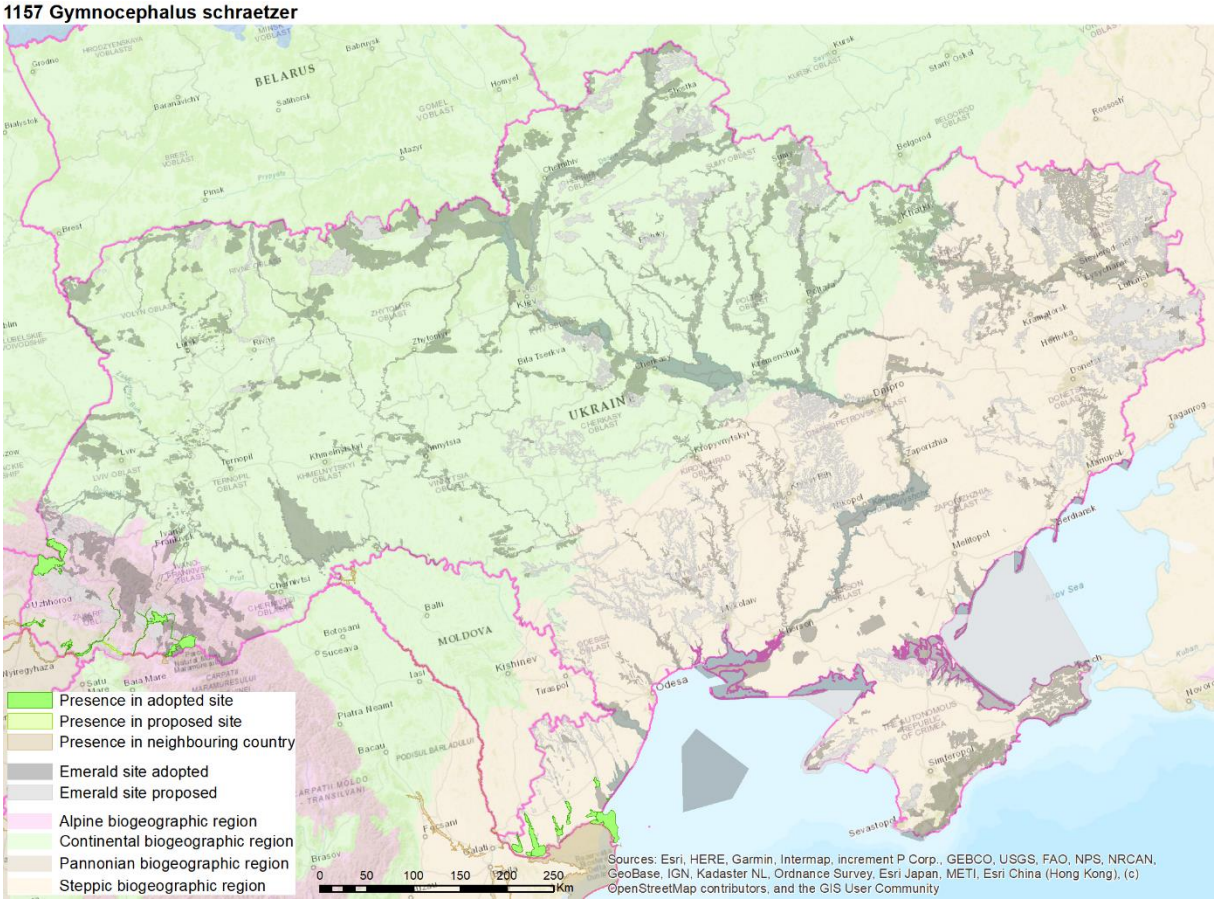
BGR	1149 Cobitis taenia	
PAN	Num. of sites:	Adopted: 1 (B:1)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Add to the adopted sites (UA0000113, UA0000269); add to the proposed site (UA0000599).
	Comments from external experts:	*C. elongatoides* occurs in the area. It occurs in lowland sections of rivers and standing waters throughout the area. In the past, it was considered a common species (Vlasová 1956).
	Comments from local experts:	Agree
	References:	Koščo et al. 2004

1149 Cobitis taenia



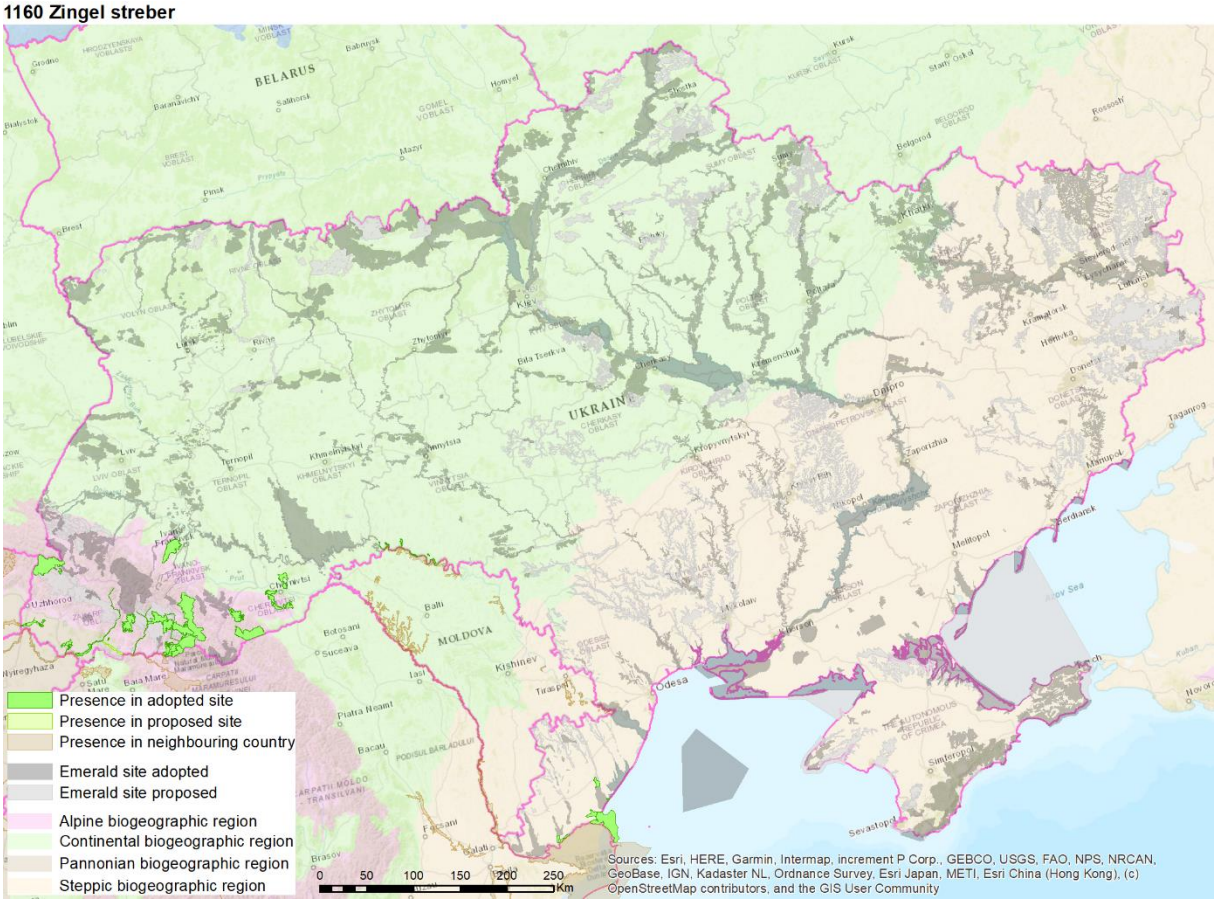
BGR	1157 Gymnocephalus schraetzer	
PAN	Num. of sites:	Adopted: 3 (B:1, C:2), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN Tisza basin
	Recommendation 2025:	Due to the added site (Tisza River floodplain), it seems to be sufficient, but records from the Tisza River need to be verified.
	Comments from external experts:	Given the range of this species in the area (lower reaches of rivers), most sites where this species occurs are likely to be well covered.
	Comments from local experts:	More research is needed on the Tisza River.
	References:	Aikimov and Radchenko 2009; Koščo et al. 2004

1157 Gymnocephalus schraetzer



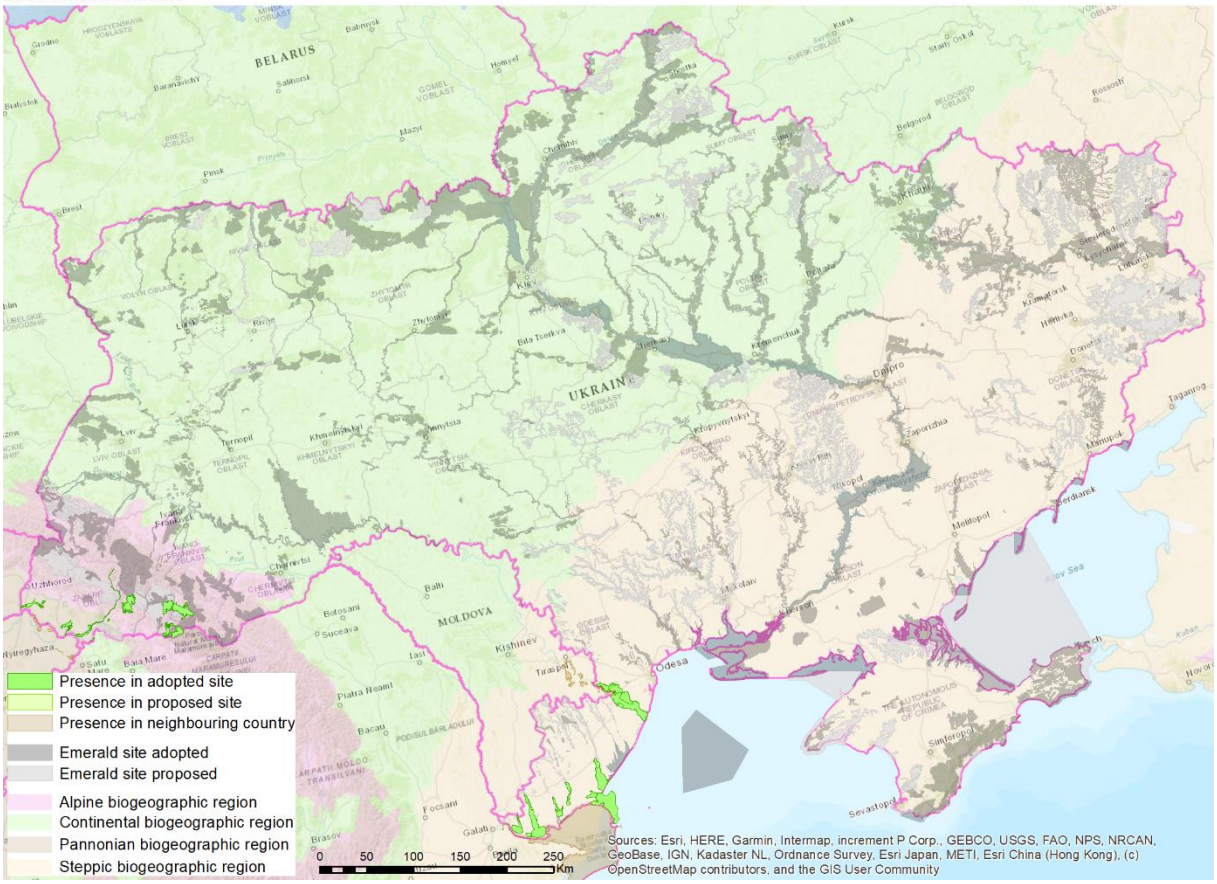
BGR	1160 Zingel streber	
PAN	Num. of sites:	Adopted: 4 (B:3, C:1), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Additional research is needed.
	Comments from external experts:	Recent findings are only in the site UA0000113 and the Tisza River (unspecified).
	Comments from local experts:	Agree
	References:	Koščo et al. 2004

1160 Zingel streber



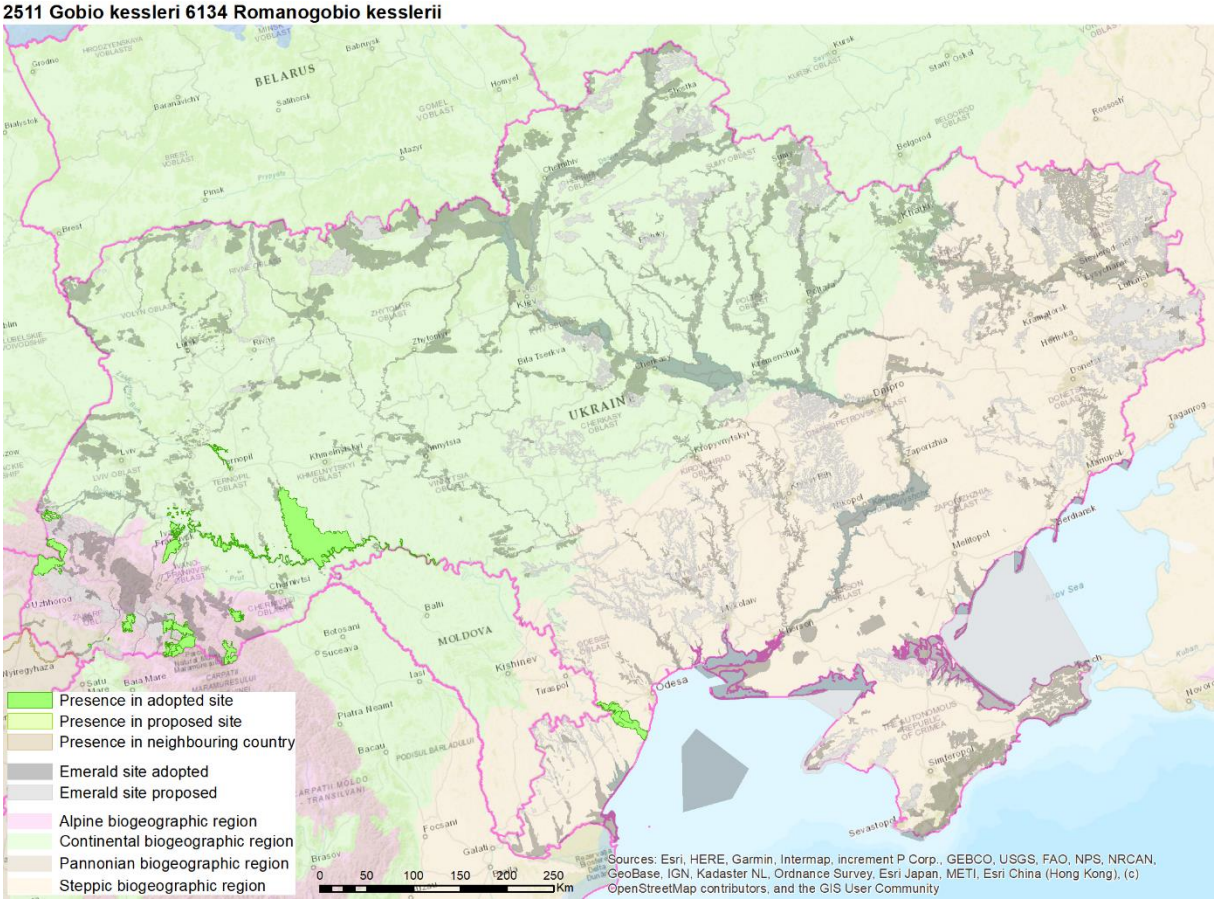
BGR	2011 Umbra krameri	
ALP	Num. of sites:	Adopted: 2 (B:2)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Absence of recent findings; possibly locally extinct. Remove from the Reference list.
	Comments from external experts:	The situation of U. krameri in the Danube tributaries is serious. Mud minnows have been caught in the Prut River itself. Two specimens were collected in the Chernovtzi area in June 1953 by Shnarevich (1959), who suggested that this species occurred only at floodtime. Our intensive collecting efforts in the 1970s and 1980s produced no specimens. This probably indicates that the species has disappeared from the Prut midflow basin. In the lower part of the Prut River, where mud minnows were previously recorded by Berg (1948), Pavlov (1953), and others, the fish is now reported as rare (Popa 1976).
	Comments from local experts:	Species is absent in ALP region.
	References:	Movchan 1995
PAN	Num. of sites:	Adopted: 4 (B:4)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Additional research is needed, primarily focusing on lakes and slow rivers.
	Comments from external experts:	The recent record is only in the Mukachevo region, not site specific. Due to the lack of current site-specific data, there is likely a large population decline.
	Comments from local experts:	Experts agree that species are in decline due to the destruction of habitats. Additional scientific research is needed—primarily focusing on lakes and slow rivers.
	References:	Movchan 1995

2011 Umbra krameri



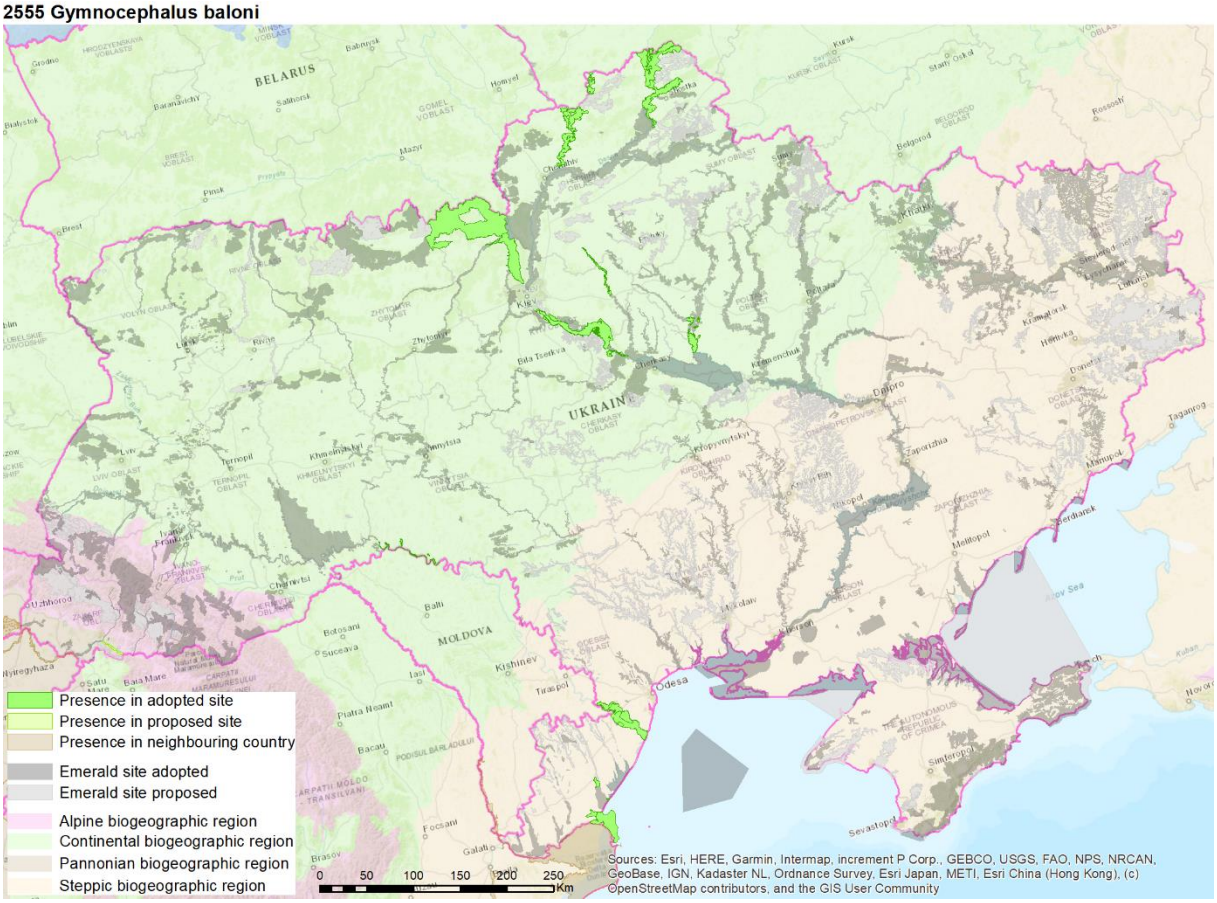
BGR	2511 Gobio kessleri 6134 Romanogobio kesslerii	
ALP	Num. of sites:	Adopted: 9 (B:2, C:7)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN western part
	Recommendation 2025:	Due to the added site (Skhidnyi Svydovets), it seems to be sufficient.
	Comments from external experts:	n/a
	Comments from local experts:	Agree
	References:	n/a
PAN	Num. of sites:	Adopted: 1 (B:1)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Create a new site - Uzh River.
	Comments from external experts:	The species was recently added to 2 sites (Tysa River floodplain, Prytysianskyi, Ponyzzia Borzhavy); data are also known from the Uh and Ublianka Rivers.
	Comments from local experts:	Experts agree, but more research is needed to understand population size. Additional site - Uzh river mid-stream.
	References:	Koščo et al. 2004

2511 Gobio kessleri 6134 Romanogobio kesslerii



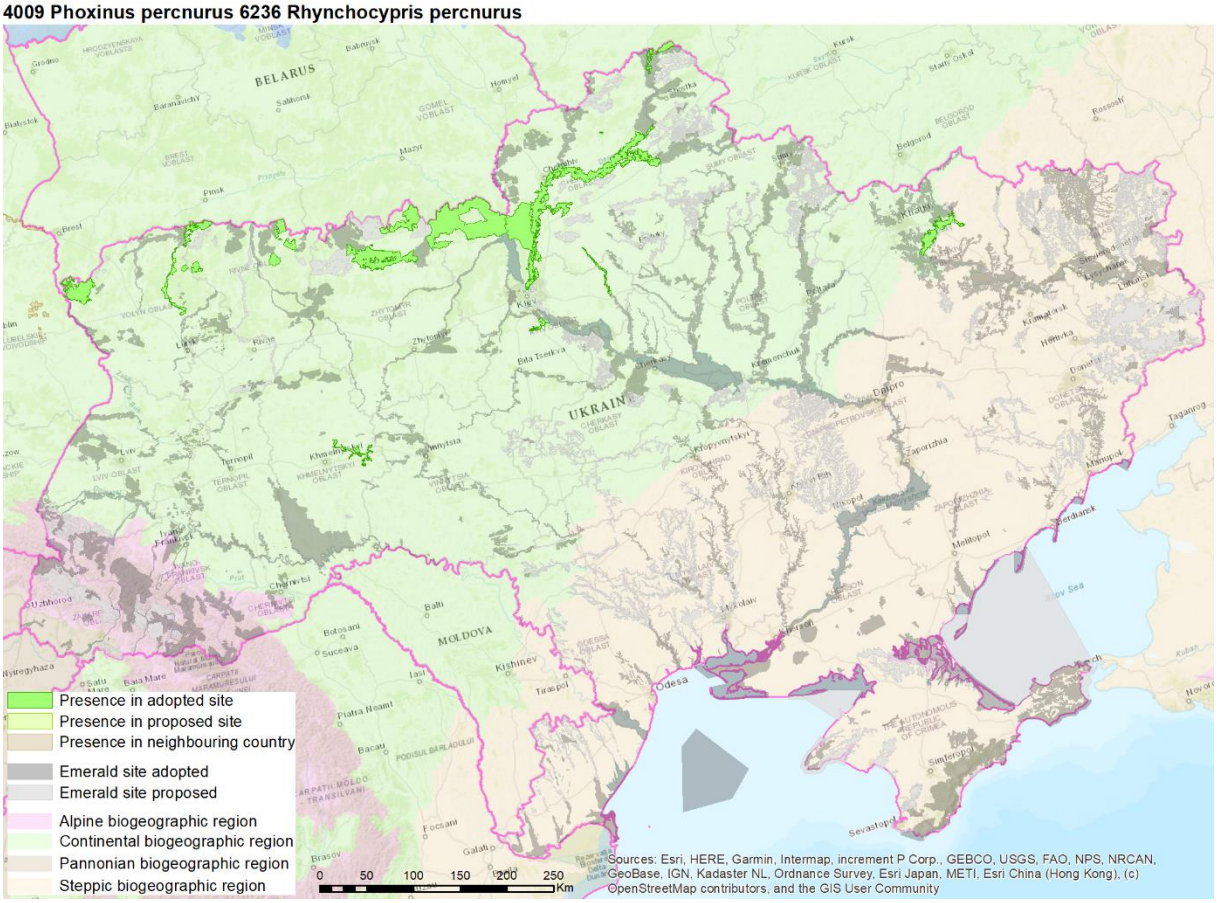
BGR	2555 Gymnocephalus baloni	
ALP	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR check references
	Recommendation 2025:	More research is needed on the Uzh River.
	Comments from external experts:	Within Ukraine, it is known from the Lower Danube, the Middle Dnipro, and its tributaries: Supij, Sula, and Trubizh (Movchan et al. 2003). Harka (2006) reports that the species still occurs in the Tisza River. It is relatively common in the lower reaches of the Tisza River (Tisza report).
	Comments from local experts:	Experts agree that more research is needed on the Uzh River.
	References:	Harka 2006; Joint Danube Survey 2002; Tsyba and Kokodiy 2017
PAN	Num. of sites:	Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	More research is needed on the Latorica River.
	Comments from external experts:	Within Ukraine, it is known from the Lower Danube, the Middle Dnipro, and its tributaries: Supij, Sula, and Trubizh (Catalogue… 2003). Harka (2006) reports that the species still occurs in the Tisza River. It is relatively common in the lower reaches of the Tisza River (Tisza report).
	Comments from local experts:	Experts agree that more research is needed on the Latorica River.
	References:	Harka 2006; Joint Danube Survey 2002; Tsyba and Kokodiy 2017

2555 Gymnocephalus baloni



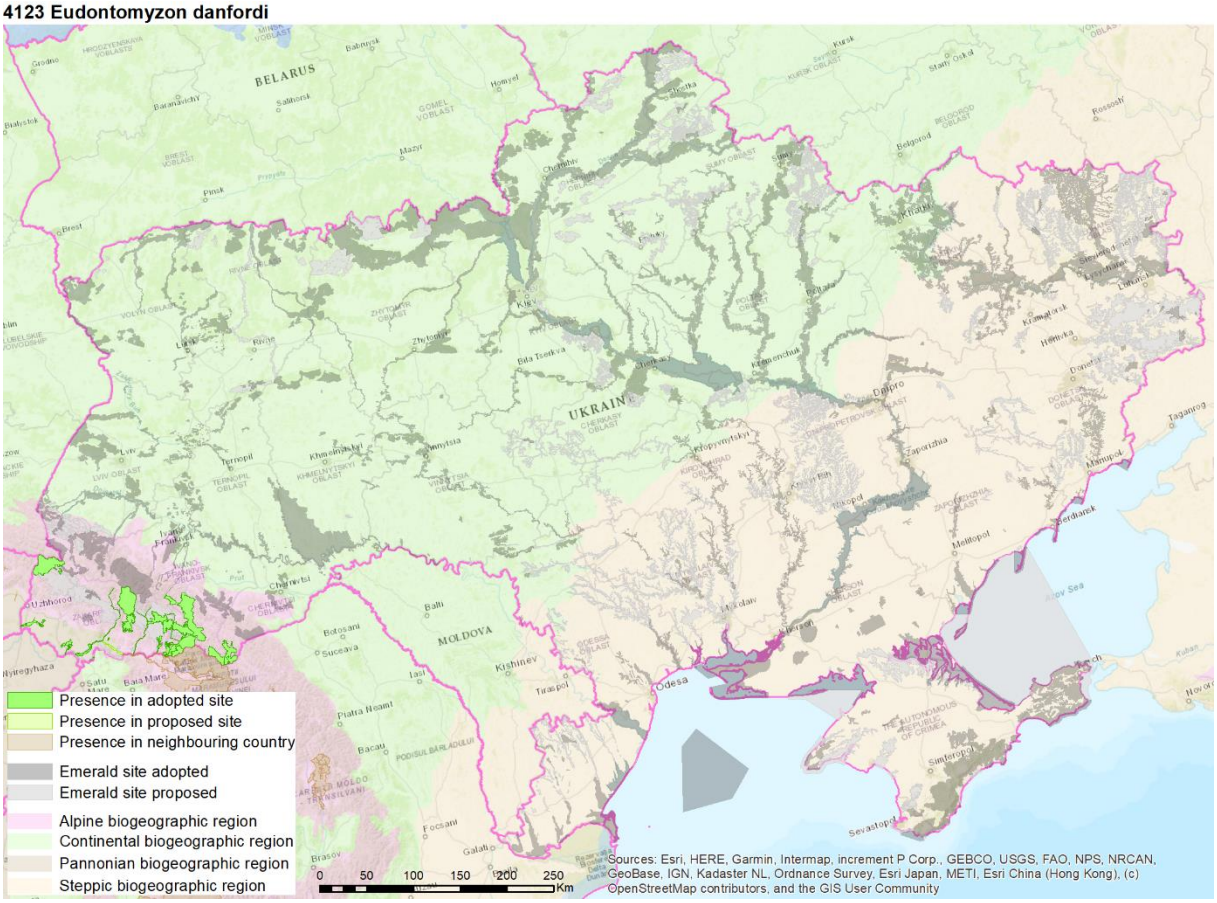
BGR	4009 Phoxinus percnurus 6236 Rhynchocypris percnurus	
CON	Num. of sites:	Adopted: 17 (B:5, C:10, D:2)
	BGR seminar 2019 conclusion:	IN MIN/SR/CD IN MIN Sumy region
	Recommendation 2025:	Seems to be sufficient
	Comments from external experts:	The species has been added to one site (Desniansko-Starohutskyi NNP) and currently exists in 17 sites. Therefore, it seems sufficient.
	Comments from local experts:	Agree
	References:	https://redbook-ua.org/item/eupallasella-percnurus-pallas/#google_vignette
STE	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR/CD SR distribution
	Recommendation 2025:	Add to sites Siverskyi Dontets. Additional research is needed.
	Comments from external experts:	In Ukraine, this species is known from the reservoirs of the Upper and Middle Dnipro, particularly in the upper reaches of the Prypiat, Desna, Ostra, Trubizh, Vorskla, Supa, Sozh, Stokhod, and Zdvyzh, as well as from floodplain lakes and drained canals in the Volyn region and small lakes in the vicinity of Kyiv. It was first recorded in the upper reaches of the Siverskyi Donets on Borove Lake in 2000. It probably does not occur in the STE region. The nearest occurrence in the Severny Donets is restricted to the river's upper reaches.
	Comments from local experts:	Found in the Siverskyi Donets River; not recorded in other parts of the STE area.
	References:	Червона книга України [Red Book of Ukraine] (accessed February 19, 2025), https://redbook-ua.org/

4009 Phoxinus percnurus 6236 Rhynchocypris percnurus



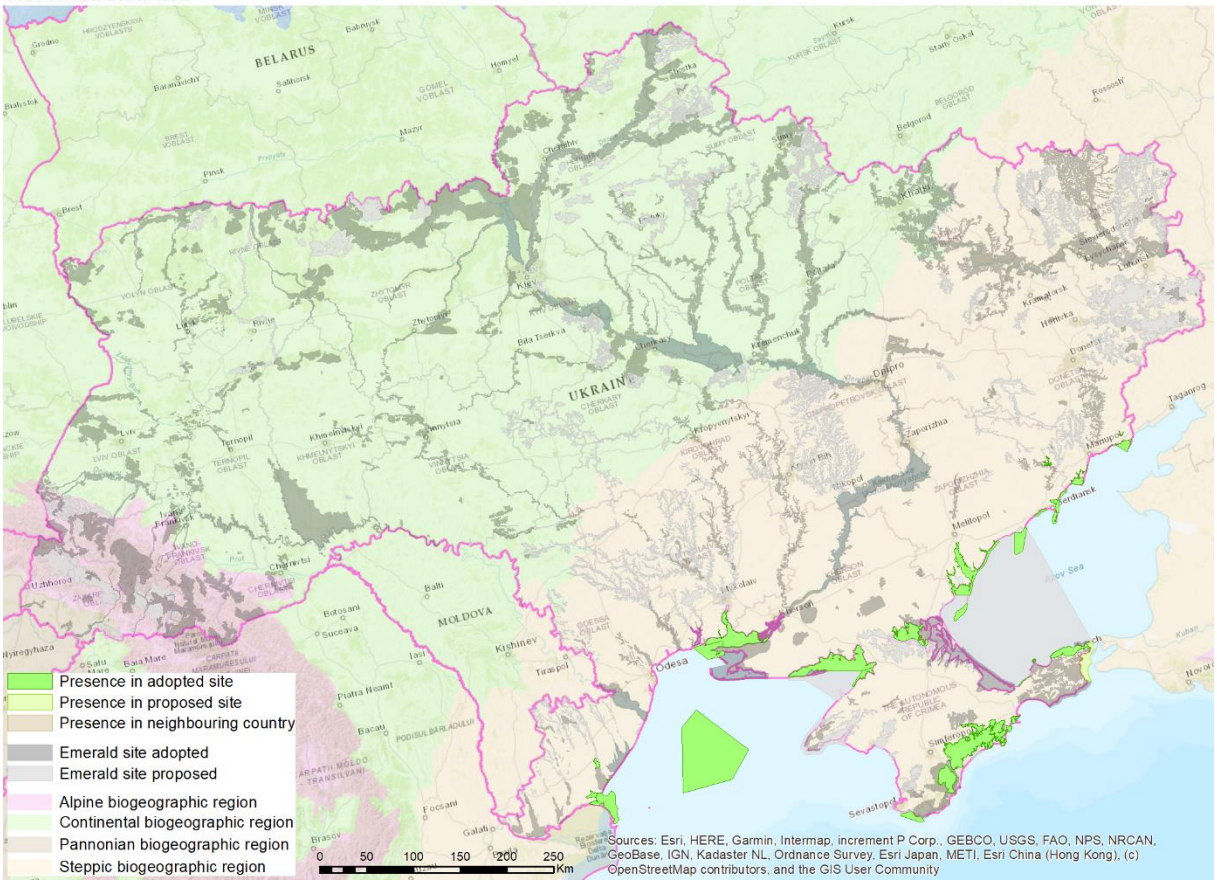
BGR	4123 Eudontomyzon danfordi	
PAN	Num. of sites:	Adopted: 4 (C:4), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN IN MOD Tisza basin
	Recommendation 2025:	Due to the added site (Tysza River floodplain, Prytysianskyi, Ponyzzia Borzhavy), it seems to be sufficient + occurrence in the Vycha River close to the region.
	Comments from external experts:	Confirmed occurrence - Vecha River near Sasivka 48°34´2”N 23°2´38”
	Comments from local experts:	Agree
	References:	Talabishka et al. 2012

4123 Eudontomyzon danfordi



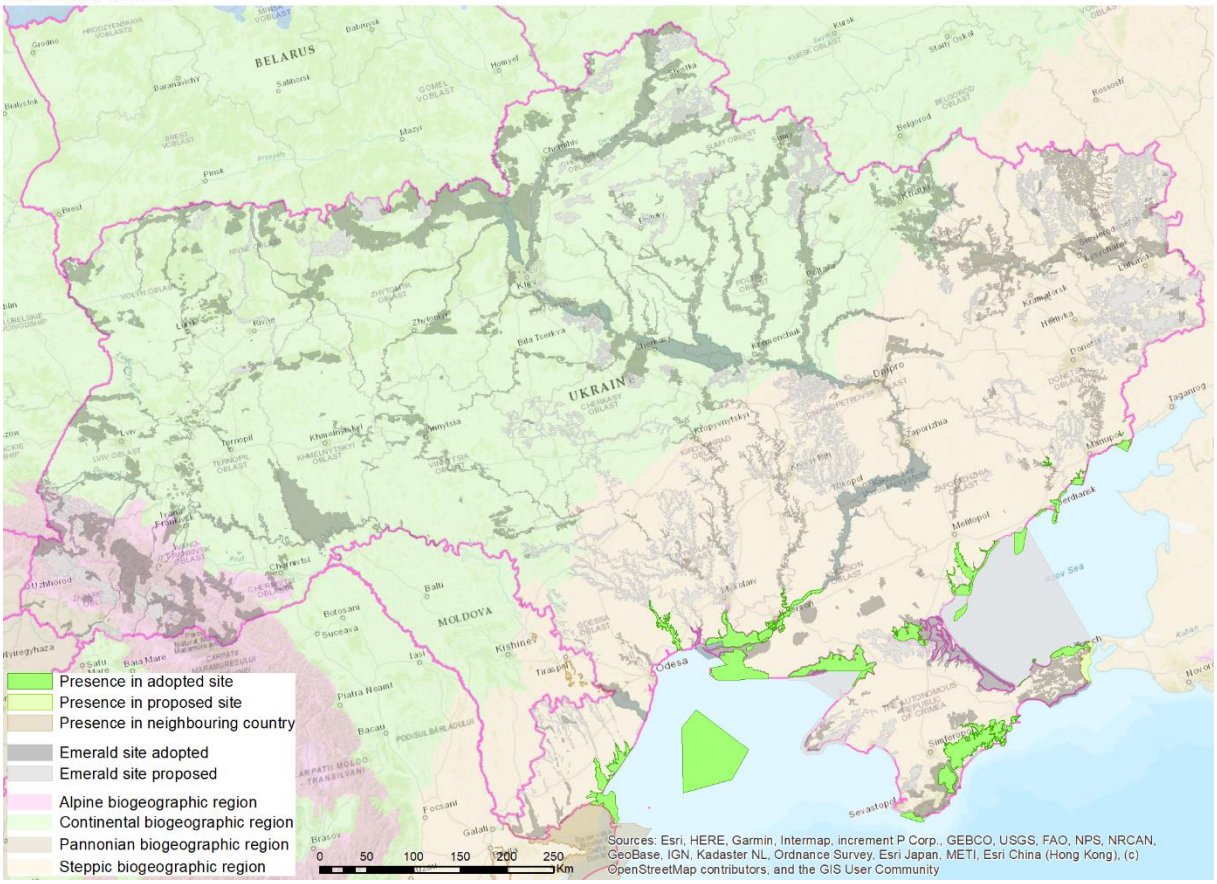
BGR	4126 Alosa maeotica	
STE	Num. of sites:	Adopted: 18 (B:16, C:2), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD 2 sites
	Recommendation 2025:	Remove from Central Sivash and in Crimean Mountains.
	Comments from external experts:	n/a
	Comments from local experts:	No need for additional research; species is widely distributed. Species cannot be in Central Sivash and in Crimean Mountains.
	References:	n/a

4126 Alosa maeotica



BGR	4127 Alosa tanaica	
STE	Num. of sites:	Adopted: 22 (B:13, C:9), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD 2 sites
	Recommendation 2025:	Remove from Central Sivash and in the Crimean Mountains.
	Comments from external experts:	One site has already been added (UA0000381). Citizen science data west of Rybakivka, near UA000009.
	Comments from local experts:	No need for additional research, the species is widely distributed. Species cannot be in the Central Sivash and in the Crimean Mountains.
	References:	Global Biodiversity Information Facility (accessed February 19, 2025), https://www.gbif.org/

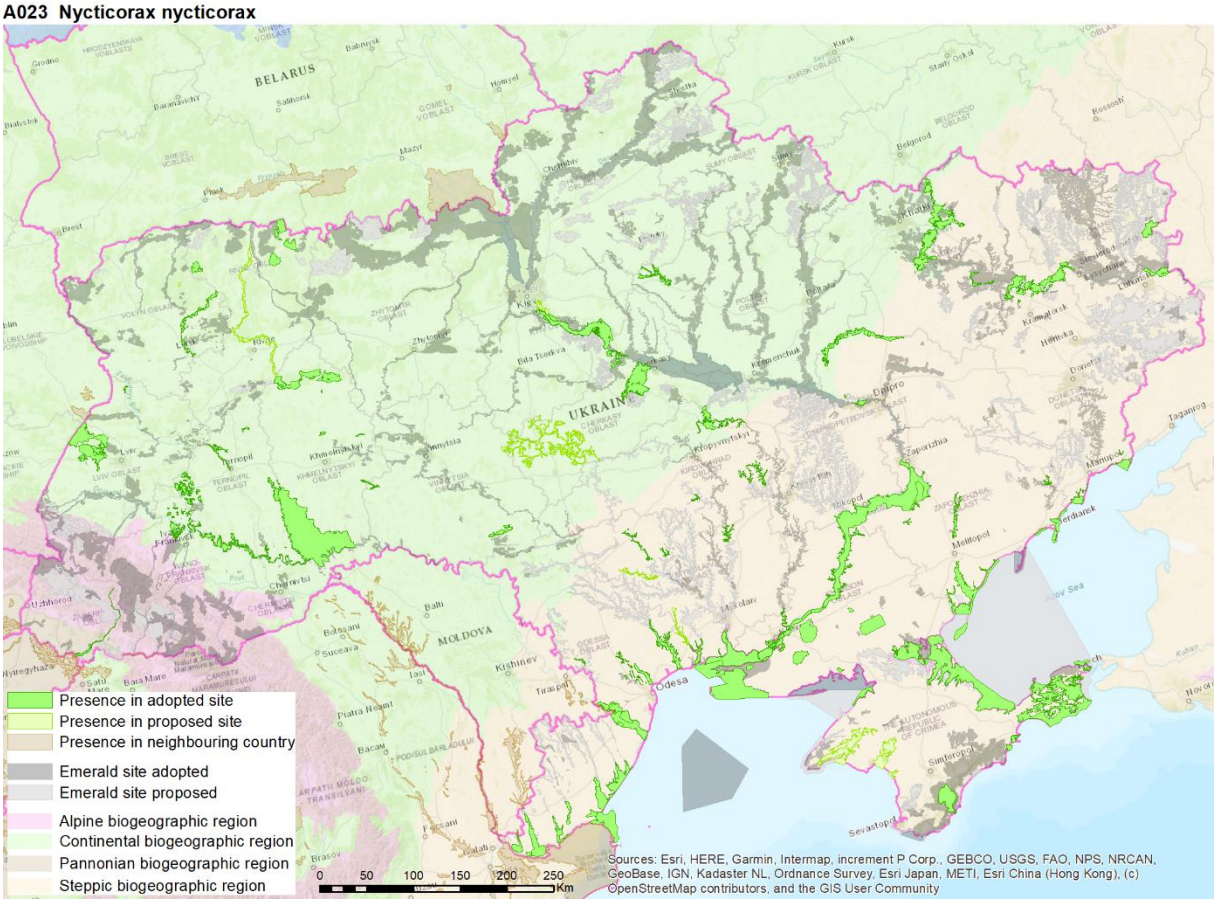
4127 Alosa tanaica



Birds

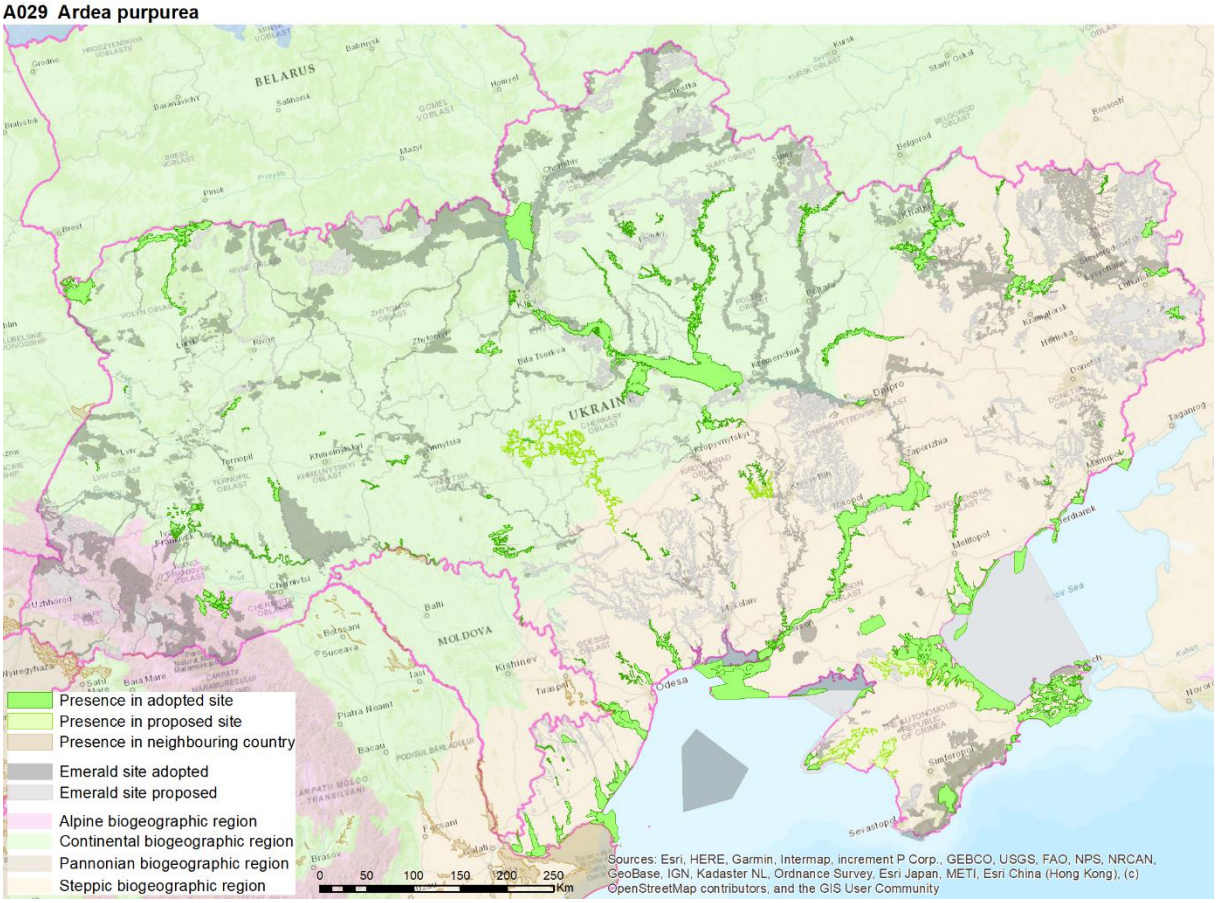
BGR	A023 Nycticorax nycticorax	
Not applicable	Num. of sites:	110 (A:1, B:5, C:86, D:18)
	BGR seminar 2018 conclusion:	IN MOD Approximately 10 sites, east and west: Izyumski Luky, Kalmius river valley, Siverskyi Donets, Oril, Vereshchitsya valley, Mozh valley, Berestova, Orchyk
	Recommendation 2025:	Add sites: Pivdennyi Buh River (Verkhnie Pobozhzhia UA0000169); Kalmius river valley (UA0000314); IN MOD: Orchyk River (Poltava)
	Comments from external experts:	ERL: (11,000–13,000 bp); SDF: r = (152–327 i and 1,704–589 p); c = (lowerbound 6,888 i) Add sites: Pivdennyi Buh River (Verkhnie Pobozhzhia UA0000169); it remains IN MIN: Kalmius river valley (UA0000314); Mozh river valley (UA0000299); IN MOD: Orchyk River (Poltava) Removed due to previous database: UA0000292; UA0000294; UA0000299 (Mozh river valley) reason?
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A023 Nycticorax nycticorax



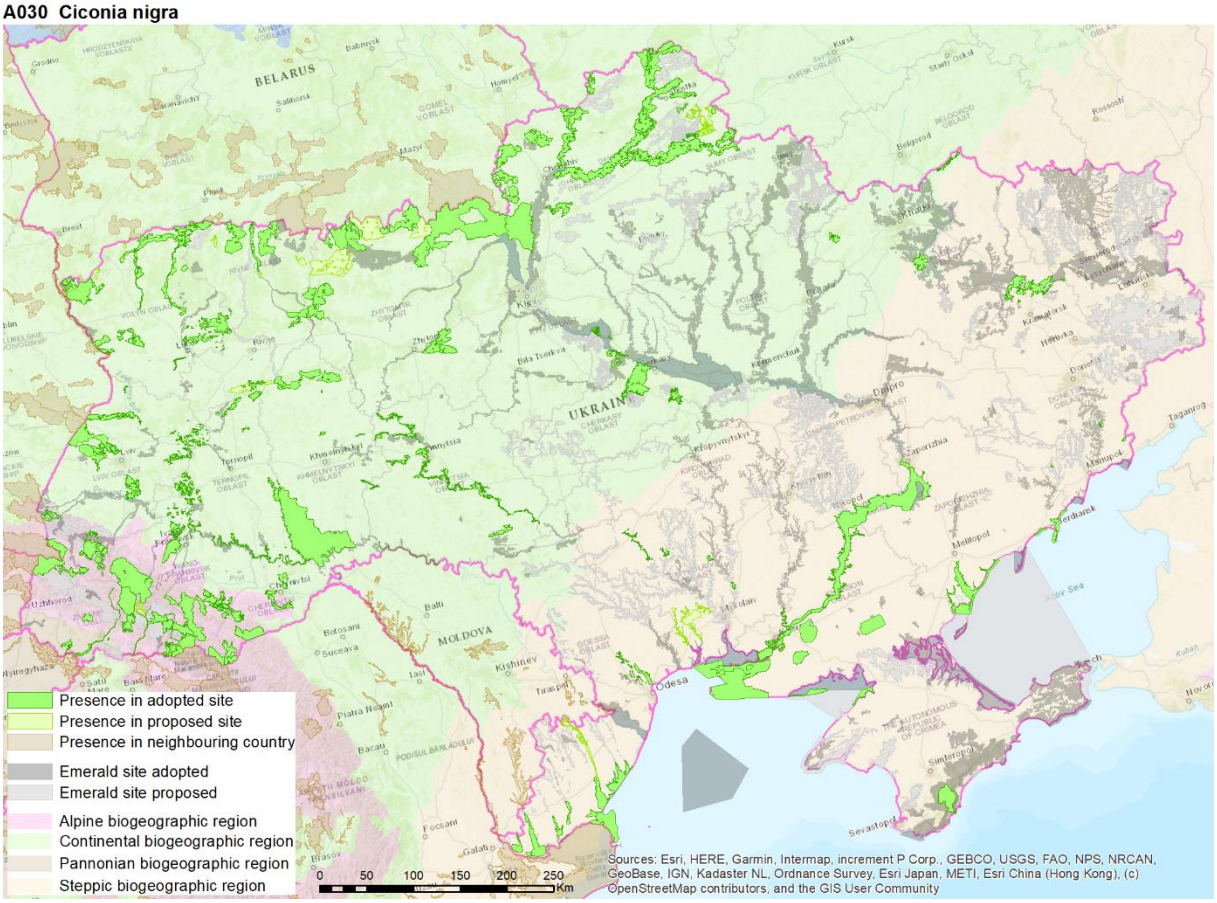
BGR	A029 Ardea purpurea	
Not applicable	Num. of sites:	133 (B:1, C:105, D:27)
	BGR seminar 2018 conclusion:	IN MOD Mainly south and east: Syvash, Sula, Siverskyi Donets, Mozh, Berestova, Pechenizskyi, Liman's lake system, Upper Dnister valley
	Recommendation 2025:	It remains IN MIN: Sula River (UA0000059); Mozh river valley (UA0000299); Pechenizka Lisova Dacha Zakaznyk (UA0000086)
	Comments from external experts:	ERL: (8,000–12,000 bp); SDF: r = (102–253 i and 1,075–874 p); c = (2,358–1,372i) It remains IN MIN: Sula River (UA0000059); Mozh river valley (UA0000299); Pechenizka Lisova Dacha Zakaznyk (UA0000086). Removed due to previous database: UA0000355.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A029 Ardea purpurea



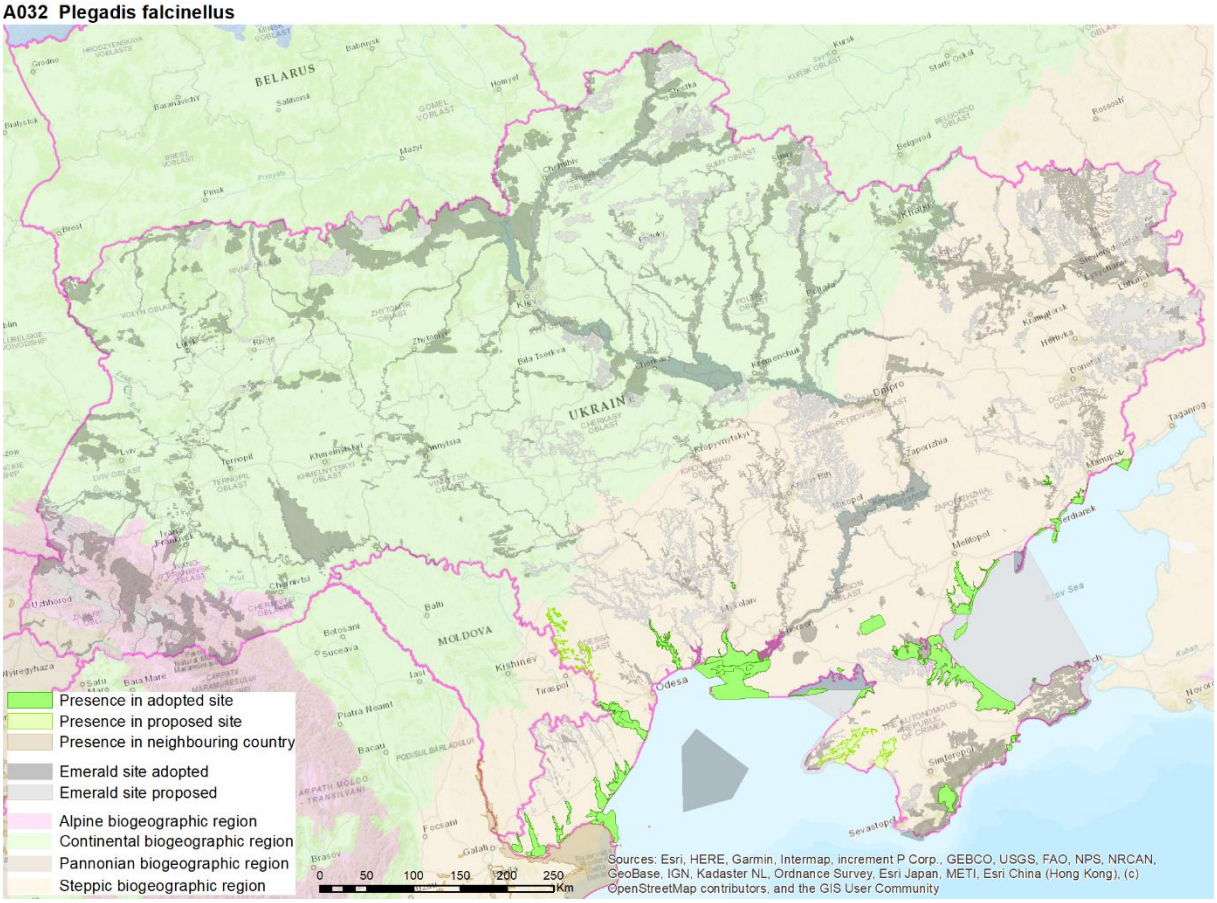
BGR	A030 Ciconia nigra	
Not applicable	Num. of sites:	166 (B:30, C:113, D:23)
	BGR seminar 2018 conclusion:	IN MOD/CD Polissia region, Rivne and Zhytomir regions, Teteriv valley, Upper Dnister valley
	Recommendation 2025:	Species added to 47 sites, including Polissia, Rivne, and Zhytomir regions. Reassessment of breeding population coverage in SDF in accepted sites.
	Comments from external experts:	ERL: (800–1,000 bp); SDF: r = (1 i and 223–309 p); c = (1,409–1,072 i); p = (1 p); Species added to 47 sites (mainly D - non-significant population); including Polissia, Rivne, and Zhytomir regions. Territorial coverage corresponds to EBBA2, but breeding population coverage is only 30–40%. (Has the population in the ERL been overestimated?) Removed due to previous database: UA0000303; UA0000307; UA0000312; UA0000320 (Teteriv river valley); UA0000335; UA0000348; UA0000379; UA0000407; UA0000412; UA0000413; UA0000418; UA0000419; UA0000422; UA0000430; UA0000456; UA0000466; UA0000467; UA0000468; UA0000469; UA0000470; UA0000589; UA0000593; UA0000594; UA0000596; UA0000599; UA0000600; UA0000602; UA0000608; UA0000609; UA0000610.
	Comments from local experts:	Check with results from international Ciconia nigra project. Otherwise agreed.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A030 Ciconia nigra



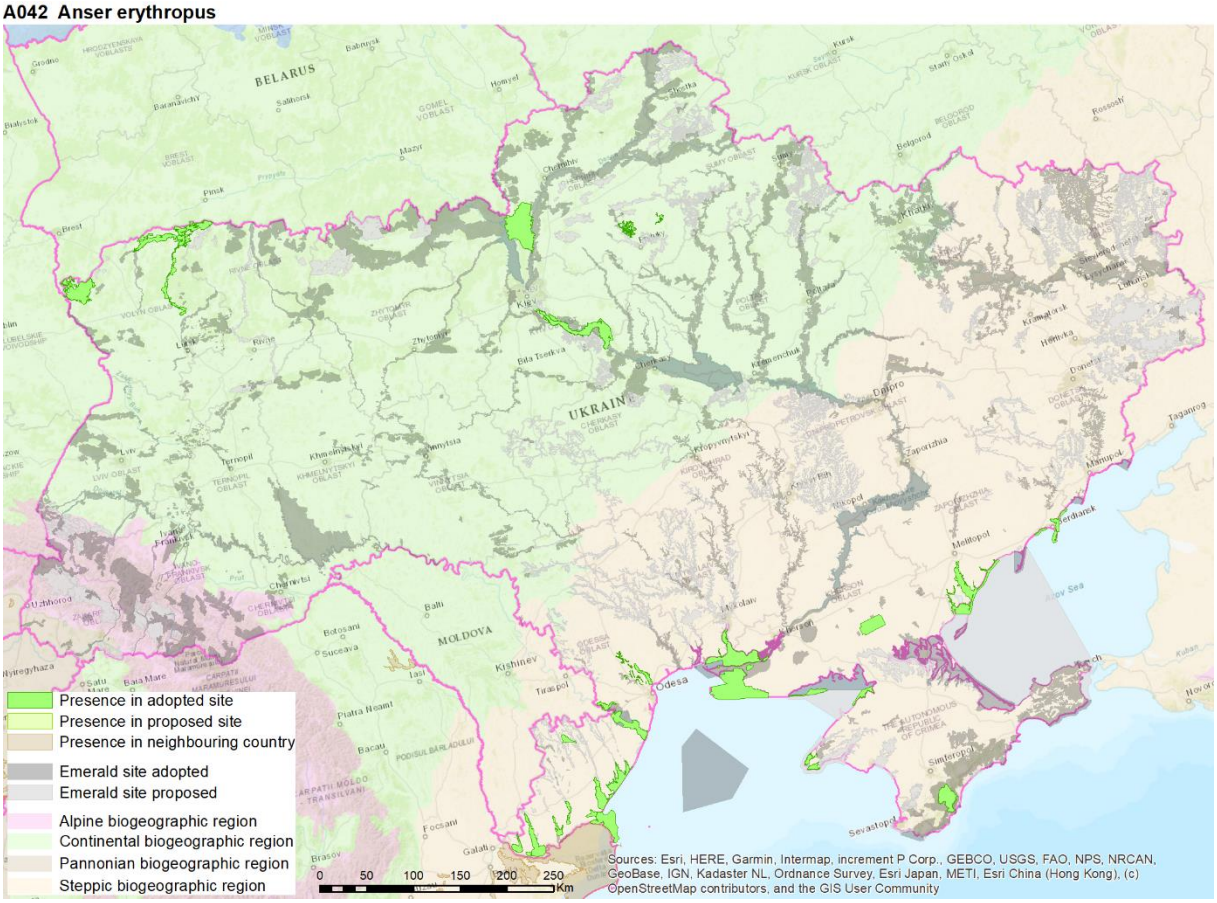
BGR	A032 Plegadis falcinellus	
Not applicable	Num. of sites:	36 (A:2, B:9, C:15, D:10)
	BGR seminar 2018 conclusion:	IN MOD/CD: Add new sites in the Odesa and Kerson region and delete sites in the west.
	Recommendation 2025:	Species added to 12 sites. Probably SUF?
	Comments from external experts:	SDF: r = (9 i and 1,441–200 p); c = (1,779–1,531 i); Species added to 12 sites. Probably SUF? Removed due to previous database: UA0000319; UA0000390; UA0000411.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A032 Plegadis falcinellus



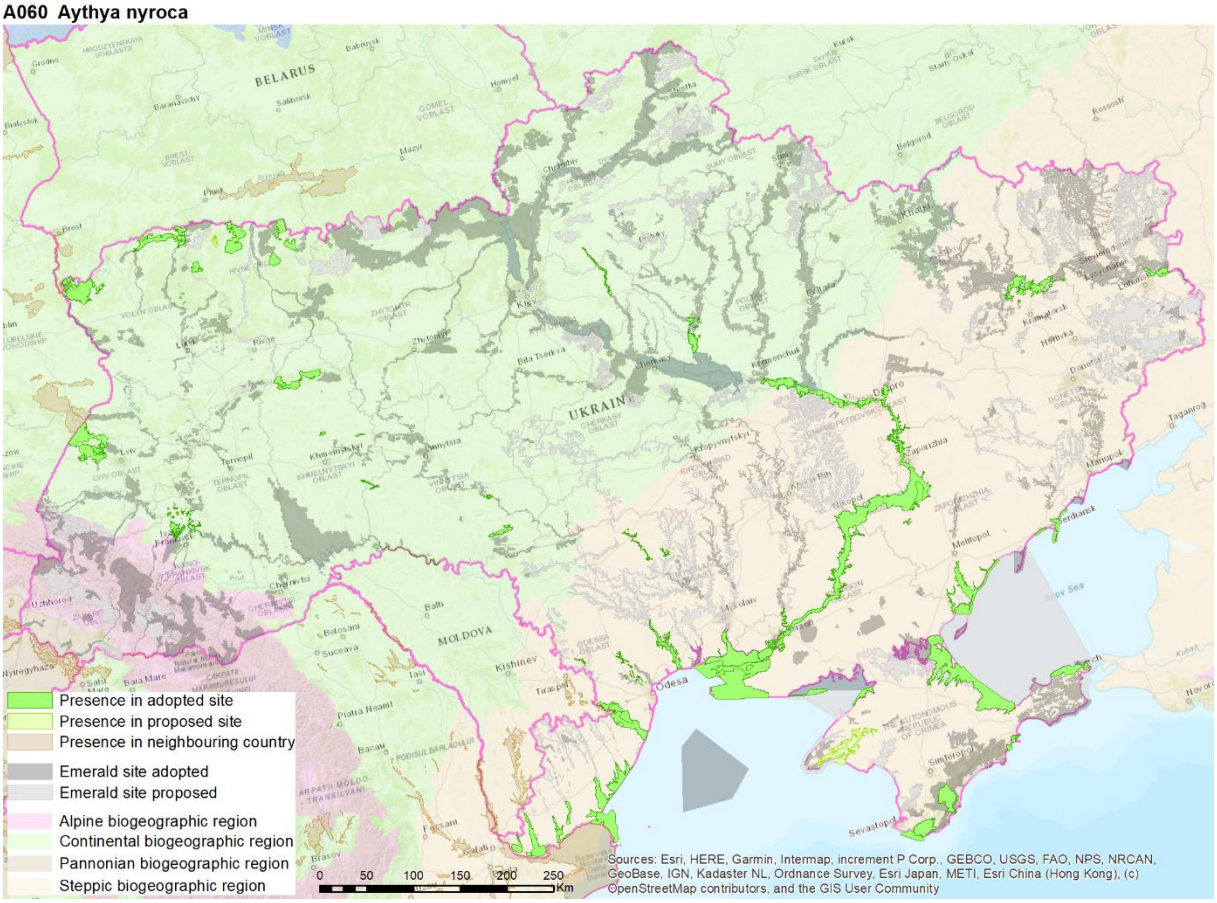
BGR	A042 Anser erythropus	
Not applicable	Num. of sites:	28 (C:6, D:22)
	BGR seminar 2018 conclusion:	SR REF LIST
	Recommendation 2025:	SR
	Comments from external experts:	ERL: (30–1,000 wintering individuals); SDF: c = (123–90 i); w = (30–100i) Removed due to previous database: UA0000589.
	Comments from local experts:	No good evidence on this species in UA - citizen science data unreliable; expert recommends to rely only on scientific publications by ornithologists.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A042 Anser erythropus



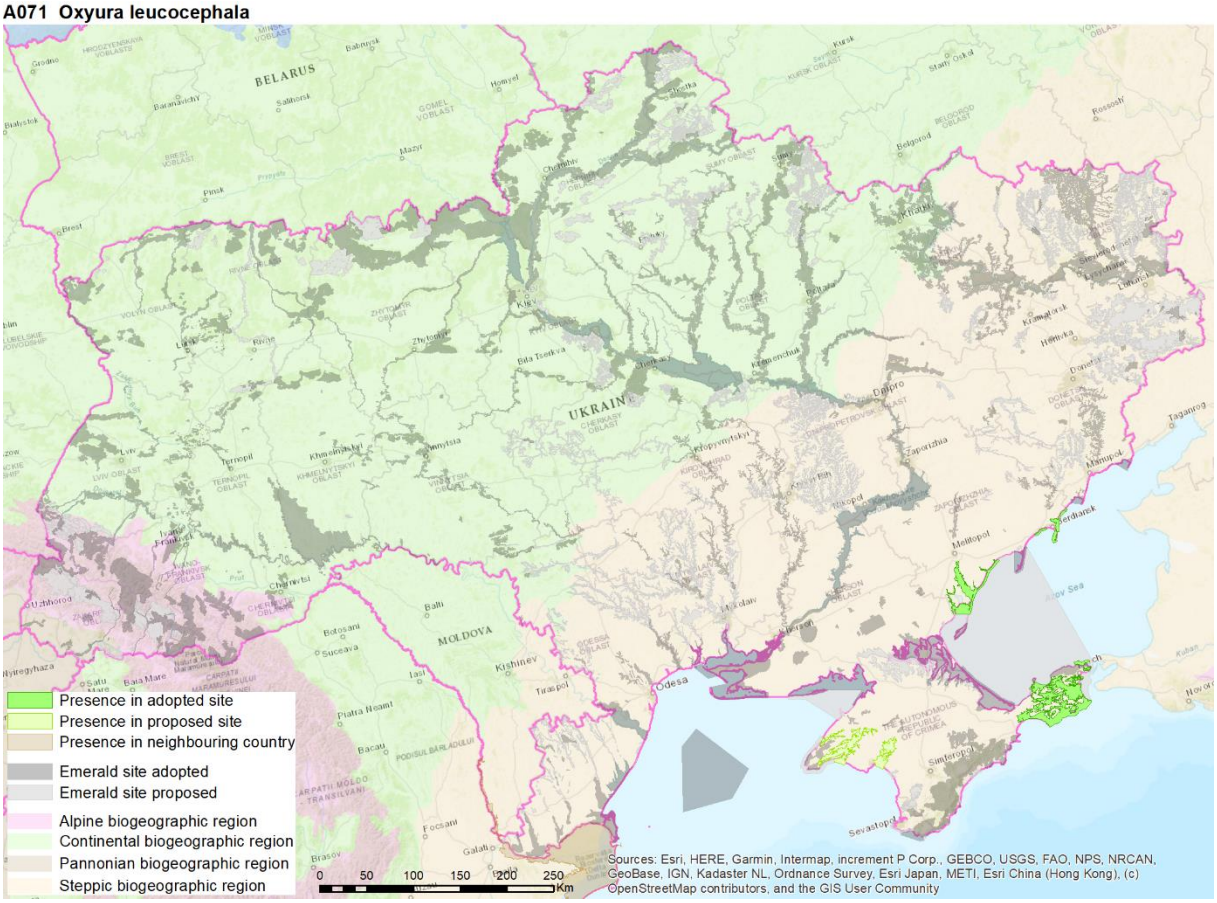
BGR	A060 Aythya nyroca	
Not applicable	Num. of sites:	82 (A:6, B:25, C:37, D:14)
	BGR seminar 2018 conclusion:	IN MIN/IN MOD/CD Kalmius, Sula, Kuplevate lakes, Rivne region, Liman's lake system, Bereka, Brytai, Protopopivka-Petrovske, Byshkinski steppes, Upper Dnister valley
	Recommendation 2025:	Add a new site: Left bank floodplain of the Dnieper River (UA0000474); Khomora River (Velyka Berezna) and add sites where the situation allows it from the previous assessment; harmonize population status (6A 25B 37C 14D >100% ??)
	Comments from external experts:	ERL: (400–550 bp); SDF: r = (27–27 i and 243–61 p); c = (1,296–685 i); w = (94–140 i) Species added to 29 sites. Unadded: Kalmius river valley (Donetsk, UA0000314); Lyman lake system (N-E, UA0000293); Protopopivka-Petrivs'ke (Kharkiv r.: UA0000297) Sula (river?, N-E, Khrystanivskyi Zakaznyk (UA0000059); Kuplevate Lake (5 km from Dniprovske Reservoir (UA0000093); Bereka (river? part of Byshkinski steppes - UA0000273); Brytai (reservoir? 8 km from Steppes Blyznyuky–Barvinkove - UA0000414); Dnistrovskyi Kanion NNP (UA0000122); Byshkinski steppes (N-E, UA0000273) Removed due to previous database: UA0000349; UA0000380; UA0000412.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A060 Aythya nyroca



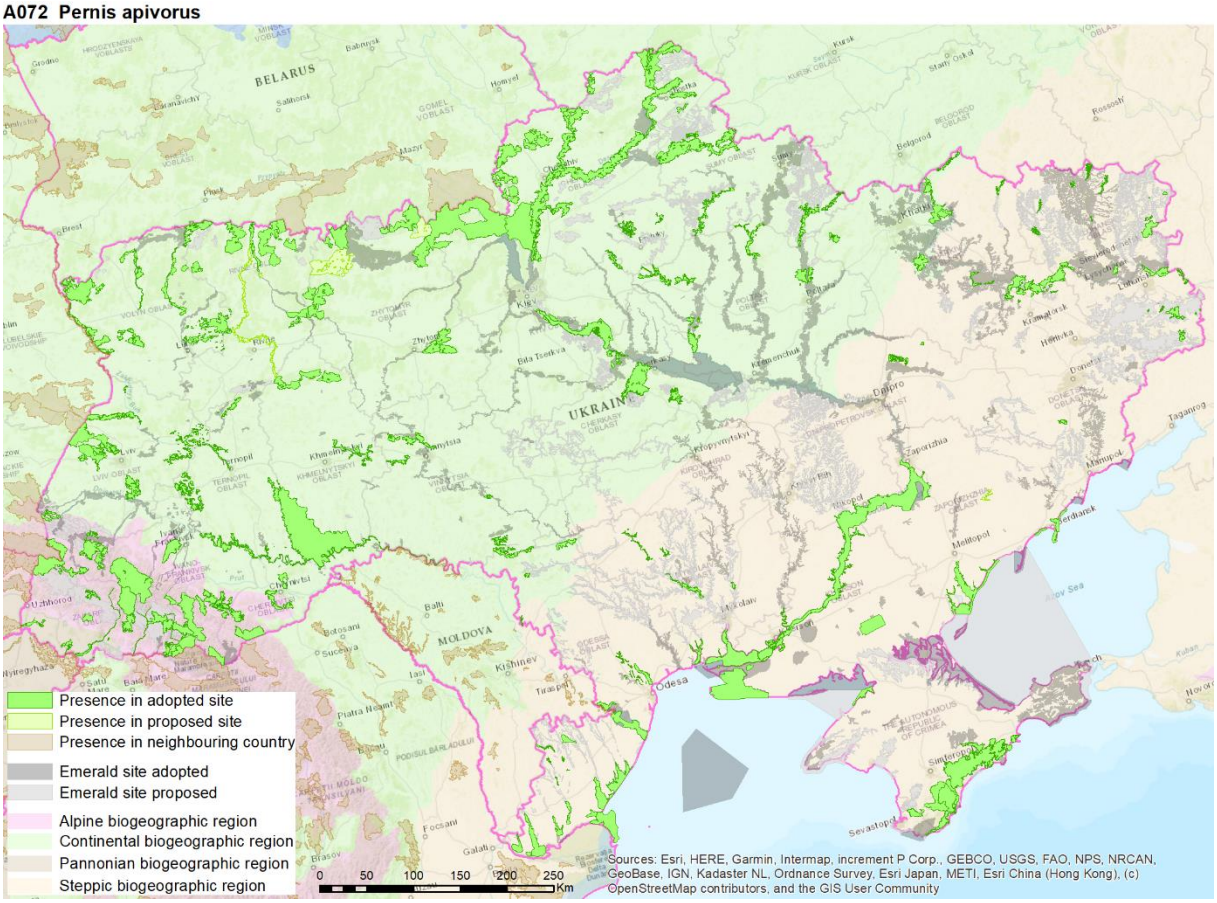
BGR	A071 Oxyura leucocephala	
Not applicable	Num. of sites:	6 (C:2, D:4)
	BGR seminar 2018 conclusion:	SR
	Recommendation 2025:	Species added to 6 sites. SR?
	Comments from external experts:	ERL: (40–110 bp); SDF: r = (1 p); c = (24–99 i); w = (2–8 i); species added to 6 sites. How is it in Odessa region (Sukhyi)? Irregular winter occurrence?
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A071 Oxyura leucocephala



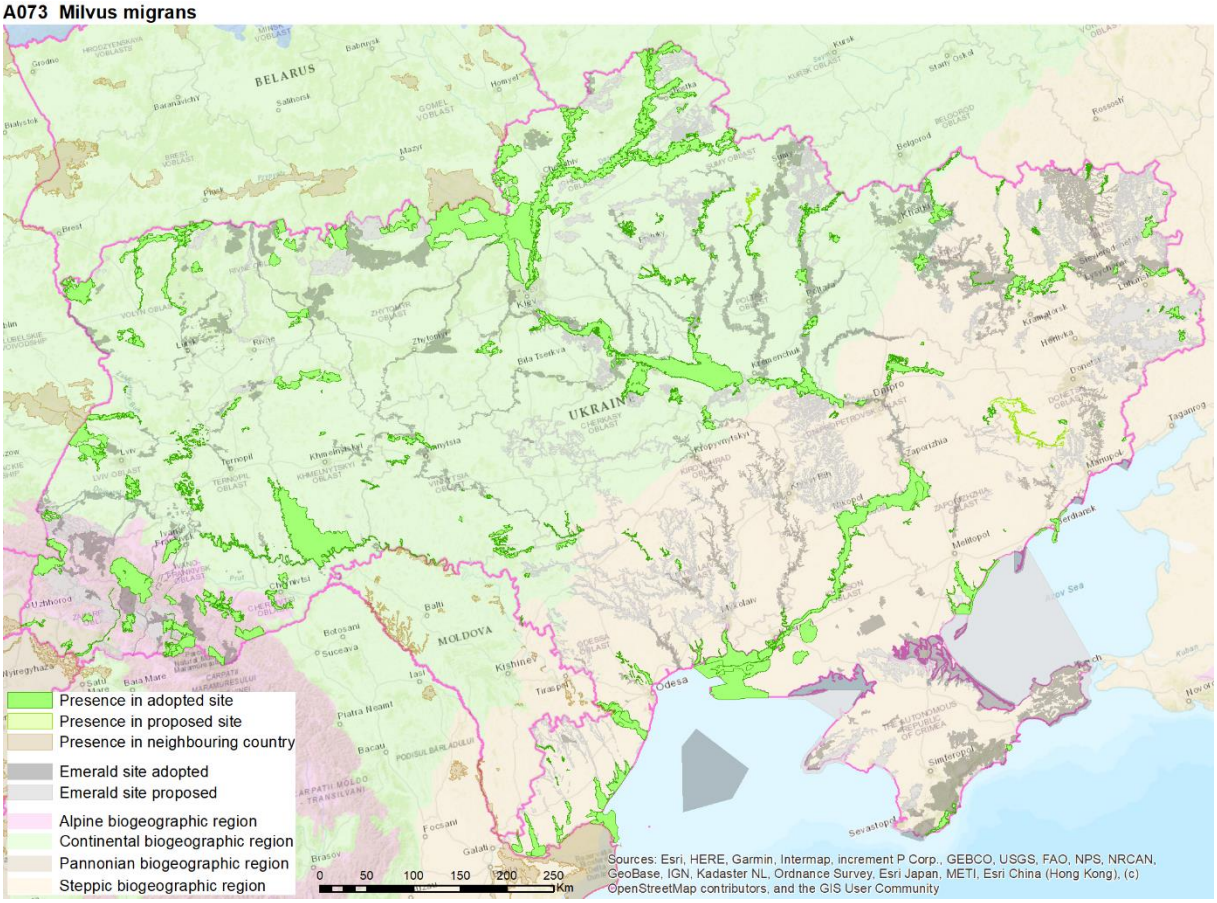
BGR	A072 Pernis apivorus	
Not applicable	Num. of sites:	242 (B:8, C:197, D:37)
	BGR seminar 2018 conclusion:	IN MIN/IN MOD/CD Kyiv, Zhytomyr, Kharkiv regions, Udai River, Mozh River, Petrivski, Protopopivka-Petrivske, Lisogirka Izyumska, Tsirkunivskyi forest, Velika Babka, Trav'yansk reservoir, Vilshanka, Derganivskyi forest, Izbytska, Spasov Skyt, Byshkinski steppes, Murom, Mil
	Recommendation 2025:	Species added to 78 sites; it remains IN MIN: Upper part of Udaj and Oster Rivers (N-E, protected site (PS): UA0000468); Lysogirka izyumska (Kharkiv: UA0000296); Vilshanka (? Syniukha River valley (PS: UA0000565); Milova (Kharkiv: UA0000274)
	Comments from external experts:	ERL: (1,500–2,500 bp); SDF: r = (22–40 i and 231–384 p); c = (808–1,325 i); species added to 78 sites. It remains IN MIN: Upper part of Udaj and Oster rivers (N-E, PS: UA0000468); Lysogirka izyumska (Kharkiv: UA0000296); Trav'yans'ke reservoir (but nearby UA0000290 and UA0000279 are removed); Vilshanka (? Syniukha River valley (PS: UA0000565); Milova (Kharkiv: UA0000274); Removed due to previous database: UA0000273; UA0000275; UA0000276; UA0000279; UA0000281; UA0000282; UA0000283; UA0000284; UA0000286; UA0000290; UA0000295; UA0000297; UA0000298; UA0000299; UA0000301; UA0000303; UA0000304; UA0000309; UA0000316; UA0000317; UA0000338; UA0000355; UA0000373; UA0000378; UA0000385; UA0000443; UA0000445; UA0000474; UA0000585.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A072 Pernis apivorus



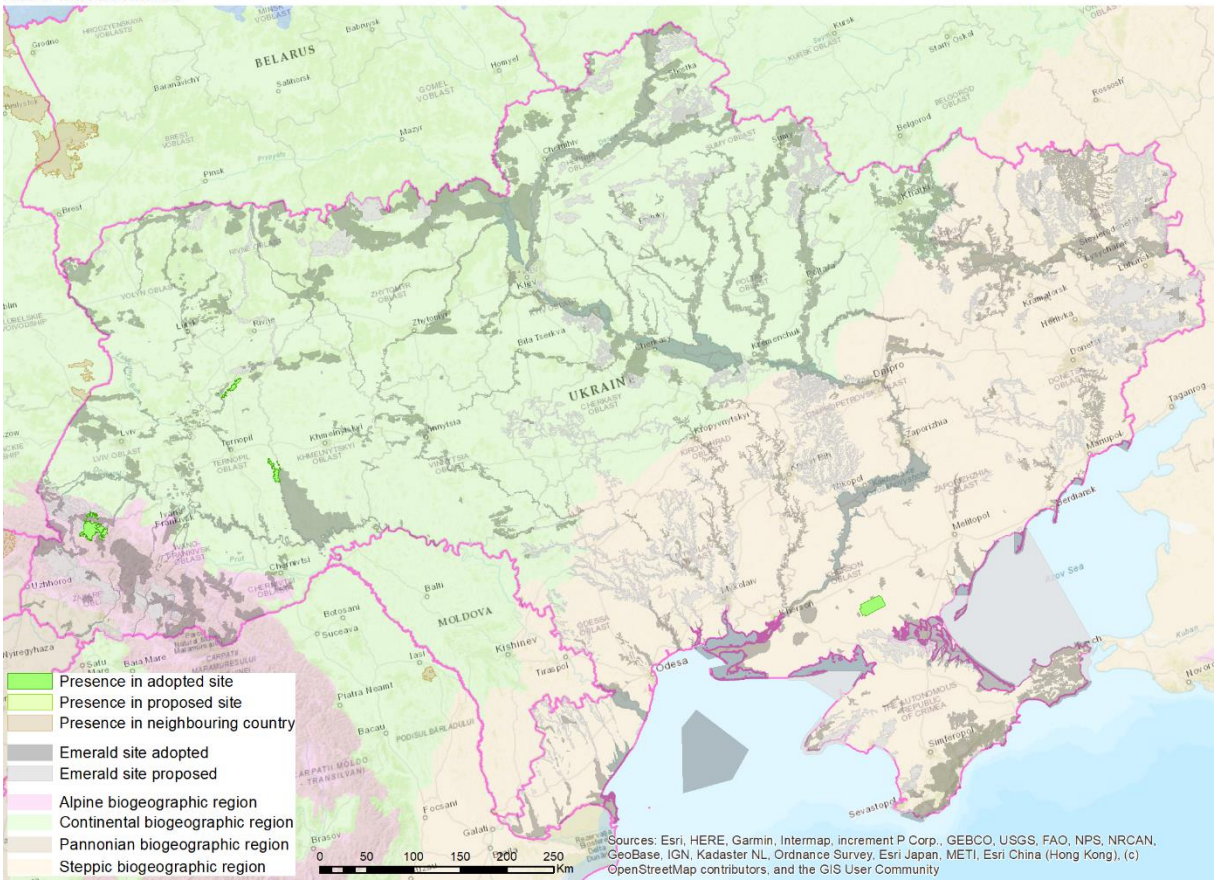
BGR	A073 Milvus migrans	
Not applicable	Num. of sites:	242 (B:4, C:168, D:70)
	BGR seminar 2018 conclusion:	IN MIN/IN MOD/CD Teteriv, Sula, Irpin, Kyiv regions, Zhytomyr region, Eastern Ukraine,Siverskyi Donets, Oril
	Recommendation 2025:	Species added to 73 sites. Possibly sufficient if breeding population is covered. Maybe add sites Teteriv river valley (Zhytomyr, PS: UA0000320); Oril (river, Pryorilskyi (E, UA0000134))
	Comments from external experts:	ERL: (1,500–2,000 bp); SDF: r = (15–35 i and 240–393 p); c = (735–1,023i and 8–22p) Species added to 73 sites. Possibly sufficient if breeding population is covered. Maybe add sites Teteriv river valley (Zhytomyr, Possible site: UA0000320); Oril (river, Pryorilskyi (E, UA0000134)). Removed due to previous database: UA0000273; UA0000274; UA0000276; UA0000280; UA0000282; UA0000283; UA0000284; UA0000289; UA0000290; UA0000297; UA0000298; UA0000299; UA0000301; UA0000303; UA0000309; UA0000310; UA0000311; UA0000312; UA0000316; UA0000317; UA0000330; UA0000333; UA0000334; UA0000338; UA0000342; UA0000349; UA0000355; UA0000378; UA0000379; UA0000384; UA0000385; UA0000402; UA0000412; UA0000413; UA0000414; UA0000427; UA0000430; UA0000441; UA0000443; UA0000456; UA0000457; UA0000459; UA0000465; UA0000466; UA0000470; UA0000472; UA0000474; UA0000569; UA0000570; UA0000571; UA0000579; UA0000586; UA0000588; UA0000596; UA0000600.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A073 Milvus migrans



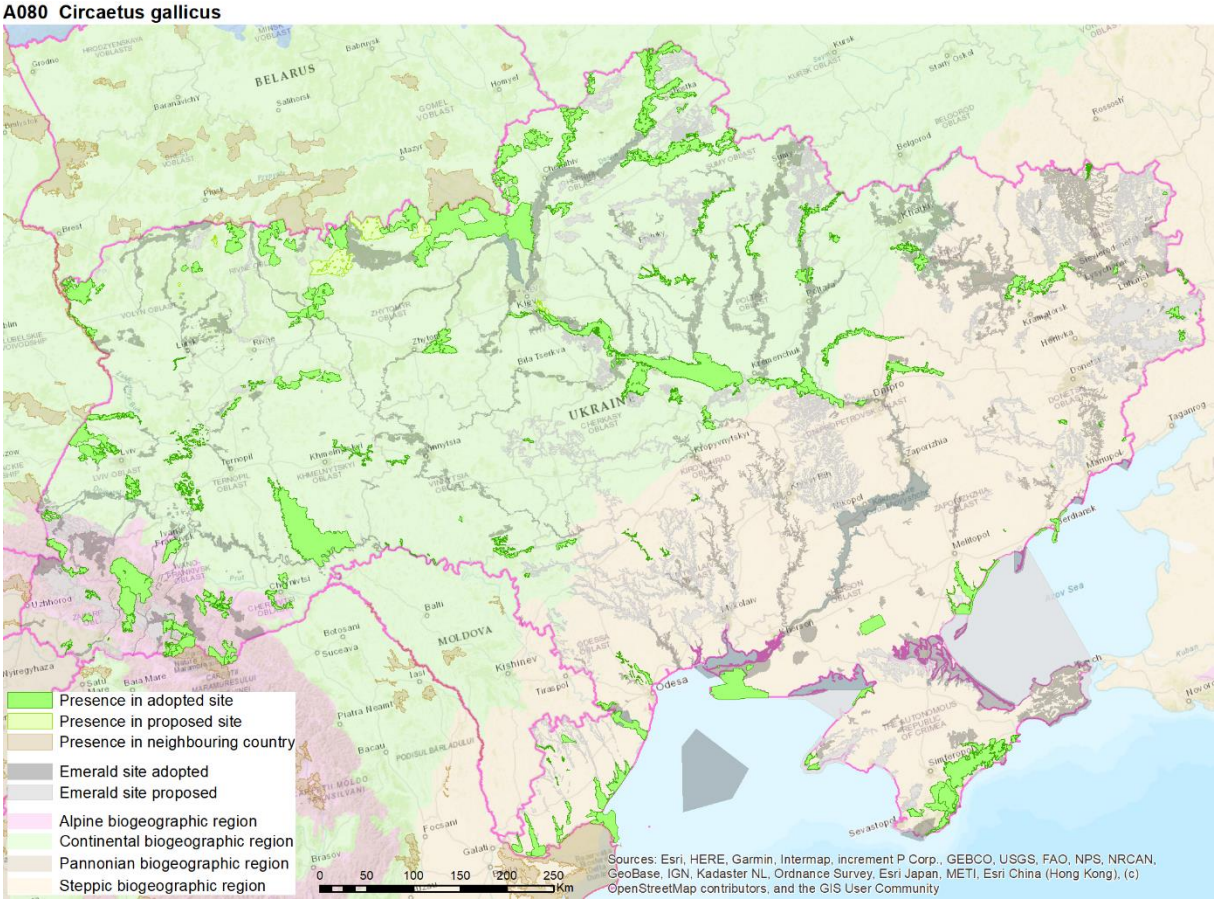
BGR	A074 Milvus milvus	
Not applicable	Num. of sites:	4 (D:4)
	BGR seminar 2018 conclusion:	SR/CD CD: Askaniia-Nova
	Recommendation 2025:	Remove Askaniia-Nova.
	Comments from external experts:	ERL: (1 bp); SDF: c = (4–16 i) Deleted from 6 sites, leaving 3 sites in the west and 1 in the S-E [Askaniia-Nova Biosphere Reserve (Kherson: UA0000016), which is apparently a questionable site]. According to databases, the species was observed at the Poltva River (Bus'ke (UA0000343) but probably only irregularly.
	Comments from local experts:	Suggest excluding Askaniia-Nova due to the unreliability of data; keep only records from western Ukraine.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A074 Milvus milvus



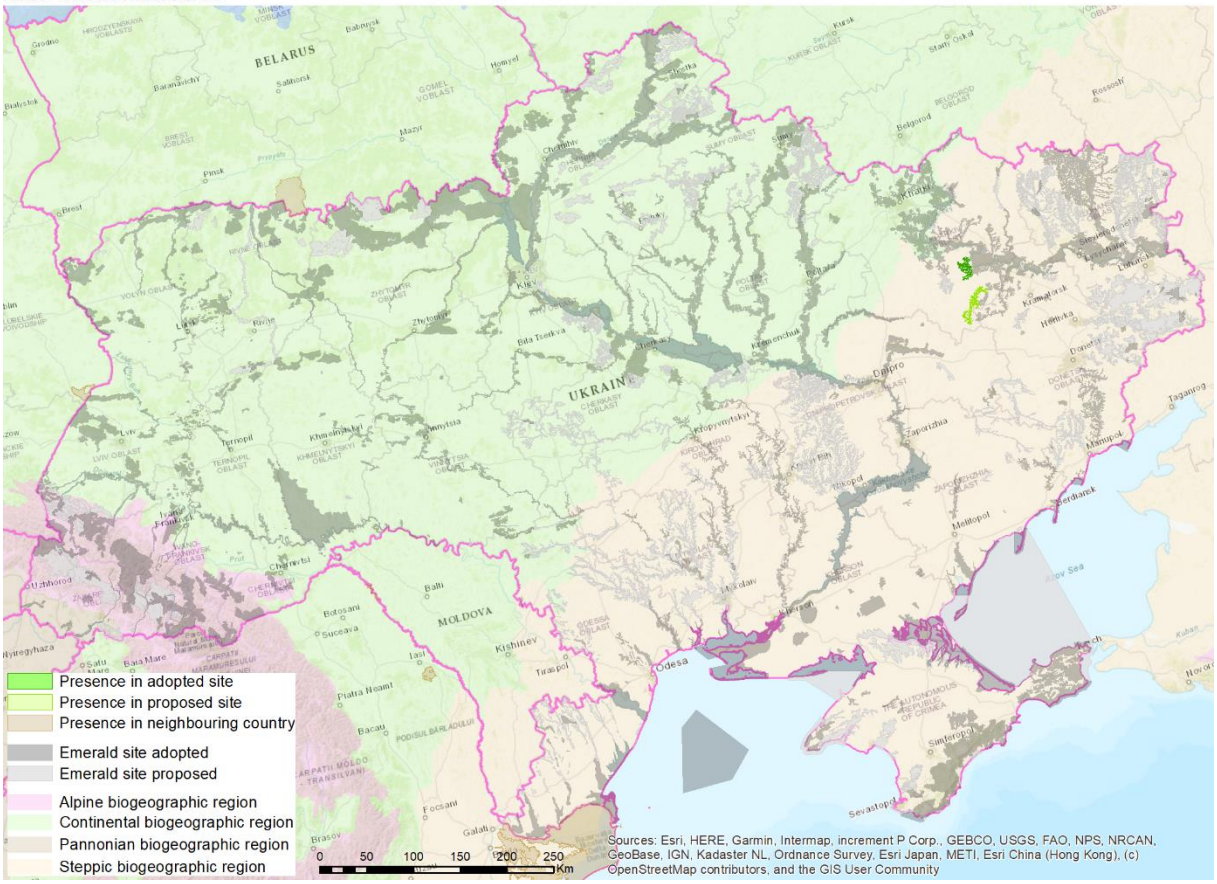
BGR	A080 Circaetus gallicus	
Not applicable	Num. of sites:	198 (B:4, C:138, D:56)
	BGR seminar 2018 conclusion:	IN MOD/CD CD: Nikolajev region; New sites: Mozh, Siverskyi Donets, Kalmius, Oskil, Teteriv, Psel, Vorskla
	Recommendation 2025:	Species added to 62 locations, including parts mentioned in the 2018 conclusion. Possibly sufficient.
	Comments from external experts:	ERL: (250–300 bp); SDF: r = (22–32 i and 108–198 p); c = (455–398 i) Unadded: Upper Psel river valley (N-E, UA0000303); Removed due to previous database: UA0000044; UA0000272; UA0000305; UA0000307; UA0000309; UA0000310; UA0000311 (Vorskla river valley); UA0000312; UA0000314 (Kalmius river valley); UA0000316 (Siverskyi Donets river valley); UA0000317 (Siverskyi Donets river valley in Kharkiv Oblast - 2); UA0000318; UA0000320 (Teteriv river valley); UA0000329; UA0000335; UA0000336; UA0000337; UA0000342; UA0000344; UA0000348; UA0000373; UA0000376; UA0000378; UA0000385; UA0000399; UA0000412; UA0000413; UA0000445; UA0000446; UA0000468; UA0000469; UA0000470; UA0000592; UA0000603.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A080 Circaetus gallicus



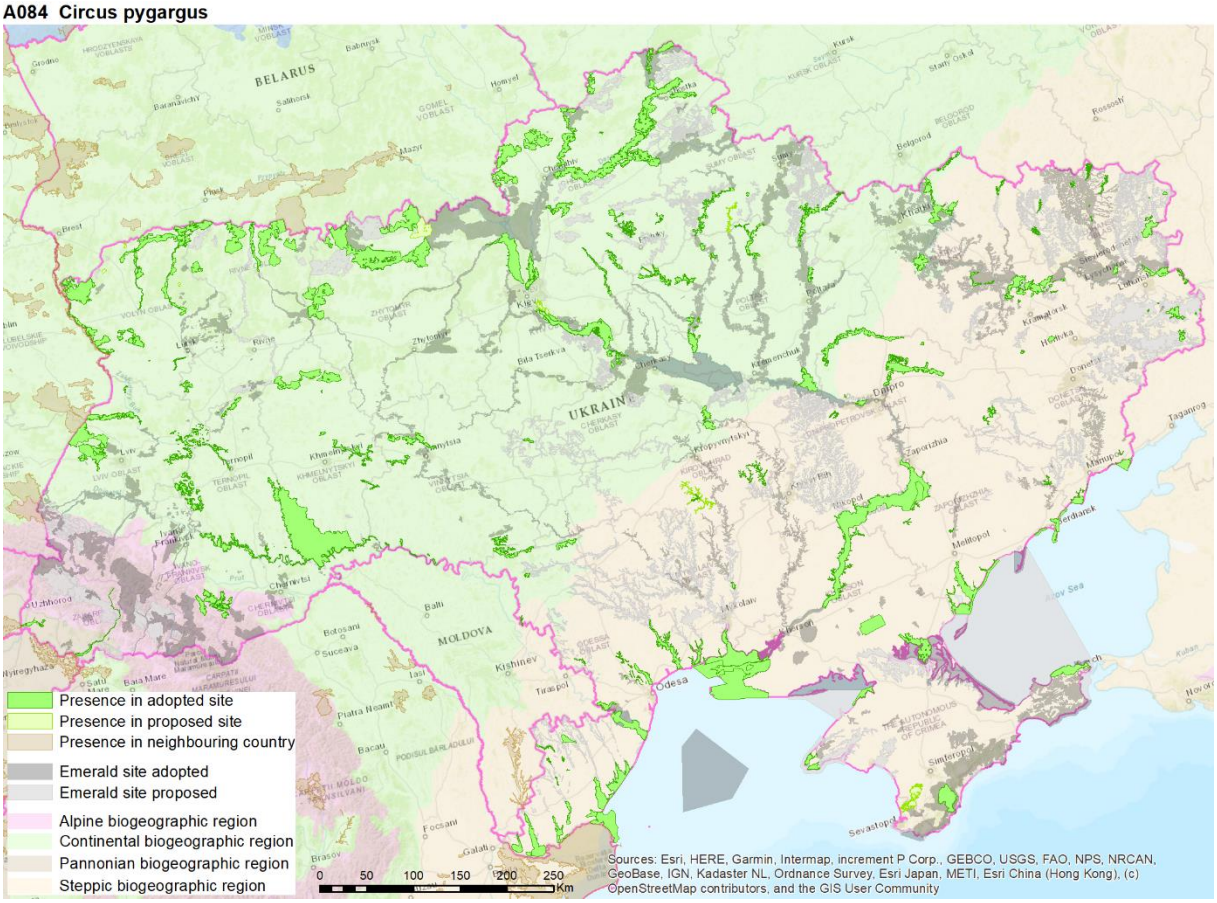
BGR	A083 Circus macrourus	
Not applicable	Num. of sites:	2 (C:1, D:1)
	BGR seminar 2018 conclusion:	SR Review status in the south and southeast
	Recommendation 2025:	Species added to 2 sites in the east. Sufficient?
	Comments from external experts:	ERL: (<1 % EUR bp); SDF: c = (3–4 i); w = (3–5i) Added to Steppes Blyznyuky-Barvinkove (UA0000414) and Protopopivka-Petrivs'ke (UA0000297). Removed due to previous database: UA0000285; UA0000288; UA0000290; UA0000293; UA0000314; UA0000349; UA0000376; UA0000377; UA0000432; UA0000438; UA0000569.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A083 Circus macrourus



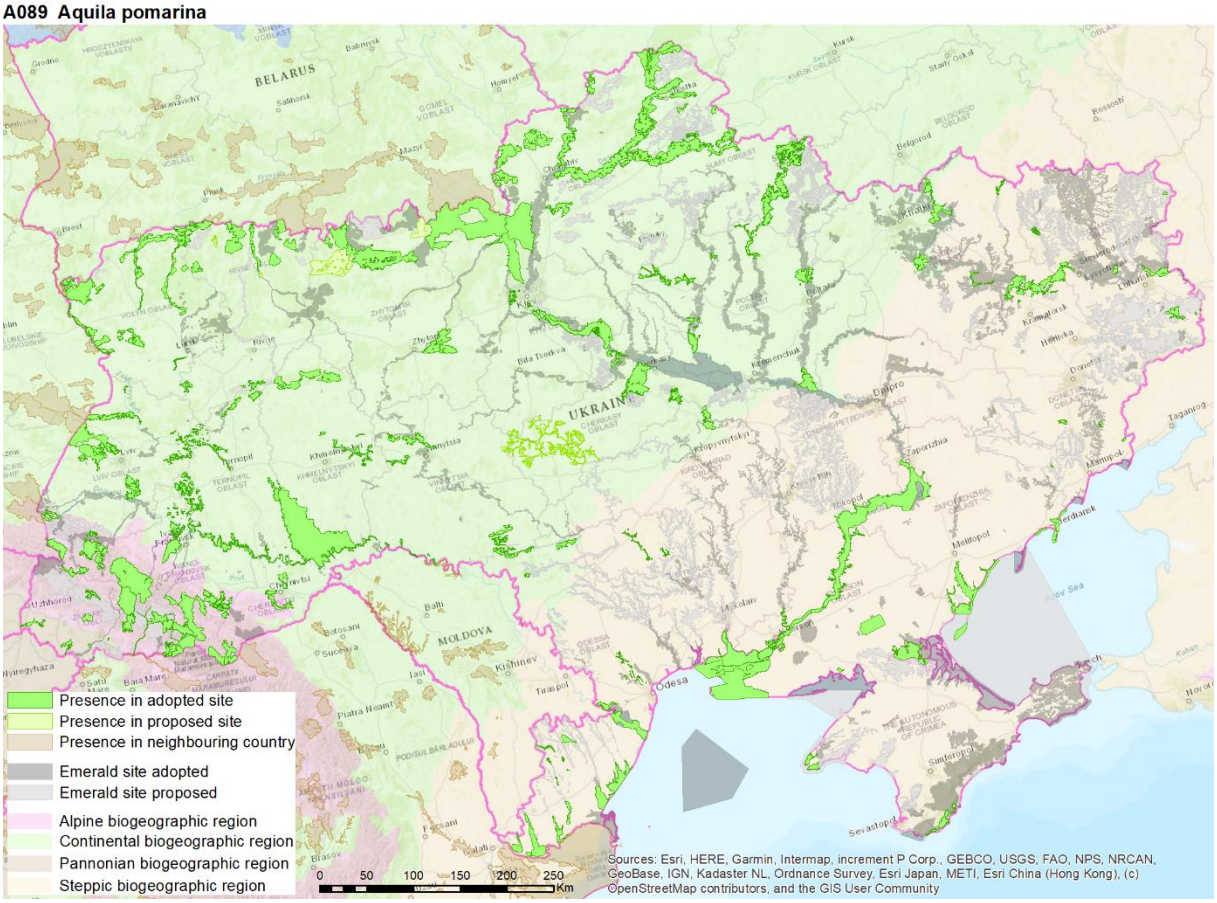
BGR	A084 Circus pygargus	
Not applicable	Num. of sites:	220 (C:188, D:32)
	BGR seminar 2018 conclusion:	IN MOD/CD IN MOD: Kyiv, Kharkiv, Chernihiv, Khmelnytsk regions, Irpin valley, Upper Dnister; CD: Nikolajewsky region, Dnepro River, Pripst
	Recommendation 2025:	Species added to 60 sites, including sites mentioned in the conclusion of 2018. Possibly sufficient.
	Comments from external experts:	ERL: (1,500–2,000 bp); SDF: r = (247–443 p); c = (828–1,108 i); p = (1 i and 1–2 p); w = (2–10 p); Species added to 60 sites, including sites mentioned in conclusion 2018. Possibly sufficient. Removed due to previous database: UA0000272; UA0000273; UA0000274; UA0000278; UA0000280; UA0000282; UA0000284; UA0000285; UA0000287; UA0000288; UA0000289; UA0000291; UA0000296; UA0000297; UA0000298; UA0000299; UA0000301; UA0000302; UA0000309; UA0000312; UA0000314; UA0000316; UA0000317; UA0000318; UA0000320; UA0000334; UA0000338; UA0000342 (Irpin river valley); UA0000348; UA0000349; UA0000366; UA0000367; UA0000377; UA0000400; UA0000413; UA0000414; UA0000430; UA0000438; UA0000440; UA0000441; UA0000465; UA0000467; UA0000468; UA0000469; UA0000470; UA0000472; UA0000583; UA0000585; UA0000586; UA0000588; UA0000589; UA0000592; UA0000593; UA0000599.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A084 Circus pygargus



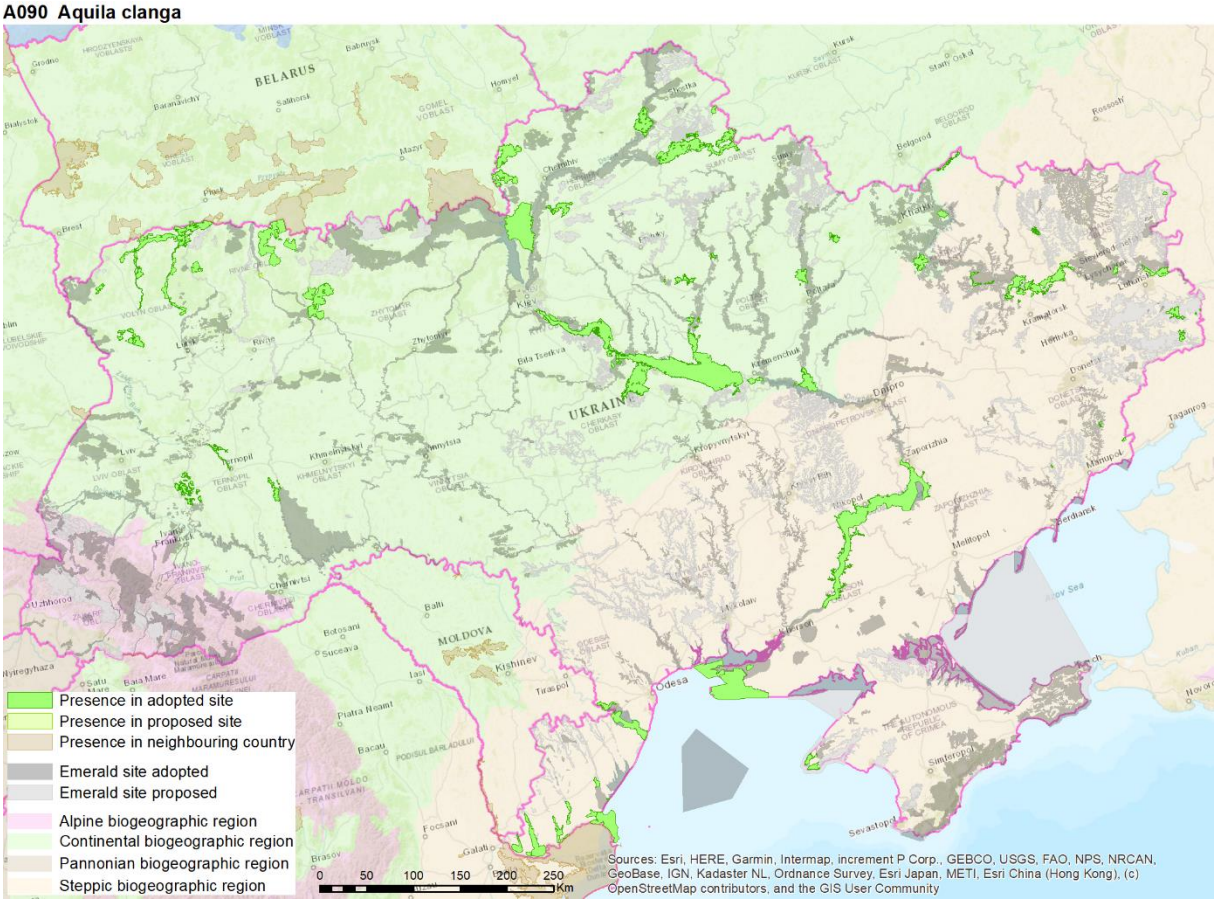
BGR	A089 Aquila pomarina	
Not applicable	Num. of sites:	197 (B:1, C:155, D:41)
	BGR seminar 2018 conclusion:	IN MOD/CD IN MOD: Kyiv, Kharkiv, Poltava, Donetsk, Kirovograd, and Sumy regions. Psel, Siverskyi Donets, Oskil; CD: Nikolajewsky region, Kyjevski region
	Recommendation 2025:	Species were added to 53 sites, including sites mentioned at the conclusion of 2018, which is possibly sufficient.
	Comments from external experts:	ERL:(1,000–1,300 bp); SDF: r = (5–20 i and 132–249 p); c = (506–739 i and 1–20 nan) Species were added to 53 sites, including sites mentioned at the conclusion of 2018, which is possibly sufficient. Removed due to previous database: UA0000272; UA0000275; UA0000297; UA0000304; UA0000305; UA0000311; UA0000312; UA0000316 (Siverskyi Donets river valley); UA0000317 (Siverskyi Donets river valley); UA0000319; UA0000320; UA0000325; UA0000326; UA0000332; UA0000337; UA0000338; UA0000342; UA0000355; UA0000378; UA0000396; UA0000407; UA0000408; UA0000412; UA0000413; UA0000452; UA0000456; UA0000458; UA0000466; UA0000468; UA0000469; UA0000562; UA0000567; UA0000569; UA0000589; UA0000592; UA0000595; UA0000596; UA0000598; UA0000600; UA0000602; UA0000605; UA0000608; UA0000609; UA0000610.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A089 Aquila pomarina



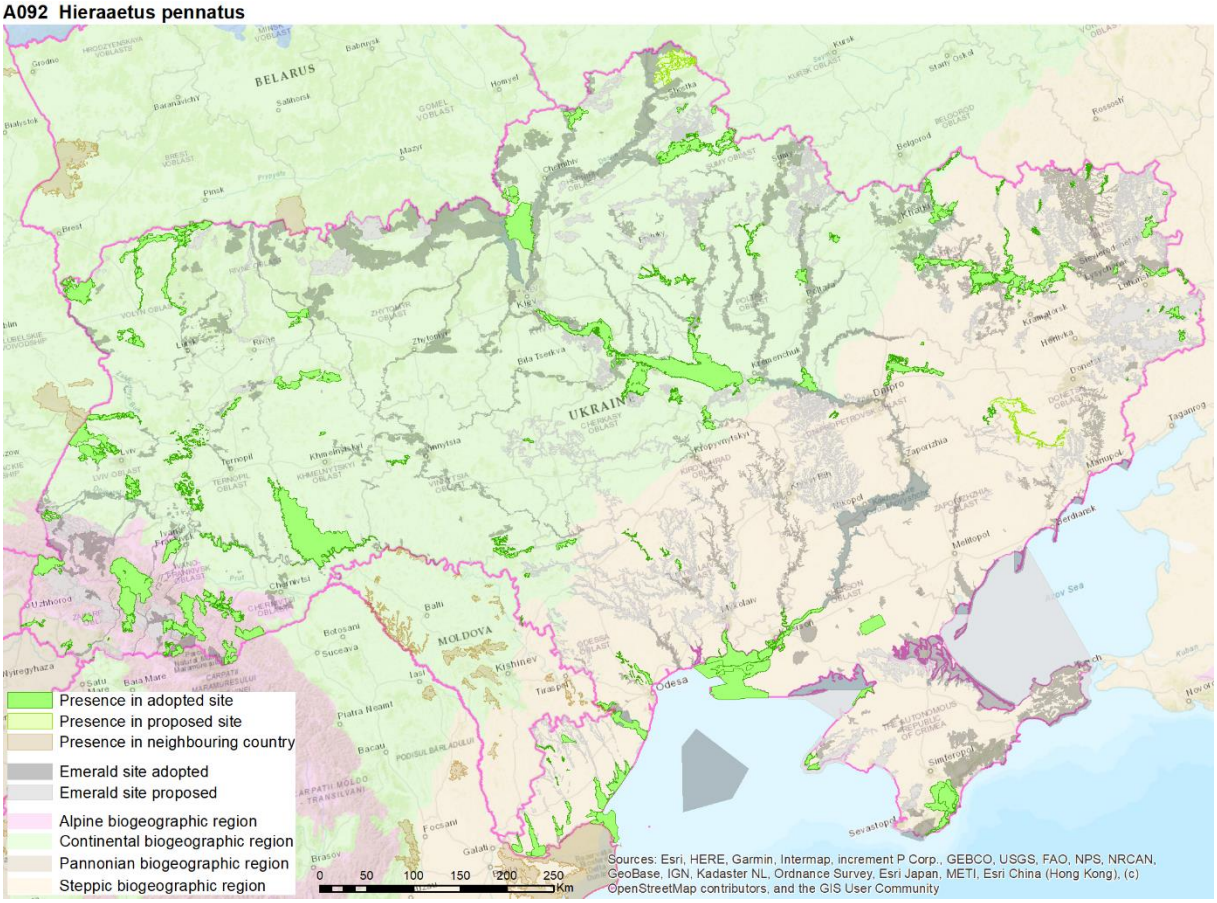
BGR	A090 Aquila clanga	
Not applicable	Num. of sites:	57 (A:3, C:20, D:34)
	BGR seminar 2018 conclusion:	IN MIN/IN MOD Results of recent survey: Eastern Ukraine
	Recommendation 2025:	Species were added at 3 sites, primarily as migrants, including the eastern part. Breeding pairs (bp) were found only in the western part of the UA. According to EBBA2, the species breeds only in the northern part of the covered area. Possibly sufficient.
	Comments from external experts:	ERL: (25–35 bp); SDF: r = (3–6 i and 6–12 p); c = (91–213 i and 1–15 nan); w = (6–11 i); Species were added at 3 sites, primarily as migrants, including the eastern part. According to EBBA2, the species breeds only in the northern part of the covered area. Possibly sufficient. Removed due to previous database: UA0000297; UA0000309; UA0000316; UA0000376; UA0000438.
	Comments from local experts:	There was a special project on this species; some 20 bp were found only in western UA and in other parts of the country—only migratory.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A090 Aquila clanga



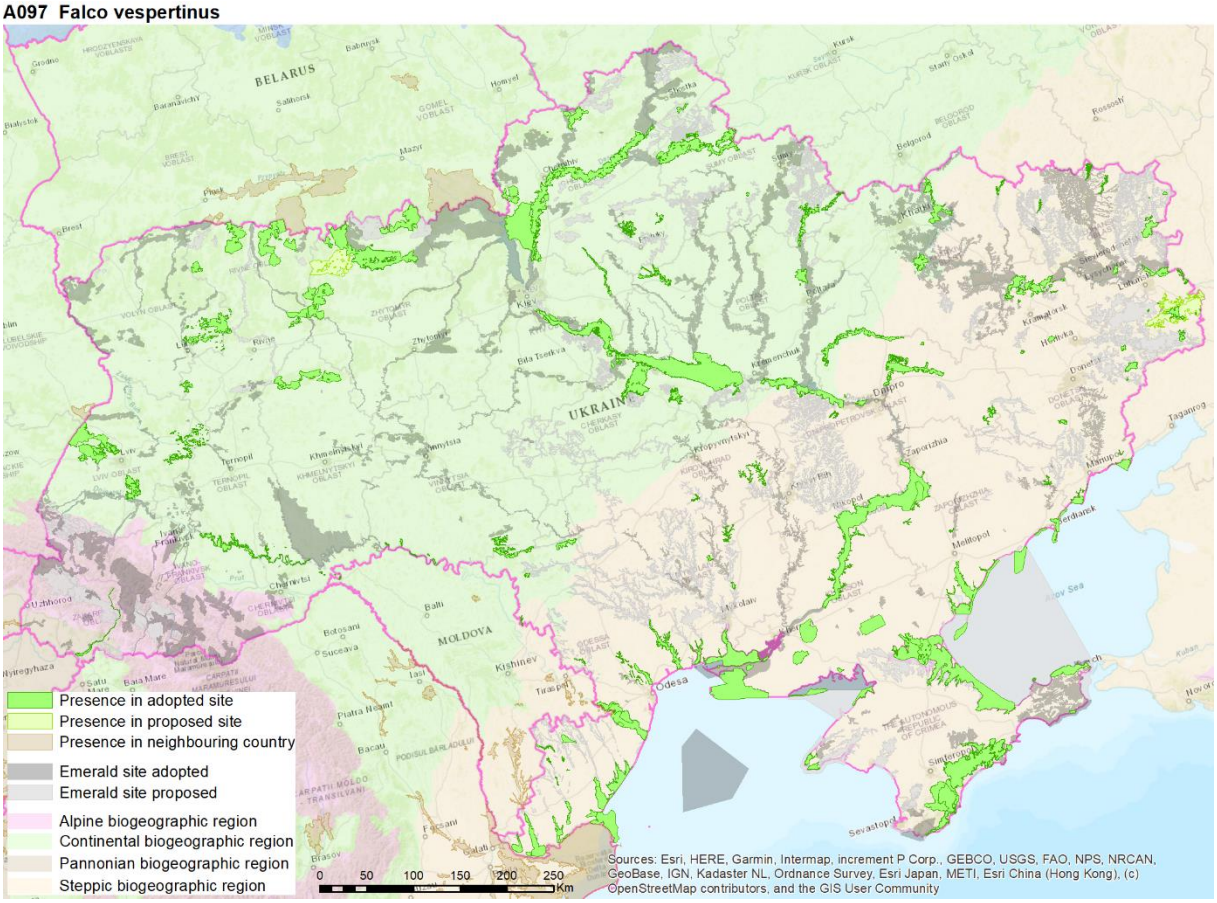
BGR	A092 Hieraaetus pennatus	
Not applicable	Num. of sites:	177 (B:2, C:101, D:74)
	BGR seminar 2018 conclusion:	IN MOD Poltava, Kharkiv, Donetsk, Sumy regions
	Recommendation 2025:	Species were added at 55 sites, including all the sites mentioned in the last conclusion. Possibly sufficient.
	Comments from external experts:	ERL: (700–1,000 bp); SDF: r = (23–56 i and 127–198 p and 5–6 nan); c = (236–539 i and 1–2 p) Species were added at 55 sites, including all the sites mentioned in the last conclusion. Possibly sufficient. Removed due to previous database: UA0000273; UA0000274; UA0000275; UA0000276; UA0000278; UA0000279; UA0000282; UA0000283; UA0000286; UA0000287; UA0000294; UA0000296; UA0000297; UA0000298; UA0000300; UA0000301; UA0000303; UA0000305; UA0000306; UA0000309; UA0000310; UA0000312; UA0000314; UA0000316; UA0000341; UA0000342; UA0000355; UA0000373; UA0000376; UA0000379; UA0000386; UA0000438; UA0000440; UA0000441; UA0000444; UA0000465; UA0000467; UA0000564; UA0000569; UA0000590; UA0000592; UA0000596; UA0000598.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A092 Hieraaetus pennatus



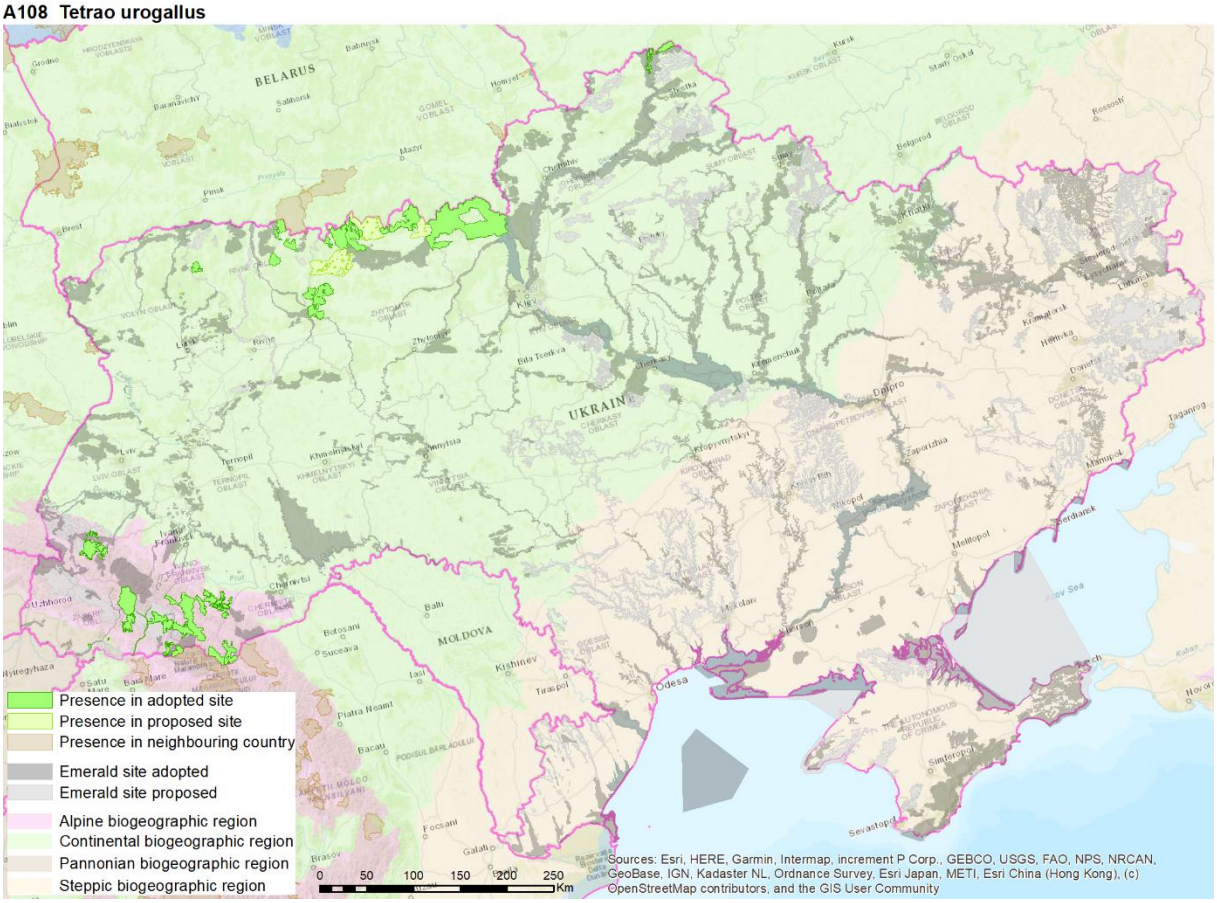
BGR	A097 Falco vespertinus	
Not applicable	Num. of sites:	171 (B:10, C:134, D:27)
	BGR seminar 2018 conclusion:	IN MOD/CD Kharkiv, Donetsk regions. Gorila Dolyna, Blagodatne, Kalmius; CD: check status
	Recommendation 2025:	Species added to 35 sites. According to the European Red List of Birds (2021), only around 8% of the breeding population is covered. CD: check status - Population type? IN MIN: Goryla Valley (UA0000285)
	Comments from external experts:	ERL: (15,000–20,000 bp; SDF: r = (40–71 i and 1,184–696 p); c = (15,025–23,809 i); Species added to 35 sites. According to the European Red List of Birds (2021), only around 8% of the breeding population is covered. CD: check status - Population type? Given the last conclusions, Goryla Valley (Kharkiv, UA0000285) has not been added. Removed due to previous database: UA0000273; UA0000288; UA0000297; UA0000300; UA0000301; UA0000306; UA0000314 (Kalmius river valley); UA0000316; UA0000336; UA0000349; UA0000366; UA0000367; UA0000368; UA0000369; UA0000370; UA0000372; UA0000377; UA0000378; UA0000383; UA0000386; UA0000442; UA0000459; UA0000461; UA0000464; UA0000467.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A097 Falco vespertinus



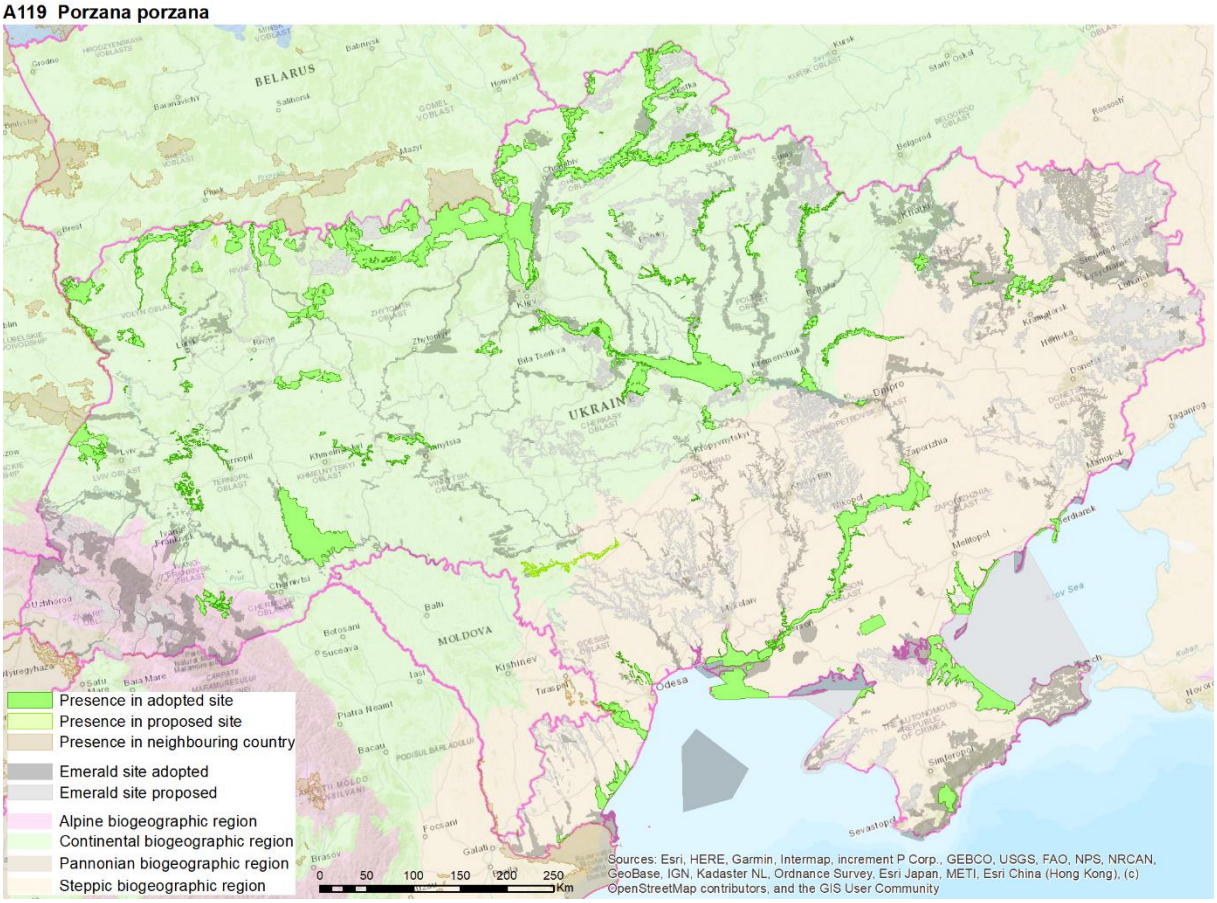
BGR	A108 Tetrao urogallus	
Not applicable	Num. of sites:	20 (A:7, B:5, C:8)
	BGR seminar 2018 conclusion:	IN MOD
	Recommendation 2025:	Species added to 4 sites; possibly sufficient, but reconcile population status (7A 5B 8C) >100% ??). SR in N-W.
	Comments from external experts:	ERL: (800–1,000 bp); SDF: r = (43–105p and 368–75m and 1 nan); p = (15–30 i) Species added to 4 sites; possibly sufficient but reconcile population status (7A 5B 8C) >100% ??). N-E = Desniansko-Starohutskyi NNP (UA0000031) = sufficient for N-E? Removed due to previous database: UA0000606.
	Comments from local experts:	The northwestern part appears underrepresented. This may indicate a knowledge gap or missing data sources. Overall, the situation seems satisfactory.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A108 Tetrao urogallus



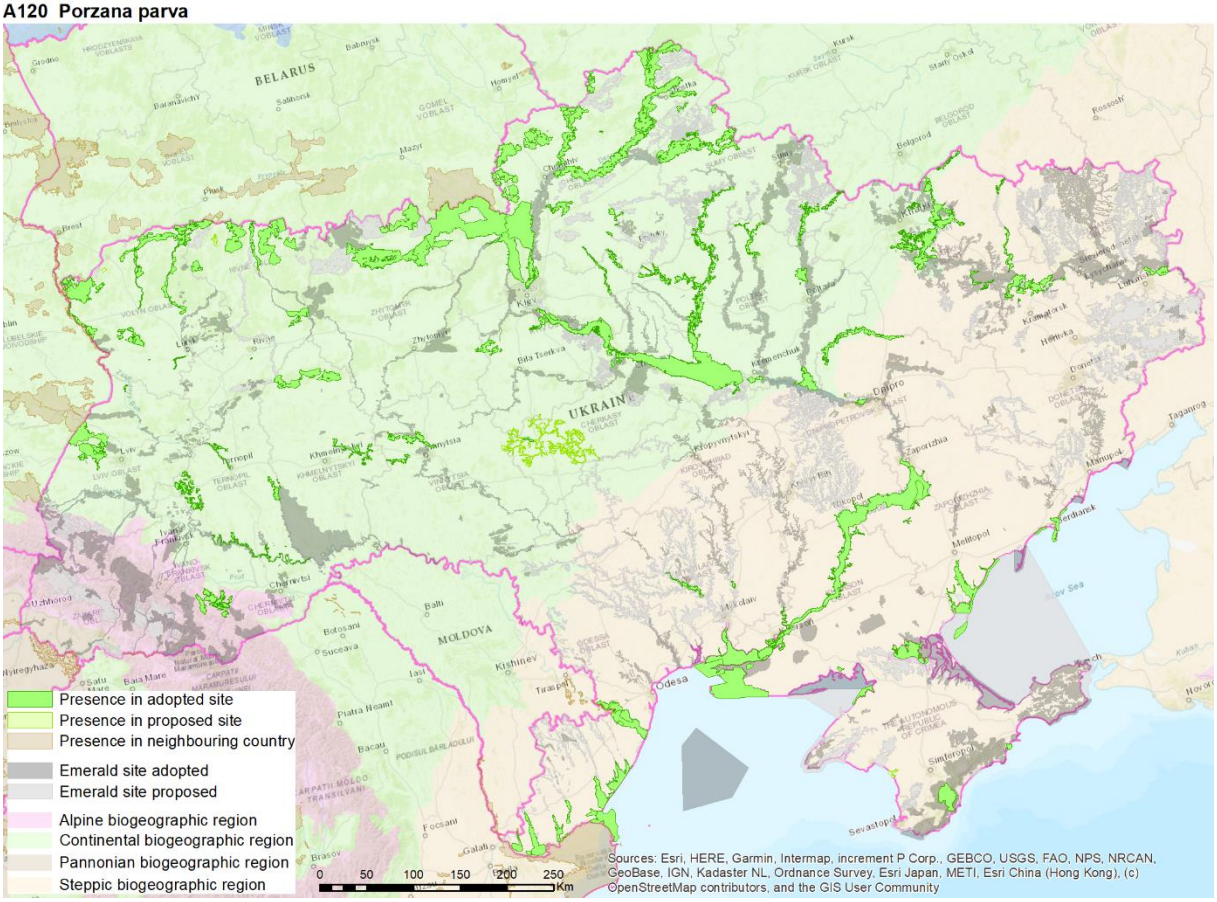
BGR	A119 Porzana porzana	
Not applicable	Num. of sites:	187 (A:1, B:18, C:148, D:20)
	BGR seminar 2018 conclusion:	IN MOD/CD Liman's lake system, Mozh, Siverskyi Donets, Upper Dnister
	Recommendation 2025:	Species added to 70 sites. According to the European Red List of Birds (2021), 35% of the breeding population is covered. Sufficient/SR? IN MIN: Left bank floodplain of the Dnieper River (UA0000474); Bulakhiv'skyy Lyman near Samarskyi Lis (UA0000212)
	Comments from external experts:	ERL: (13,000–20,000 bp); SDF: r = (56–92 i and 4,565–3,026 p and 3–5 m); c = (10,787–16,615 i); w = (1 i) Species added to 70 sites. According to the European Red List of Birds (2021), 35% of the breeding population is covered. Sufficient/SR? Can be added according to data: Left bank floodplain of the Dnieper River (Proposed sites, UA0000474); Bulakhiv'skyy Lyman near Samarskyi Lis (UA0000212) Unadded: Dnistrovskyi Kanion NNP (W, UA0000122); Lyman lake system (Kharkiv, UA0000293); Mozh river valley (Kharkiv, UA0000299); Siverskyi Donets river valley in Kharkiv Oblast - 1 (SiteCode: UA0000316).
	Comments from local experts:	Experts agree, but data on this species are generally scarce.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A119 Porzana porzana



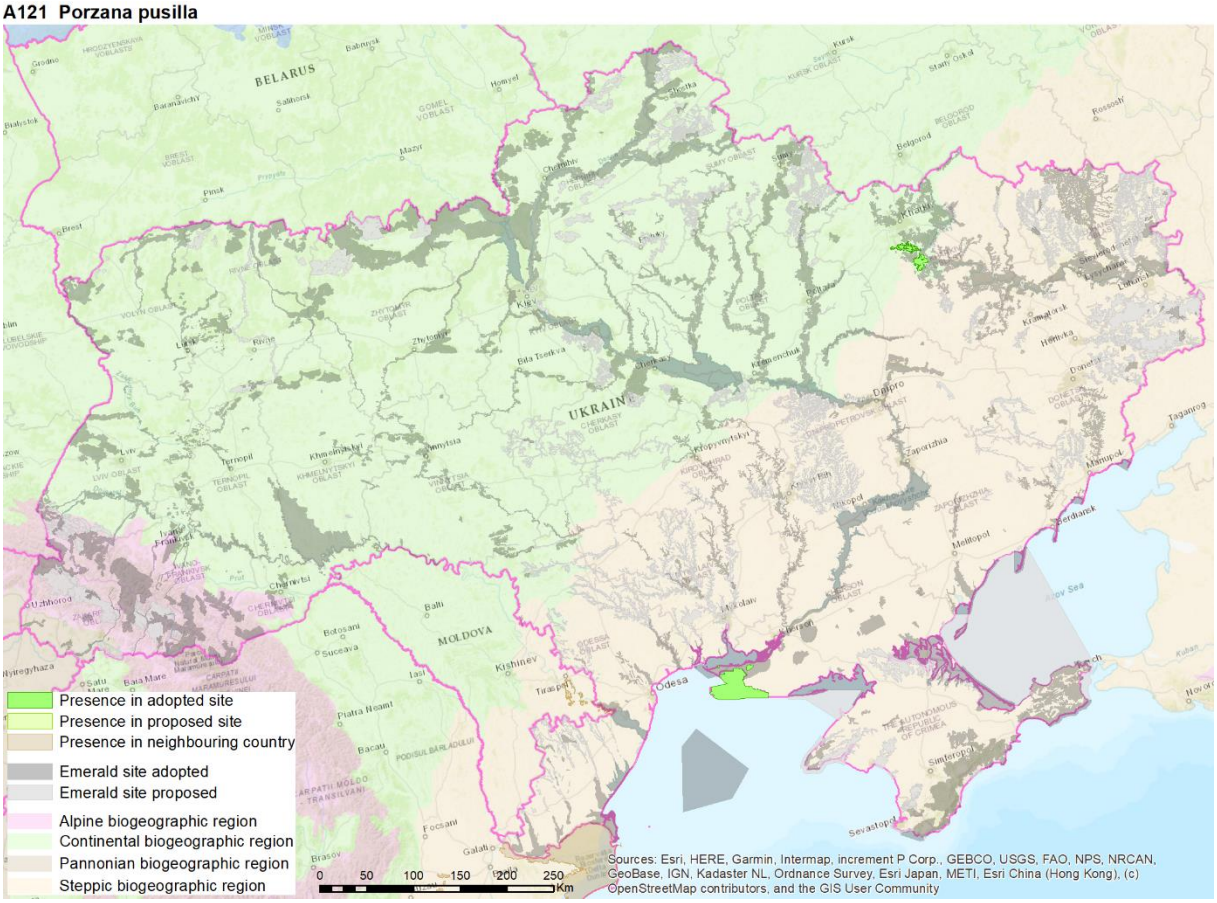
BGR	A120 Porzana parva	
Not applicable	Num. of sites:	189 (B:3, C:160, D:26)
	BGR seminar 2018 conclusion:	IN MOD/CD Liman's lake system, Mozh, Siverskyi Donets, Upper Dnister, Sumy region, Kuchurganskyi Liman, Odessa region
	Recommendation 2025:	Species added to 77 sites, including sites mentioned in the conclusion 2018; older data are also from Tysa river floodplain (UA0000423); Teteriv river valley (Zhytomyr, UA0000320); SR
	Comments from external experts:	ERL: (15,000–25,000 bp); SDF: r = (21–55 i and 3,985–2,700 p); c = (11,397–15,225 i and 5 nan) Species added to 77 sites, including sites mentioned in conclusion 2018; older data are also from Tysa river floodplain (W, Pannonian Biosphere Reserve, Proposed site: UA0000423); Teteriv river valley (Zhytomyr, UA0000320); Unadded - Kuchurhanskyi (S-W, UA0000154)
	Comments from local experts:	Experts agree, but data on this species are generally scarce; information from birdwatchers without photographic evidence should not be considered reliable.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A120 Porzana parva



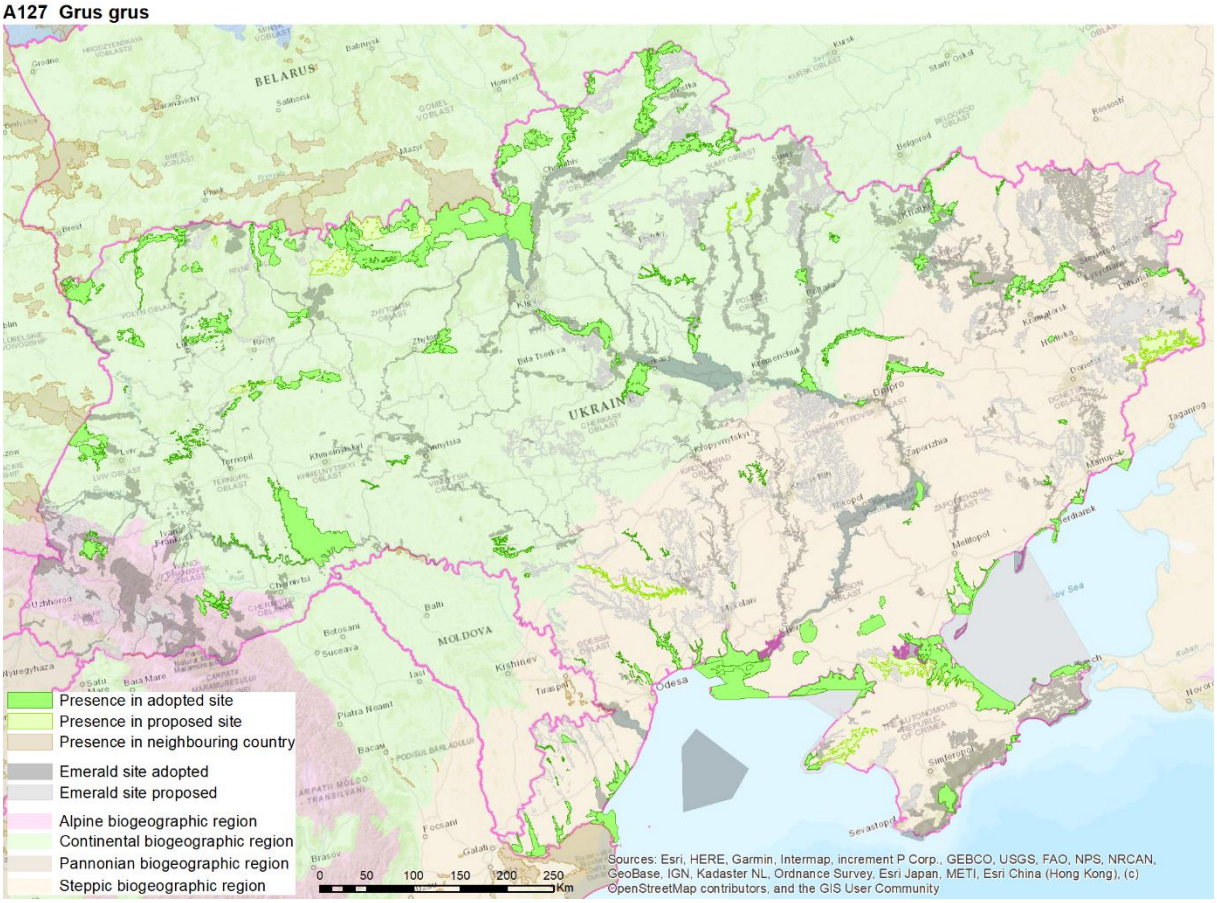
BGR	A121 Porzana pusilla	
Not applicable	Num. of sites:	3 (C:1, D:2)
	BGR seminar 2018 conclusion:	SR
	Recommendation 2025:	SR remains
	Comments from external experts:	SDF: r = (4–6 p); c = (1–5 i); no data in databases for UA
	Comments from local experts:	The majority of historical records appear to be erroneous, and the expert reports no recent data. Verification of the data sources is recommended. Information originating from protected areas is likely reliable, though the temporal validity of these records should be confirmed.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A121 Porzana pusilla



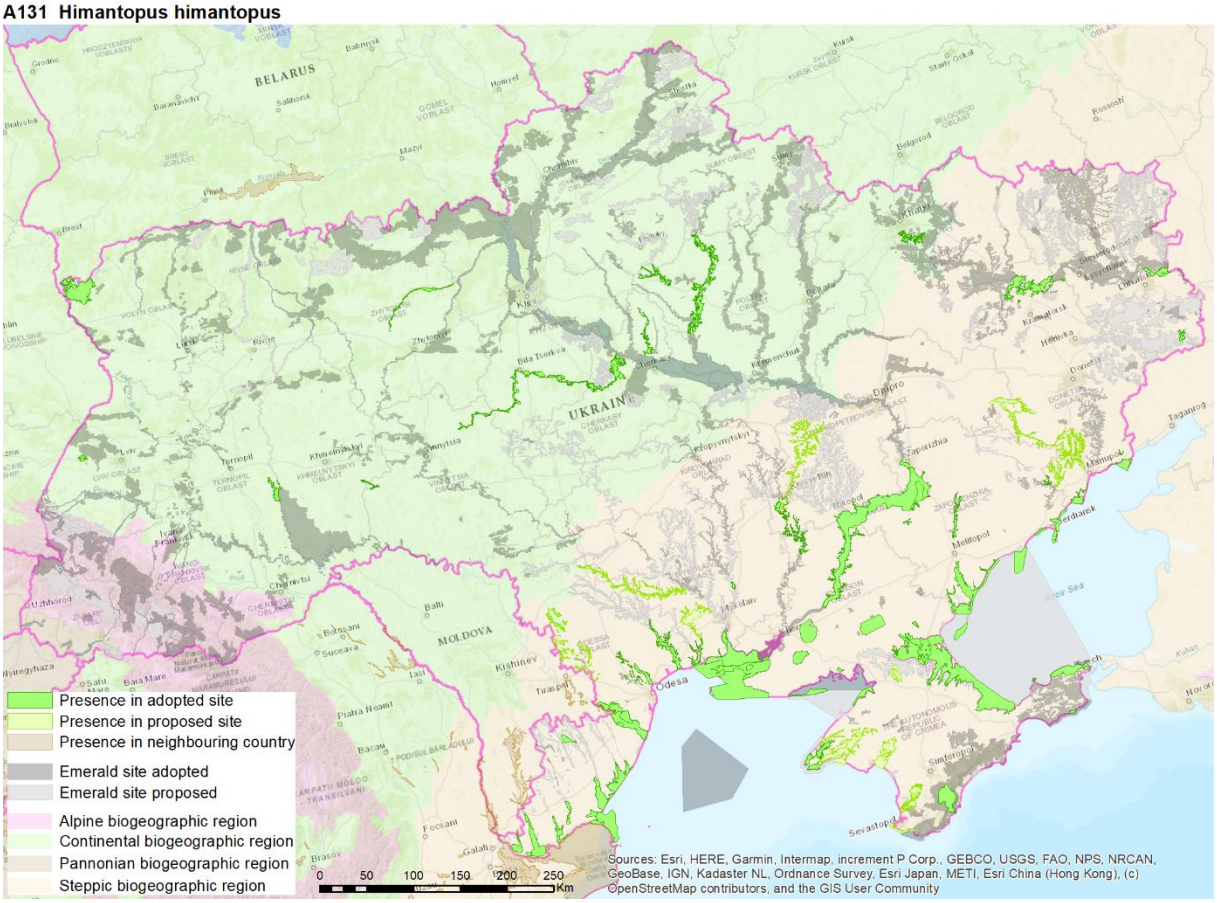
BGR	A127 Grus grus	
Not applicable	Num. of sites:	169 (A:1, B:18, C:128, D:22)
	BGR seminar 2018 conclusion:	IN MOD/CD Dnipropetrovsk, Zhytomyr, Kyiv, Chernihiv, Donetsk, Lugansk, Sumy regions
	Recommendation 2025:	Species added to 52 sites, including sites mentioned in conclusion 2018; Sufficient? Possibly add: Kyivske Reservoir (UA0000094) and left bank floodplain of the Dnieper River (UA0000474).
	Comments from external experts:	ERL: (1,000–1,500 bp); SDF: r = (62–102 i and 391–418 p); c = (61,387–56,289 i); w = (13 i); Species added to 52 sites, including sites mentioned in conclusion 2018; Sufficient? Possibly add: Kyivske Reservoir (UA0000094) and left bank floodplain of the Dnieper River (Proposed sites: UA0000474); Removed due to previous database: UA0000272; UA0000278; UA0000285; UA0000286; UA0000293; UA0000296; UA0000299; UA0000303; UA0000309; UA0000311; UA0000312; UA0000315; UA0000316; UA0000317; UA0000320; UA0000334; UA0000348; UA0000356; UA0000368; UA0000371; UA0000376; UA0000377; UA0000378; UA0000383; UA0000412; UA0000413; UA0000419; UA0000430; UA0000444; UA0000447; UA0000465; UA0000466; UA0000468; UA0000469; UA0000470; UA0000564; UA0000569; UA0000570; UA0000571; UA0000577; UA0000578; UA0000585; UA0000592; UA0000596.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A127 Grus grus



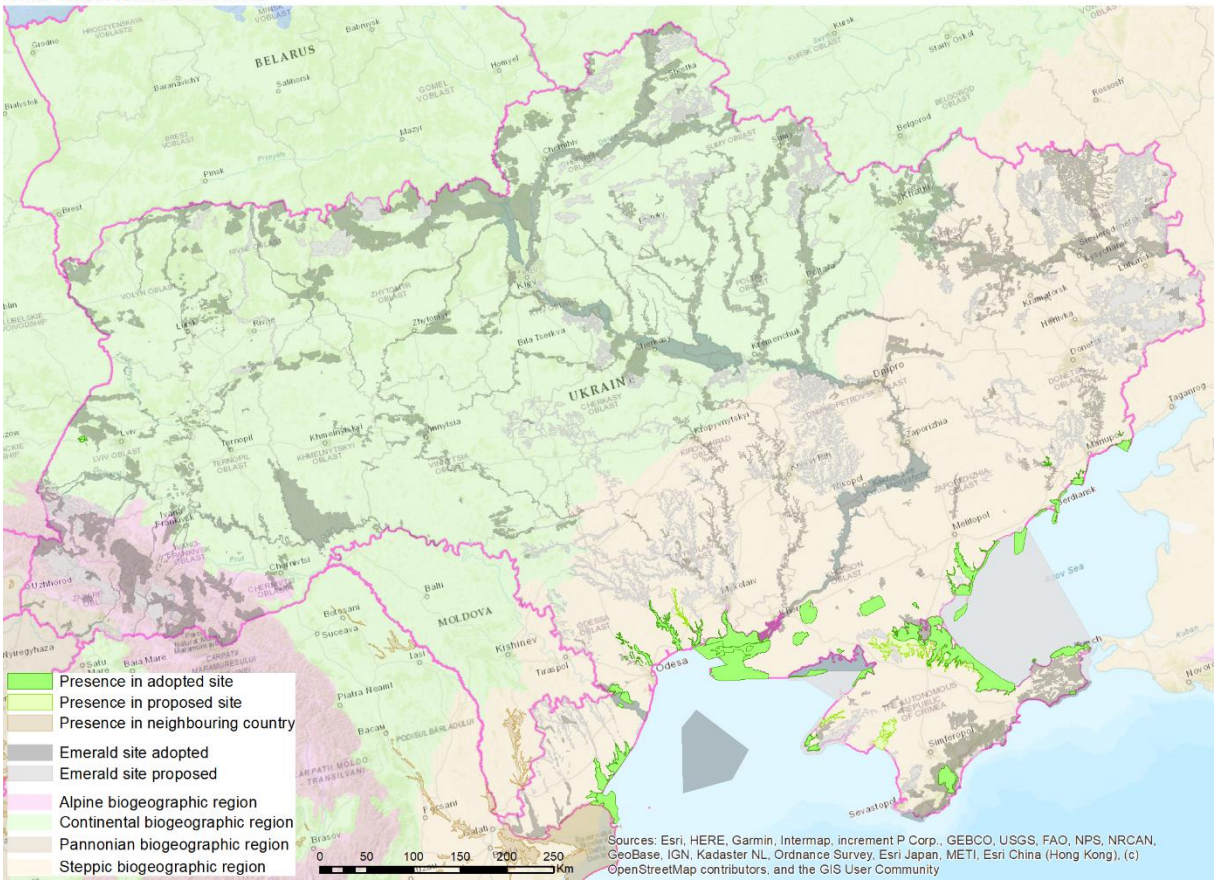
BGR	A131 Himantopus himantopus	
Not applicable	Num. of sites:	88 (A:4, B:3, C:57, D:24)
	BGR seminar 2018 conclusion:	IN MOD Dnipropetrovsk, Kharkiv regions; Crimea
	Recommendation 2025:	Species added to 41 sites, including sites mentioned in conclusion 2018; possibly add: Zaplava Supoiu (UA0000237); Rivne region; Remove: Crimean Nature Reserve (UA0000005).
	Comments from external experts:	ERL: (3,000–5,000 bp); SDF: r = (27–67 i and 1,368–603 p); c = (1,527–959 i and 5–10 nan); species added to 41 sites, including sites mentioned in conclusion 2018; Possibly add: Bortnychi filtration fields near Left bank floodplain of the Dnieper River (Proposed sites: UA0000474); Zaplava Supoiu (UA0000237); Rivne region; Removed due to previous database: UA0000277.
	Comments from local experts:	Suggestion to focus on the southern part of Ukraine (up to Cherkasy). Some sites in Crimea may have been overlooked; the species does not occur in the mountainous part of the Crimea Biosphere Reserve, which is excluded. The coastal areas and western regions of Crimea are well populated. The Bortnychi site should be excluded.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A131 Himantopus himantopus



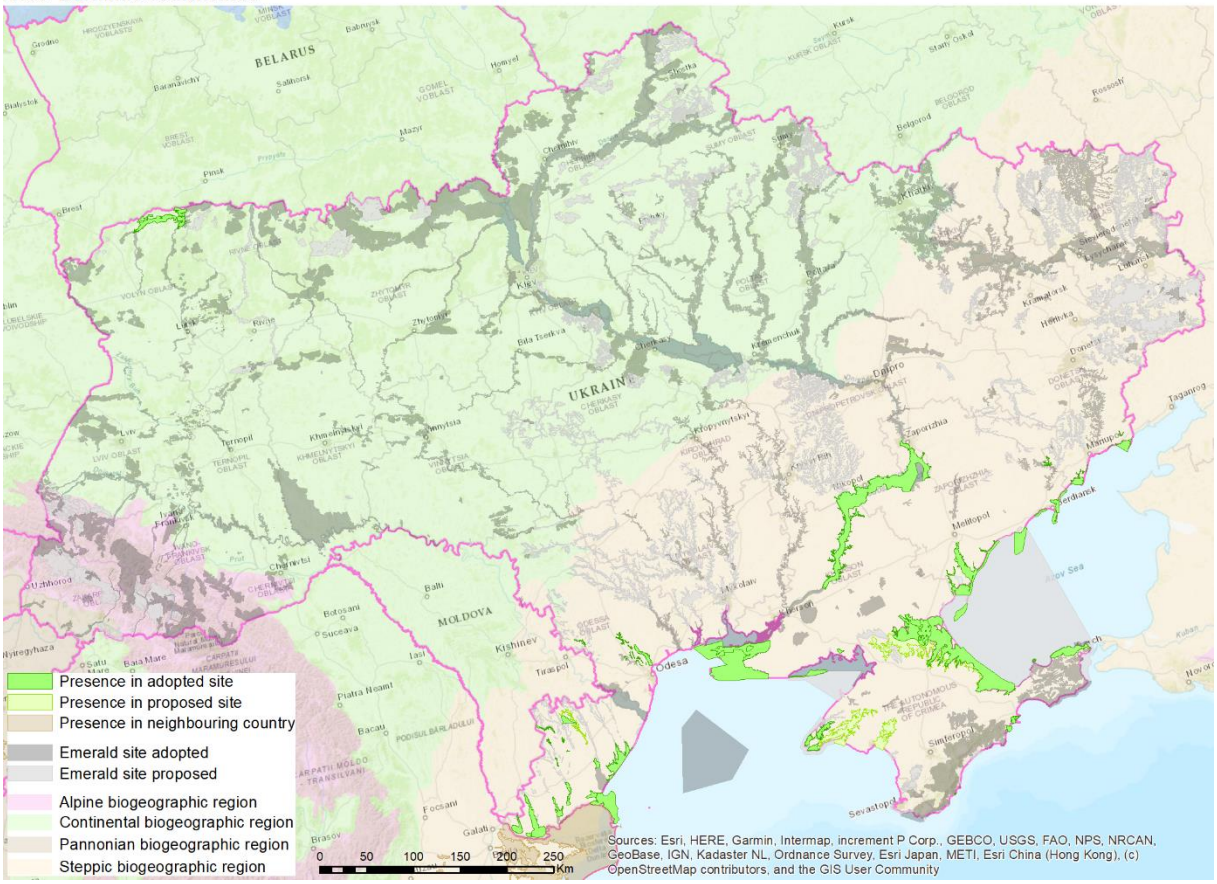
BGR	A132 Recurvirostra avosetta	
Not applicable	Num. of sites:	49 (A:2, B:10, C:33, D:4)
	BGR seminar 2018 conclusion:	IN MOD Crimea
	Recommendation 2025:	Added to 22 sites, including Crimea; IN MIN: Samarskyi Lis (Dnipropetrovsk: UA0000212); Remove: Crimean Nature Reserve (UA0000005)
	Comments from external experts:	ERL: (5,000–7,000 bp); SDF: r = (51–255 i and 1,602–445 p); c = (3,180–1,445 i); w = (10 i)
	Comments from local experts:	Experts agree, but Crimean sites should be double-checked, and mountains should be excluded.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A132 Recurvirostra avosetta



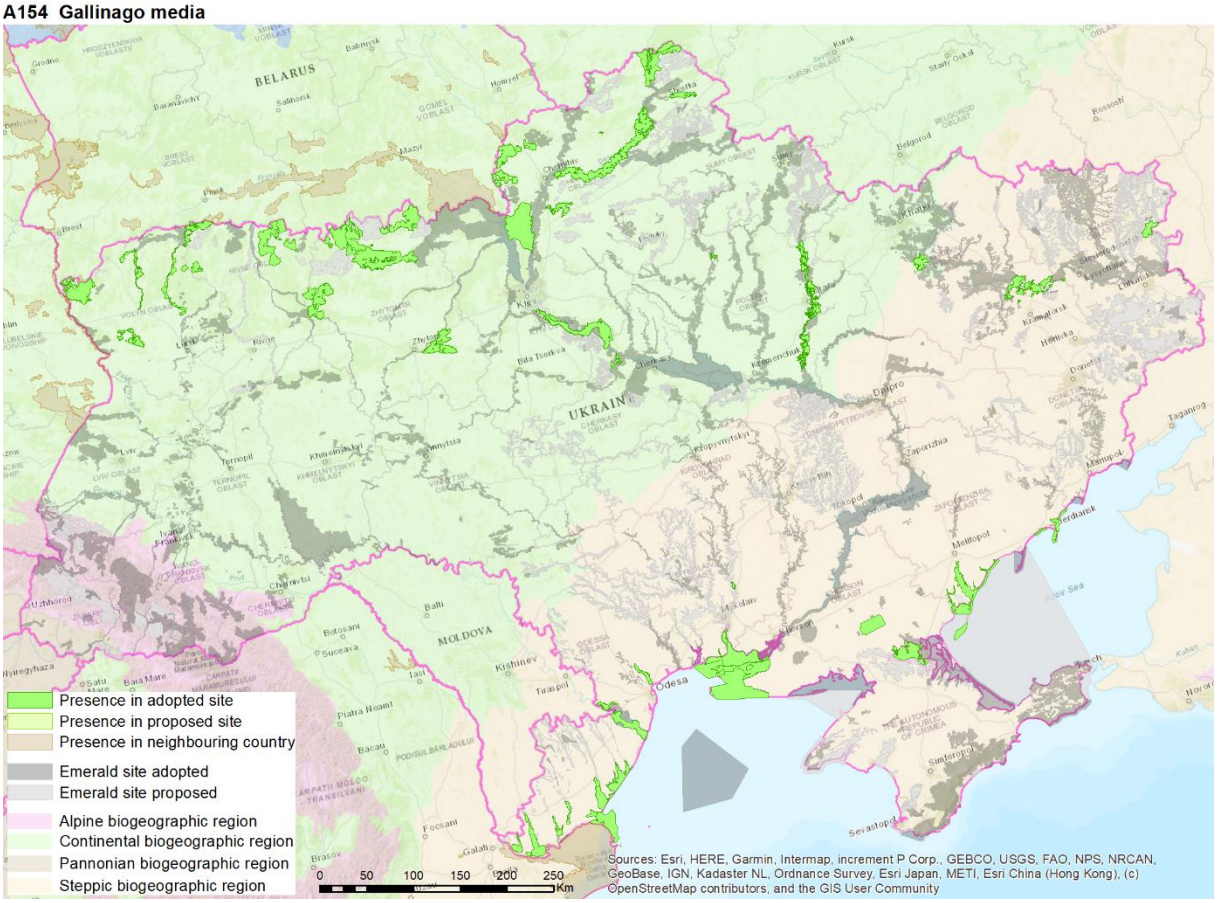
BGR	A133 Burhinus oedicnemus	
Not applicable	Num. of sites:	41 (A:2, B:7, C:18, D:14)
	BGR seminar 2018 conclusion:	SR/CD
	Recommendation 2025:	Added to 13 sites. Remove: Prypiat-Stokhid NNP (UA0000044); Verify: Kakhovske Reservoir (UA0000106)
	Comments from external experts:	ERL: (200–400 bp); SDF: r = (1–3 i and 89–174 p); c = (130–145 i); Added to 13 sites. Is there a confirmed occurrence in the N-W - Prypiat-Stokhid NNP (UA0000044)?] Removed due to previous database: UA0000307.
	Comments from local experts:	The northern site (Pripyat) should be reexamined—the expert suspects these records may be obsolete. Additionally, all records associated with the Kakhovka Reservoir should be reviewed.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A133 Burhinus oedicnemus



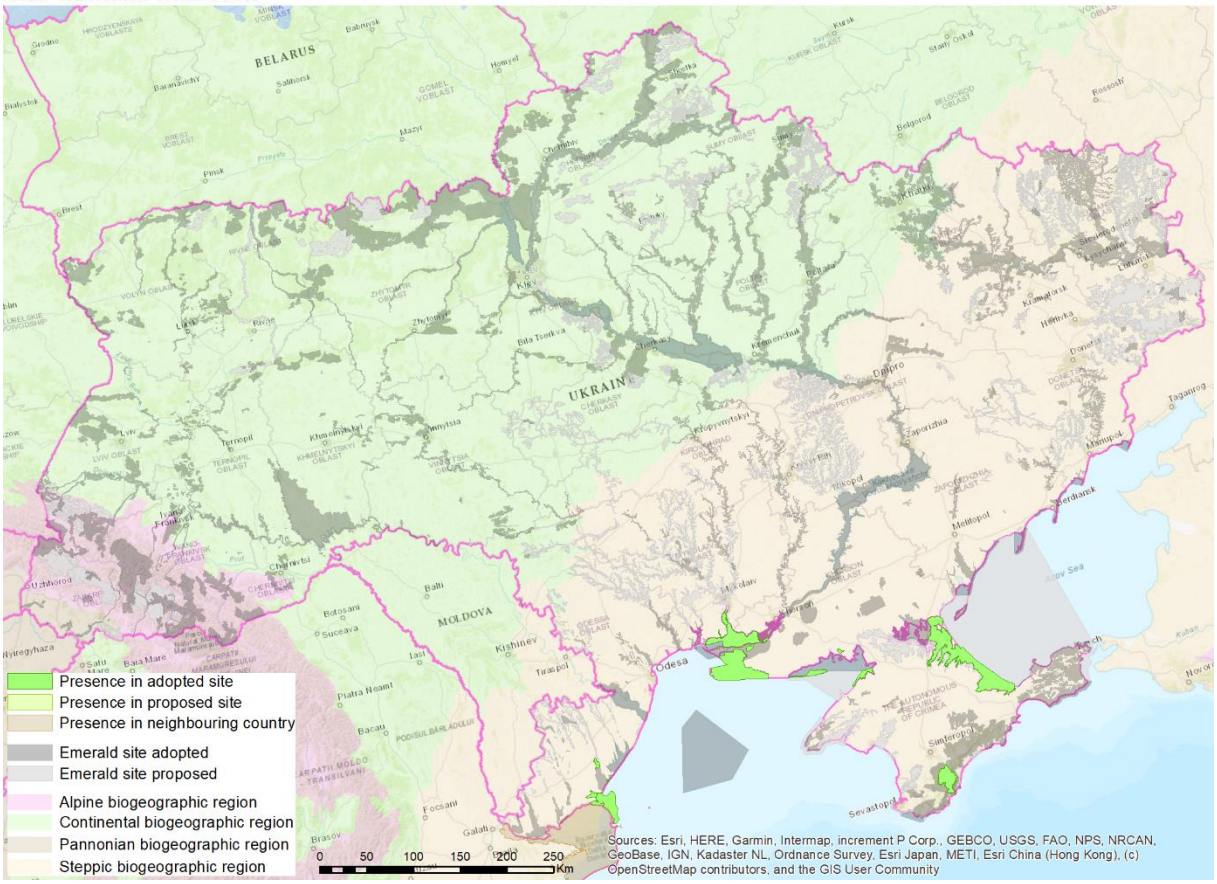
BGR	A154 Gallinago media	
Not applicable	Num. of sites:	Adopted: 50 (B:10, C:24, D:16)
	BGR seminar 2018 conclusion:	IN MOD/CD
	Recommendation 2025:	Nearly 100% of the breeding population according to the number of bp in the ERL. Possibly sufficient.
	Comments from external experts:	ERL: (200–300 bp); SDF: r = (269–292 p); c = (270–180 i); Added to existing 2 sites; Nearly 100% of the breeding population according to the number of bp in the ERL. Possibly sufficient.
	Comments from local experts:	The breeding area is restricted to the northern part of the country and is not found in the south. Double-check distribution.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A154 Gallinago media



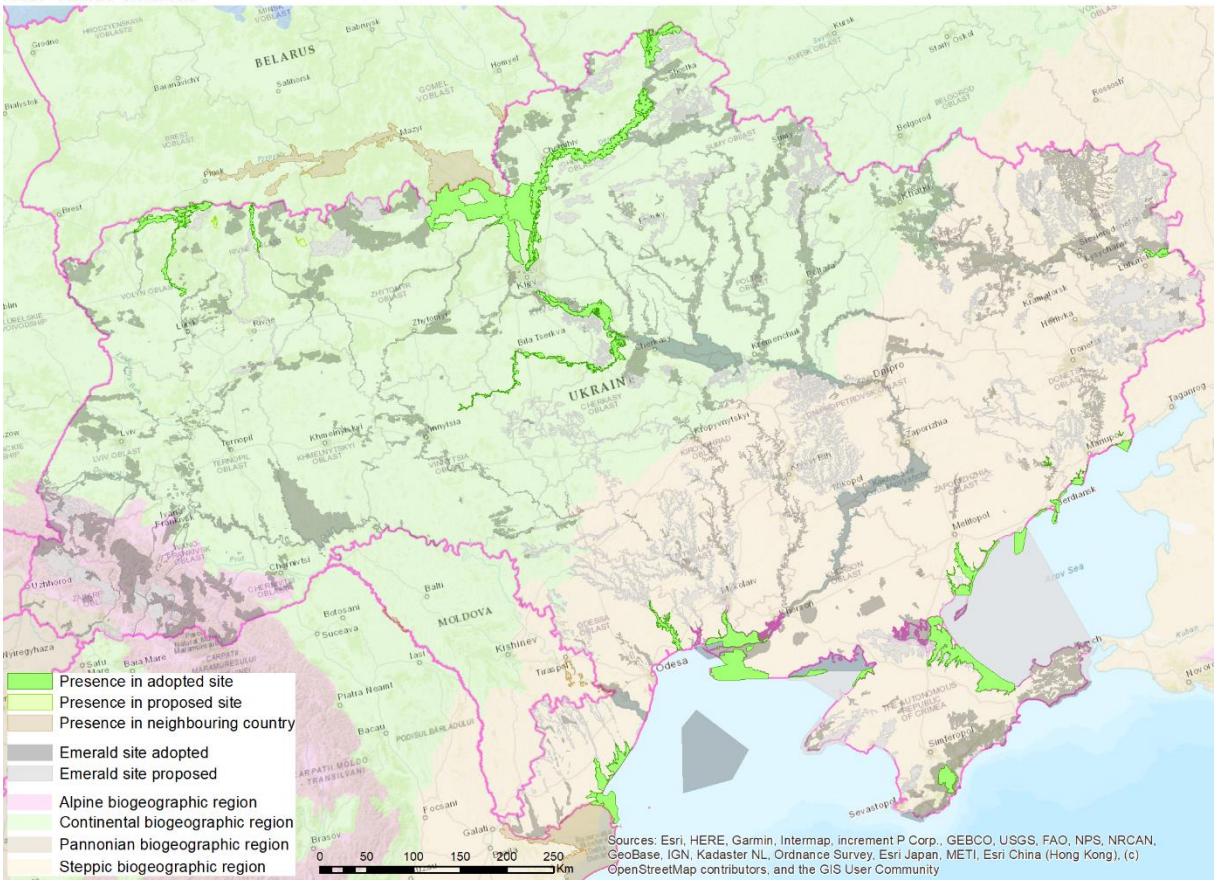
BGR	A159 Numenius tenuirostris	
Not applicable	Num. of sites:	Adopted: 7 (A:3, C:1, D:3)
	BGR seminar 2018 conclusion:	SR
	Recommendation 2025:	Exclude from the Reference list.
	Comments from external experts:	SDF: c = (12–35 i), SR, Deleted from 1 site. Sufficient? All sites in Crimea and the Kherson region.
	Comments from local experts:	Exclude from the Reference list.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A159 Numenius tenuirostris



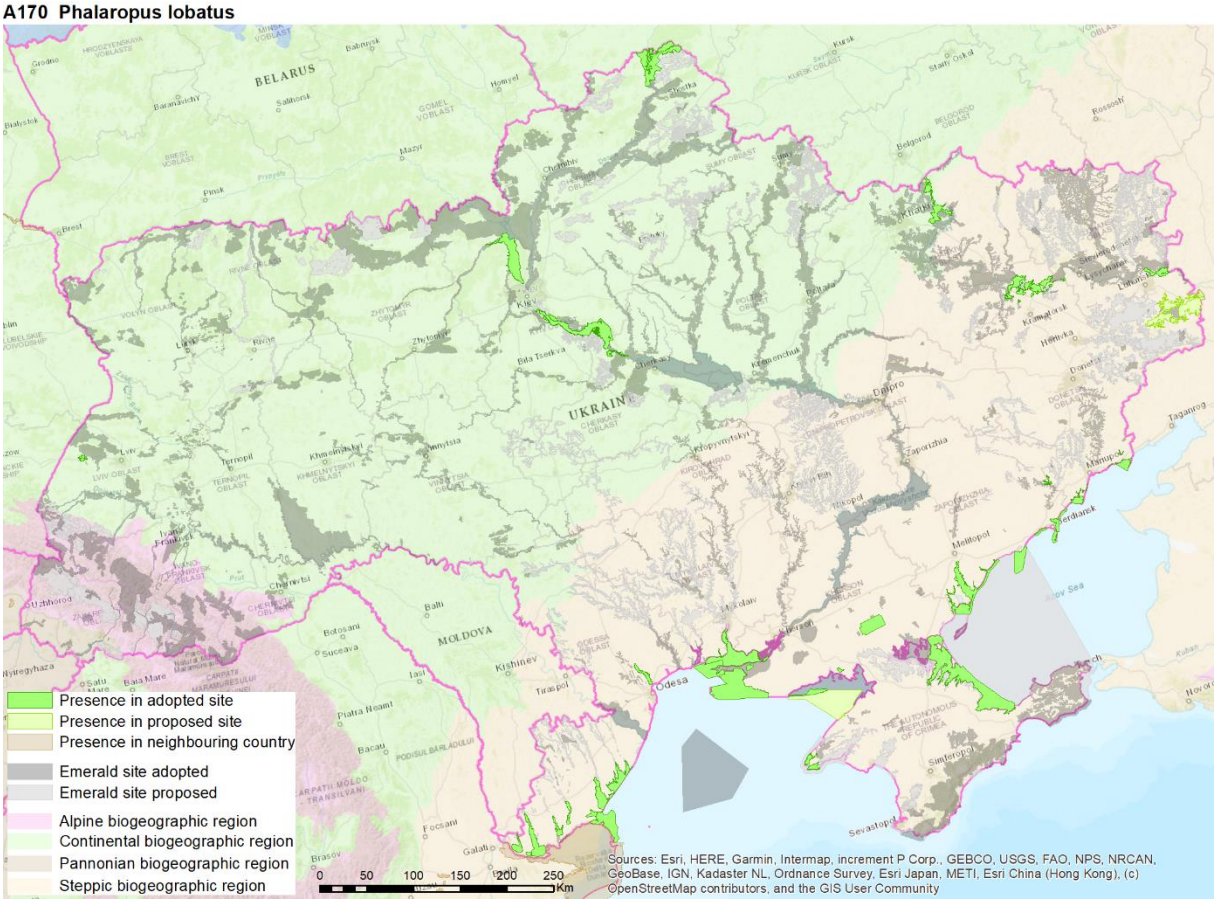
BGR	A167 Xenus cinereus	
Not applicable	Num. of sites:	36 (B:5, C:13, D:18)
	BGR seminar 2018 conclusion:	IN MOD/CD Pripyat River and its tributaries; the Desna River
	Recommendation 2025:	Species added to 16 sites, including sites mentioned in conclusion 2018; According to the European Red List of Birds (2021), 100% of the breeding population is covered. Sufficient? Check the population type in the SDF.
	Comments from external experts:	ERL: (20–30 bp); SDF: r = (23–35 p); c = (1,042–354 i); Species added to 16 sites, including sites mentioned in the conclusion of 2018; According to the European Red List of Birds (2021), 100% of the breeding population is covered. Sufficient?
	Comments from local experts:	Check in standard data form: no reliable data on breeding, only sightings. South part - migration and wintering only.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A167 Xenus cinereus



BGR	A170 Phalaropus lobatus	
Not applicable	Num. of sites:	27 (B:3, C:15, D:9)
	BGR seminar 2018 conclusion:	IN MOD
	Recommendation 2025:	Added to 2 new proposed sites, including Crimea; Sufficient?
	Comments from external experts:	SDF: c = (552–458 i); p = (3 i) Occurs only during migration (100–200 i).
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A170 Phalaropus lobatus



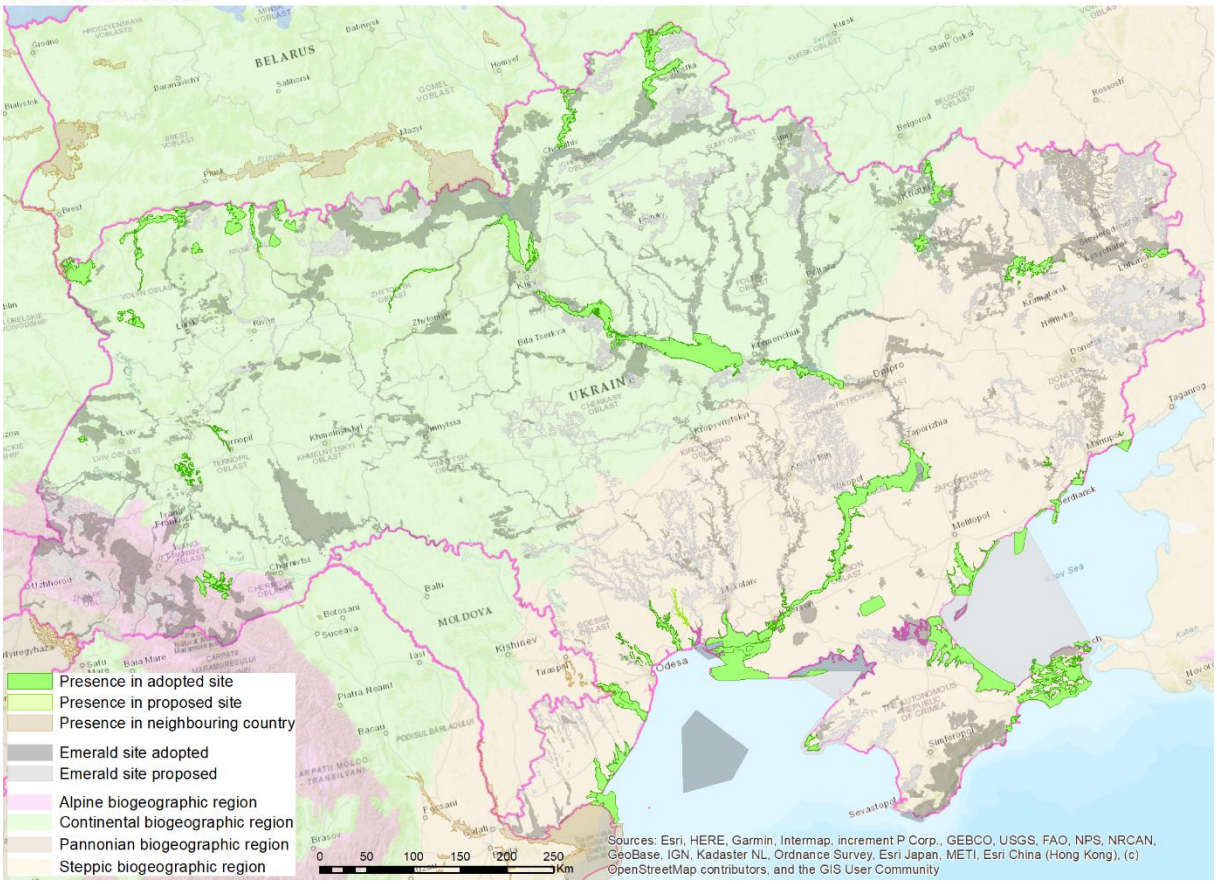
BGR	A177 Larus minutus	
Not applicable	Num. of sites:	68 (A:1, B:4, C:52, D:11)
	BGR seminar 2018 conclusion:	IN MOD/CD
	Recommendation 2025:	The breeding area is probably covered by Emerald, but numbers appear low for colonial species, SR Crimea?
	Comments from external experts:	ERL: (<1% EUR); SDF: r = (72–15 i and 41–22 p); c = (4,890–6,156 i); w = (83 i); Species added to 15 sites. Most observations according to databases are from the Dnipro River and the Odessa area. The breeding area is probably covered by Emerald, but numbers appear low for colonial species.
	Comments from local experts:	Suggest checking data about the colonies of these species. Some Crimean sites might be overlooked and data deficient, with no fresh data on breeding.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A177 Larus minutus



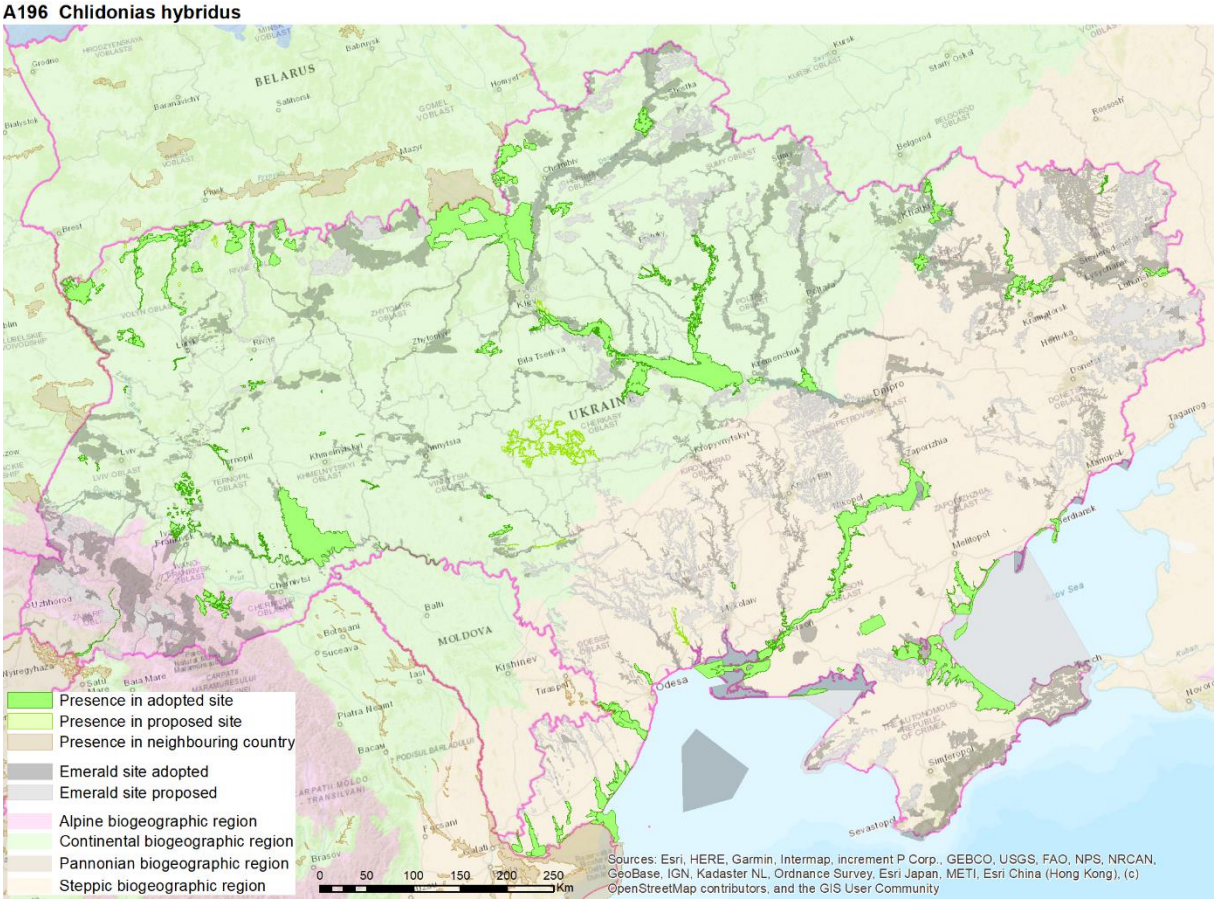
BGR	A195 Sterna albifrons	
Not applicable	Num. of sites:	72 (A:2, B:4, C:56, D:10)
	BGR seminar 2018 conclusion:	IN MOD/CD IN MOD: at least 3 sites: Upper Dnister, Kharkiv region
	Recommendation 2025:	Species added to 20 sites; Breeding population covered over 60%. IN MIN: Dnistrovskyi Kanion NNP (UA0000122); The older data are also from Vynohradivska Tysa (UA0000269)
	Comments from external experts:	ERL: (2,500–3,500 bp); SDF: r = (48–95 i and 1,544–865 p); c = (1,415–1,115 i); Species added to 20 sites; Breeding population covered over 60%. IN MIN: Dnistrovskyi Kanion NNP (UA0000122); The older data are also from Vynohradivska Tysa (UA0000269) - Pannonian BR. Is there more recent data as well?
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A195 Sterna albifrons



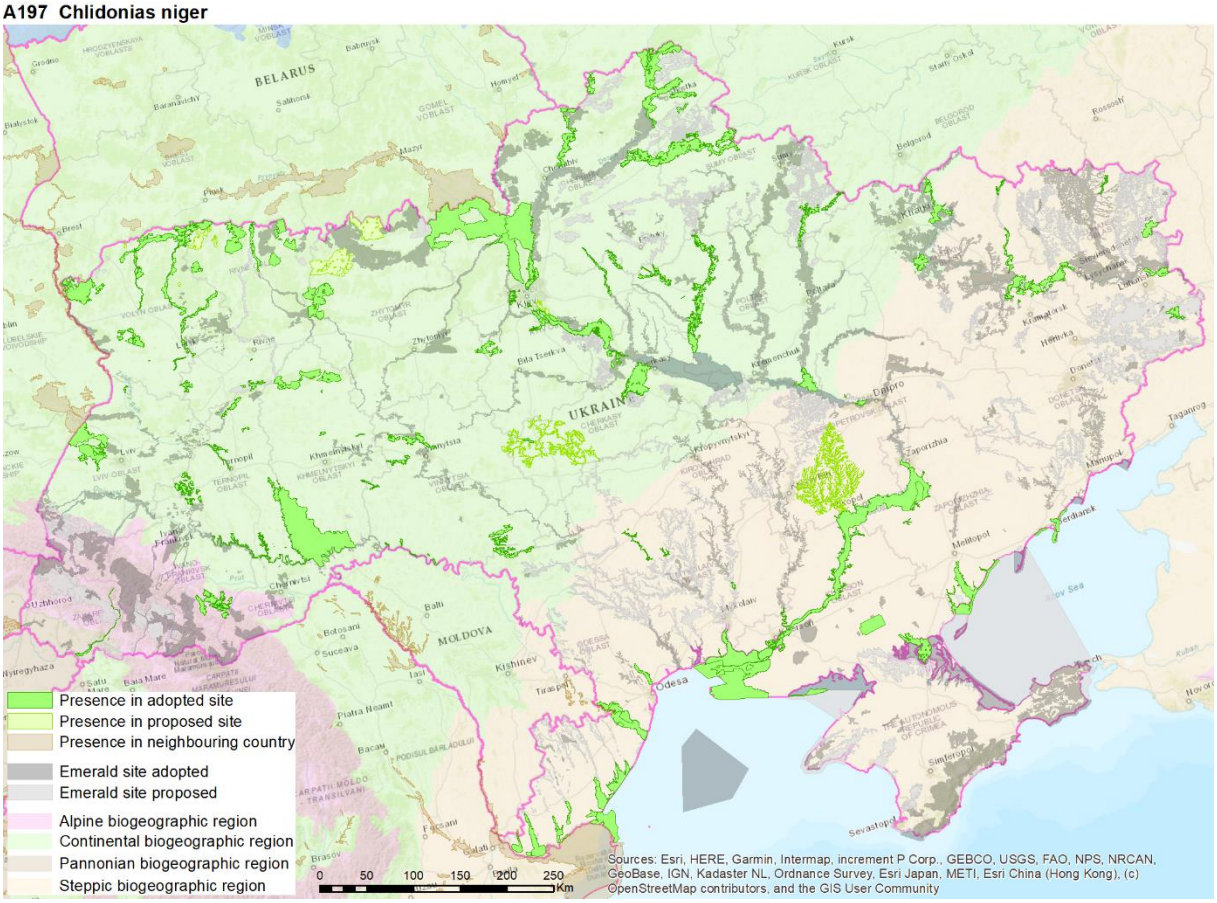
BGR	A196 Chlidonias hybridus	
Not applicable	Num. of sites:	105 (B:13, C:79, D:13)
	BGR seminar 2018 conclusion:	IN MOD/CD Kharkiv, Zhytomyr, Kirovograd, Dnipropetrovsk regions
	Recommendation 2025:	Added to 32 sites. IN MIN: Dniprovske Reservoir (UA0000093), Samarskyi Lis (UA0000212), Zhytomyr region
	Comments from external experts:	ERL: (8,000–12,000 bp); SDF: r = (101–162 i and 3,738–3,927 p); c = (8,305–7,450 i); p = (50–150 i and 11–22 p)
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A196 Chlidonias hybridus



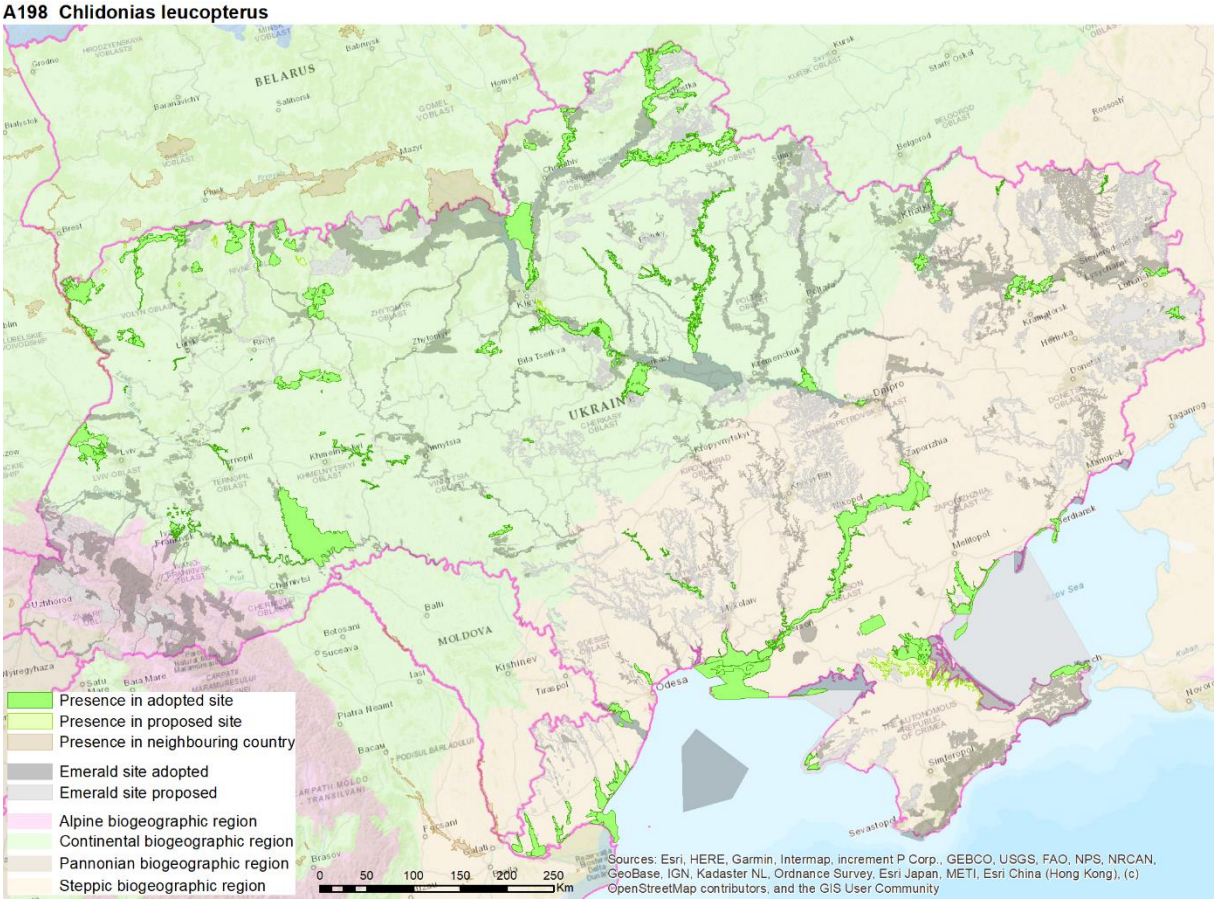
BGR	A197 Chlidonias niger	
Not applicable	Num. of sites:	155 (A:1, B:10, C:128, D:16)
	BGR seminar 2018 conclusion:	IN MOD/CD IN MOD: Charkiv, Poltava regions. Siverskyi Donets valley, Mozh River, Oskil, Oril, Liman's Lakes, Udai River; CD: 2 sites
	Recommendation 2025:	Probably sufficient.
	Comments from external experts:	ERL: (5,000–7,000 bp); SDF: r = (16–42 i and 4,758–5,058 p); c = (17,910–13,390 i); p = (20–50 p); Species added to 53 sites. According to ERL data, the breeding population is 70–95% covered. Probably sufficient. Unadded: Siverskyi Donets river valley in Kharkiv Oblast - 1 (UA0000316); Mozh river valley (Kharkiv, UA0000299); Lyman lake system (UA0000293); Udaiskyi (Poltava: UA0000183); Upper part of Udaj and Oster rivers (Proposed s., Chernihiv, N-E): UA0000468) Removed due to previous database: UA0000413.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A197 Chlidonias niger



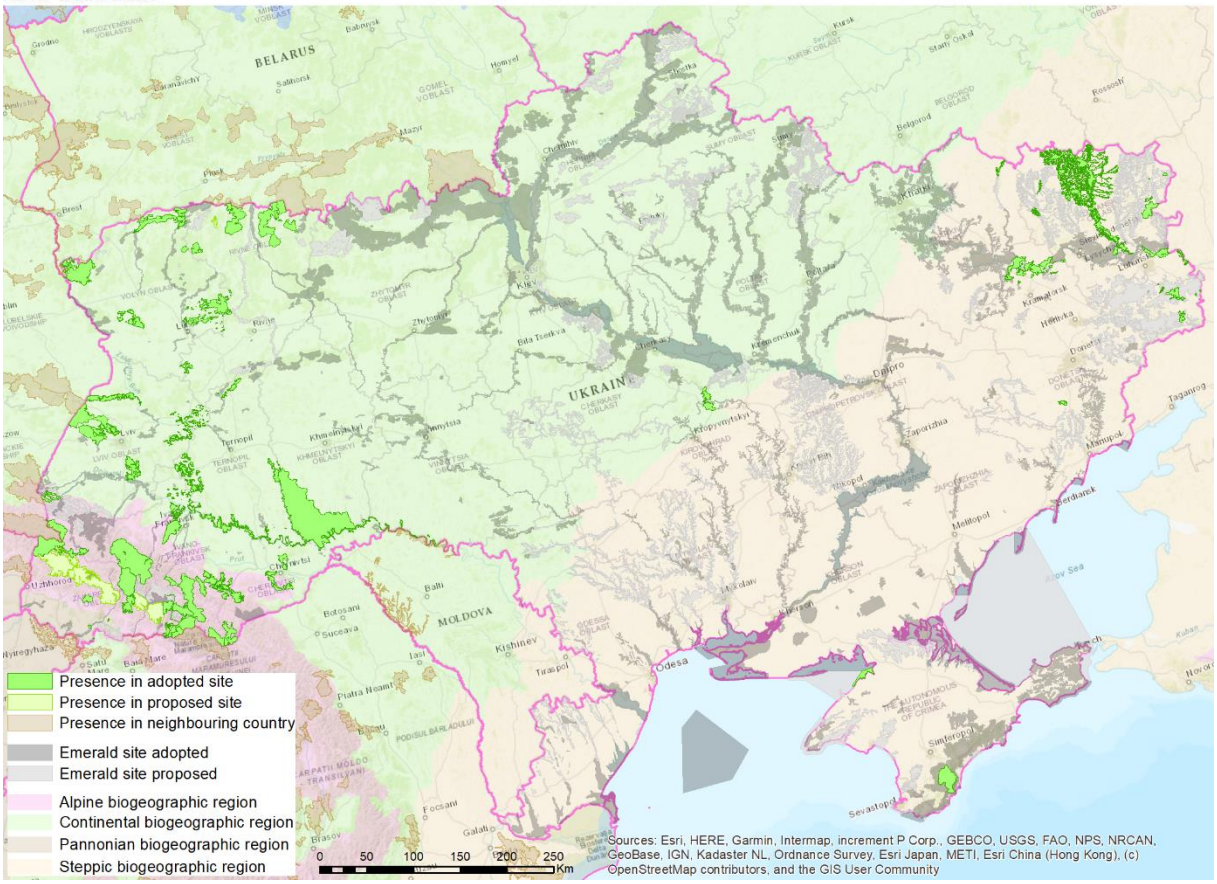
BGR	A198 Chlidonias leucopterus	
Not applicable	Num. of sites:	131 (A:2, B:7, C:108, D:14)
	BGR seminar 2018 conclusion:	IN MOD/CD Kharkiv, Lugansk regions
	Recommendation 2025:	Species added to 39 sites, including Kharkiv and Lugansk; According to ERL data, the breeding population is about 60% covered. Sufficient?
	Comments from external experts:	ERL: (7,000–15,000 bp); SDF: r = (85–47 i and 4,437–2,778 p); c = (22,430–28,442 i); p = (71–115 p); w = (69–70 i)
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A198 Chlidonias leucopterus



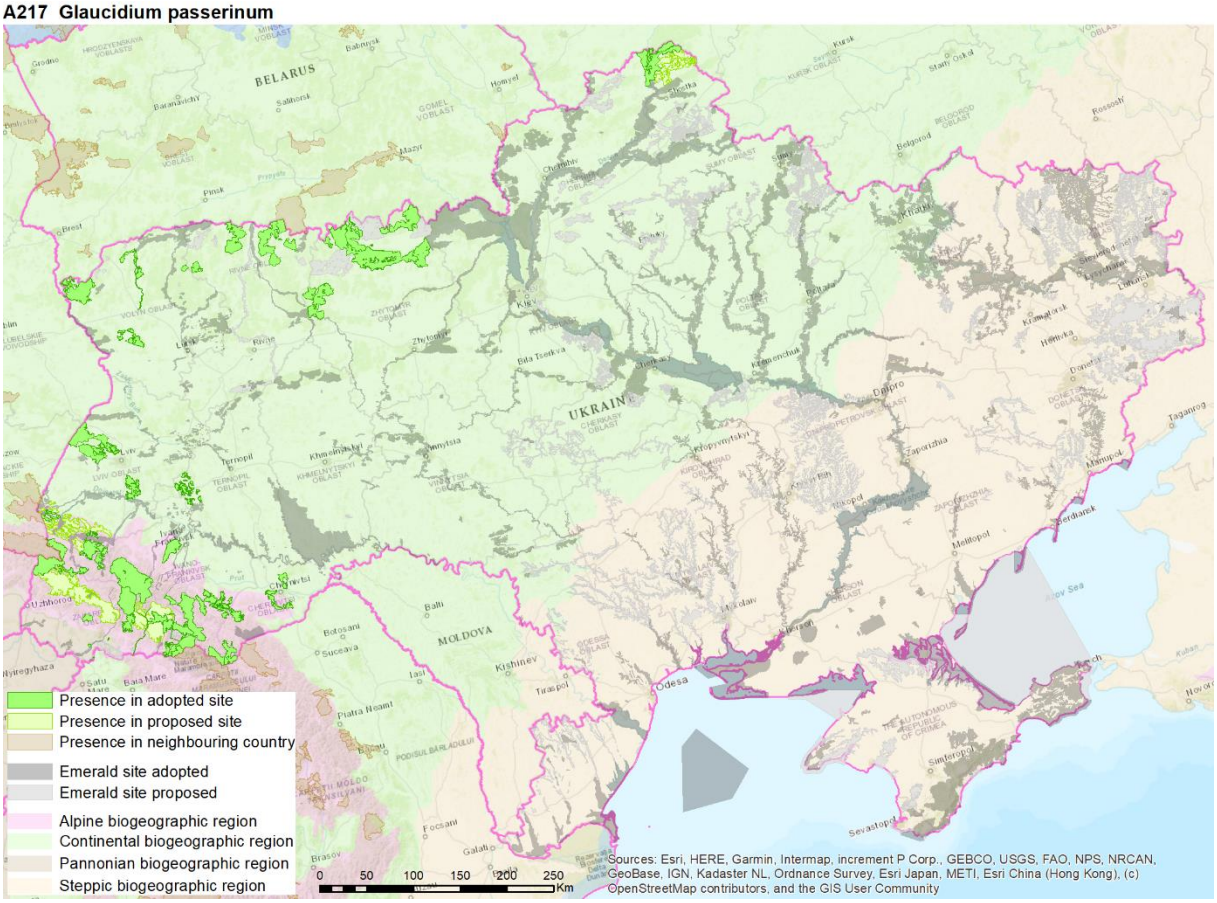
BGR	A215 Bubo bubo	
Not applicable	Num. of sites:	73 (A:2, B:7, C:41, D:23)
	BGR seminar 2018 conclusion:	IN MOD/CD IN MOD: Kharkiv, Lugansk, Donetsk regions, Dercul, Donetskyi Kryazh, Krasna, Evsug, Kovsug, Aidar, Siverskyi Donets, Kalmius, Oskil, Kamyanska Izumska, Lysogirka Izumska; CD: status
	Recommendation 2025:	The breeding population is mostly covered. Probably sufficient. Breeding sites in the east of the country will need to be verified in the future.
	Comments from external experts:	ERL: (150–220 bp); SDF: r = (61–94 p); c = (9–33 i); p = (9–29 i and 111–141 p); w = (2–7 i); Unadded: Donetskyi Kriazh Regional Landscape Park (Donetsk, UA0000063); Derkul river valley (Proposed site, Luhansk: UA0000393) - but is on neighbouring sites (68, 221, 405); Krasna river valley (Proposed site, Luhansk: UA0000403) - but is on neighbouring sites (226, 227); Kam`yanka izyums`ka (Kharkiv: UA0000280); Lysogirka izyumska (Kharkiv: UA0000296); Yevsug and Kovsug river valleys (Proposed s., Luhansk: UA0000409); removed due to previous database: UA0000300; UA0000314; UA0000315; UA0000316; UA0000344; UA0000355; UA0000386; UA0000400; UA0000402; UA0000411; UA0000444; UA0000465; UA0000580; UA0000602; UA0000607; UA0000609.
	Comments from local experts:	Experts agree, however, the eastern regions and areas along the front line may have been lost as breeding habitat for this species. In Crimea, it occurs only in the mountains; there are no records from the Lebyazhy Islands.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A215 Bubo bubo



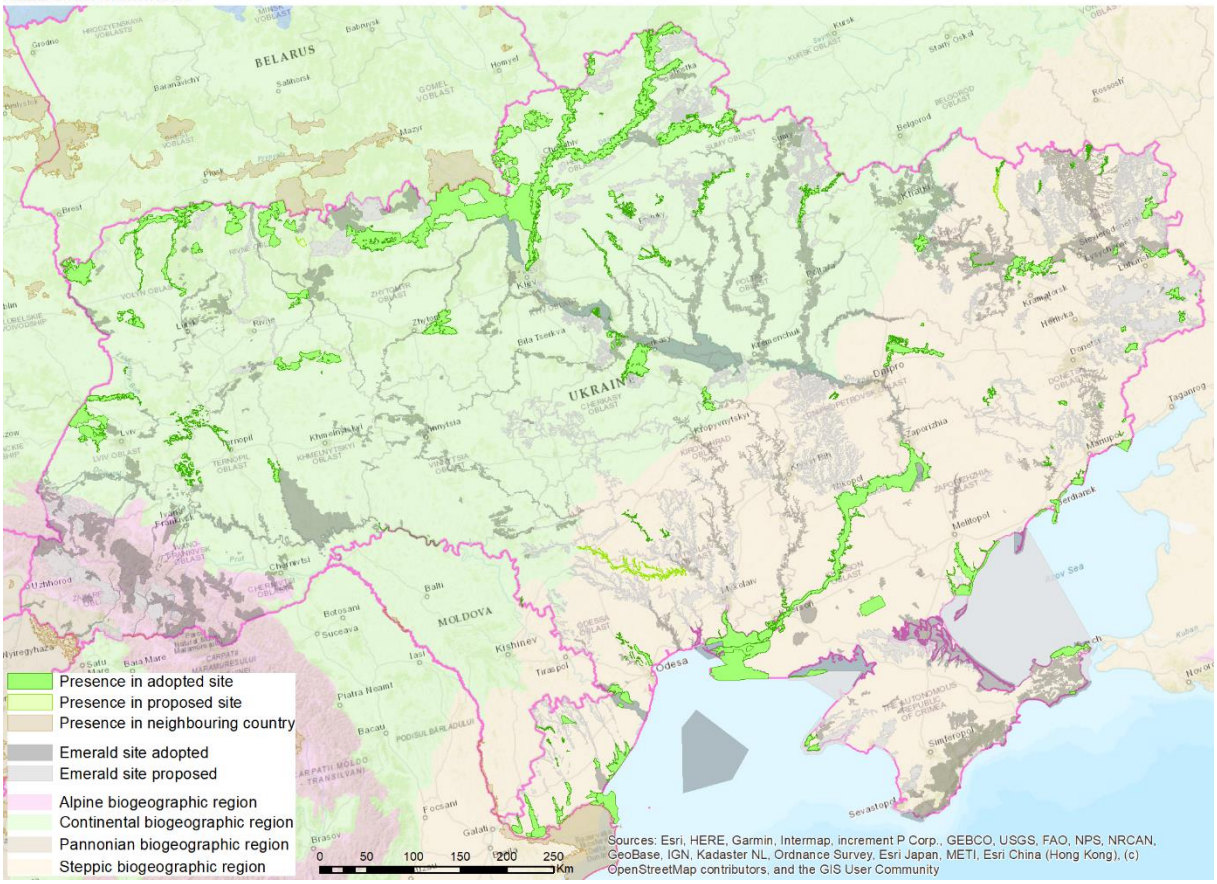
BGR	A217 Glaucidium passerinum	
Not applicable	Num. of sites:	47 (A:1, B:10, C:29, D:7)
	BGR seminar 2018 conclusion:	IN MOD/CD IN MOD: north and west: Lviv, Chernigiv regions
	Recommendation 2025:	The breeding population appears to be adequately covered in the west and north. The Chernihiv region remains uncertain.
	Comments from external experts:	ERL: (200–350 bp); SDF: r = (72–105 p); p = (2–10 i and 207–184 p); Added to 4 new sites. The breeding population appears to be adequately covered in the west and north, including the Lviv region. The Chernihiv region remains uncertain. According to EBBA2, there was confirmed breeding in the north in 3 mapping squares. Removed due to previous database: UA0000606.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A217 Glaucidium passerinum



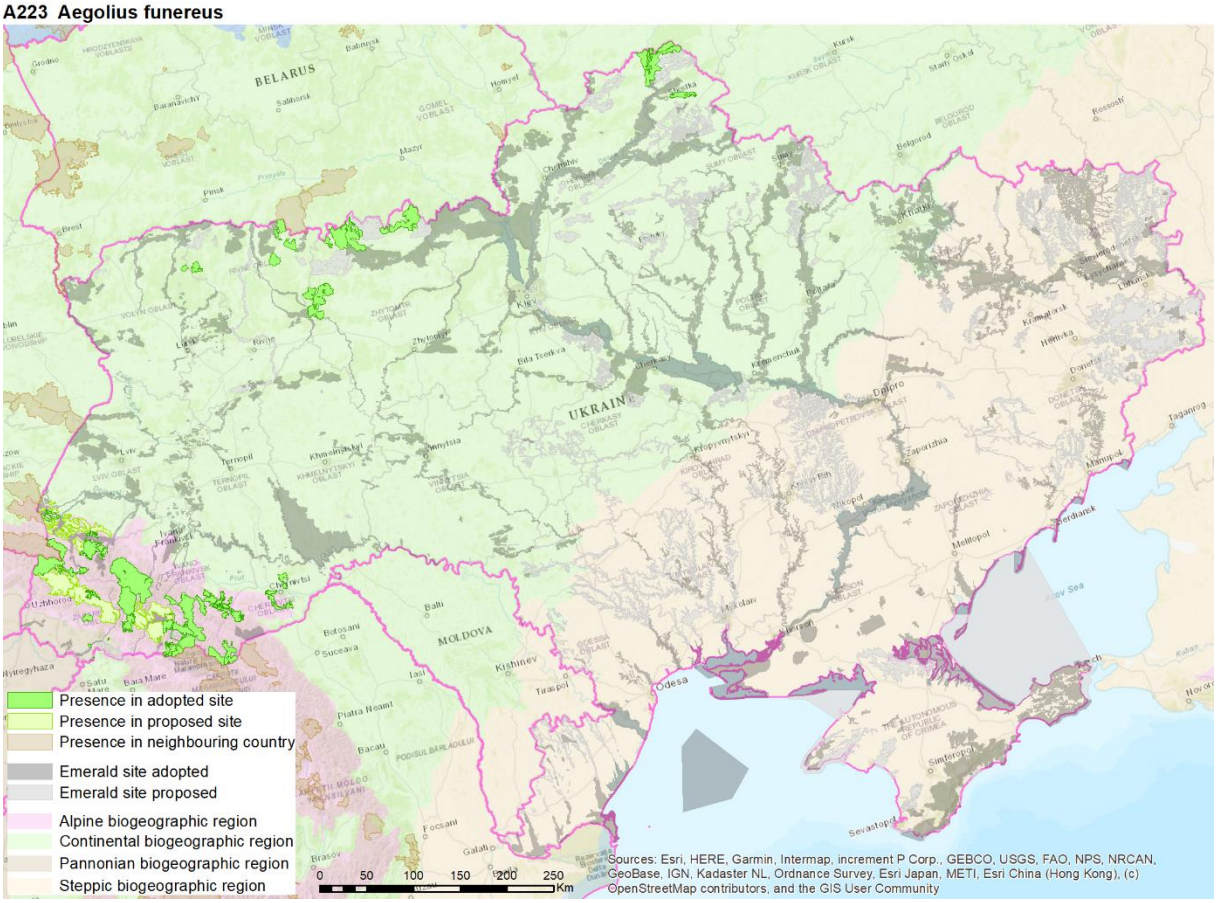
BGR	A222 Asio flammeus	
Not applicable	Num. of sites:	162 (B:1, C:138, D:23)
	BGR seminar 2018 conclusion:	IN MOD/CD IN MOD: Kharkiv, Donetsk, Lugansk regions. Gomilshanski Lisy, Beshkinskyi steppes, Mozh, Gorila Dolyna, Blagodatne Polygon, Kamyanka Izumska, Barvinkivski steppes, Oskil, Striltsivskiy Step, Velyki Babky, Milova, Dercul, Aidar, Evsug, Kovsug
	Recommendation 2025:	Species added to 52 sites. Breeding sites in the east of the country will need to be verified in the future.
	Comments from external experts:	ERL: (500–1000 bp); SDF: r = (2–7 i and 210–218 p); c = (286–321 i); p = (5–10 i); w = (98–115 i); Species added to 52 sites. The breeding population is over 50% covered. Several sites in the east of the country remained uncovered—probably not possible at the moment. Unadded: Derkul river valley (Proposed site, Luhansk: UA0000393), Yevsug and Kovsug river valleys (Proposed site, Luhansk: UA0000409); Aidar river valley (Luhansk: UA0000313), Luhanskyi Nature Reserve (Stril'tsivs'kyy Step, Luhansk: UA0000020), Kam`yanka izyums`ka (Kharkiv: UA0000280); Milova (Kharkiv: UA0000274); Removed due to previous database: UA0000273; UA0000285; UA0000288; UA0000293; UA0000296; UA0000299; UA0000301; UA0000314; UA0000316; UA0000317; UA0000378; UA0000438; UA0000470; UA0000571.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A222 Asio flammeus



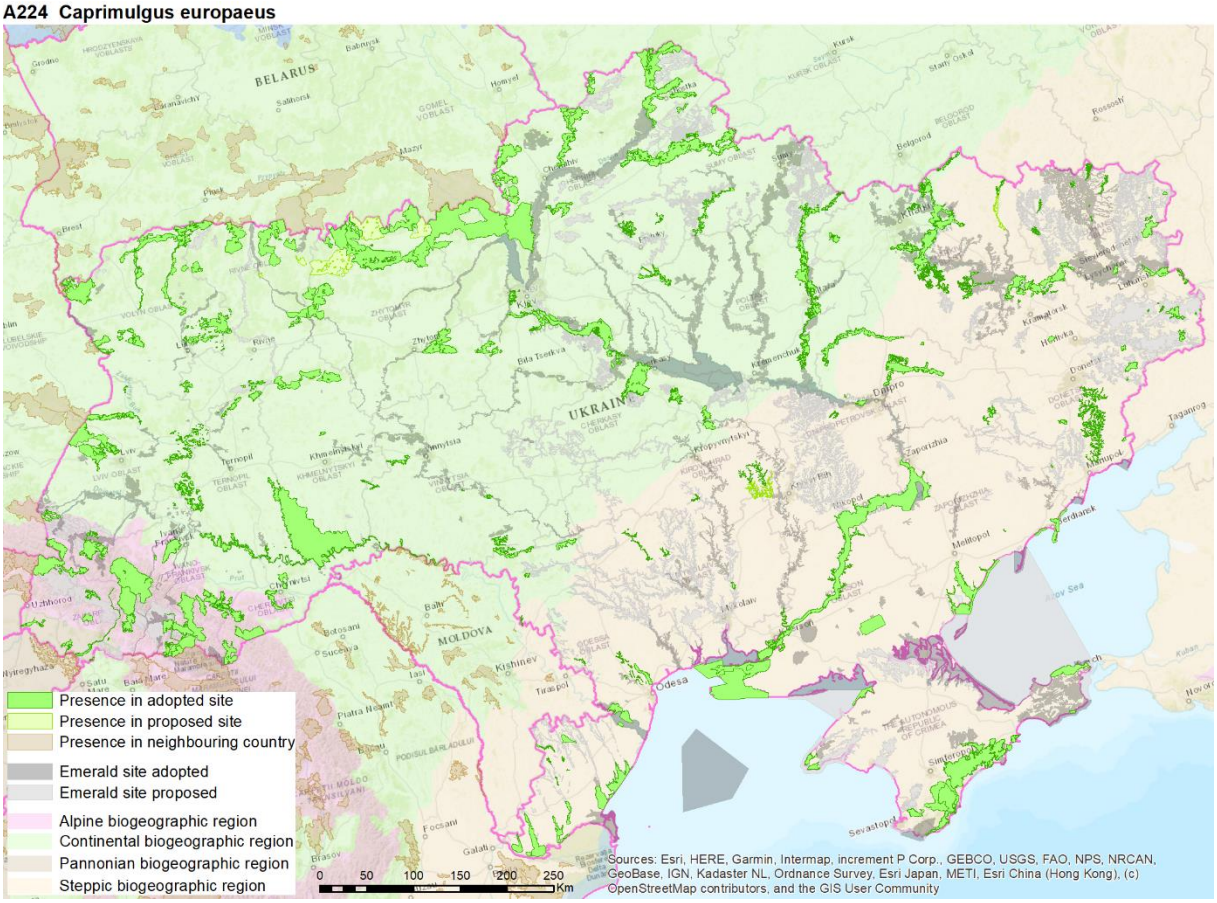
BGR	A223 Aegolius funereus	
Not applicable	Num. of sites:	32 (B:11, C:16, D:5)
	BGR seminar 2018 conclusion:	SR distribution
	Recommendation 2025:	Approximately 80% of the breeding population is covered, which seems sufficient.
	Comments from external experts:	ERL: (300–400 bp); SDF: r = (41–72 p); p = (225–137 p); Species added to 5 new sites and the species has also been deleted from several existing sites since 2018. Approximately 80% of the breeding population is covered, which seems sufficient. Removed due to previous database: UA0000583.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A223 Aegolius funereus



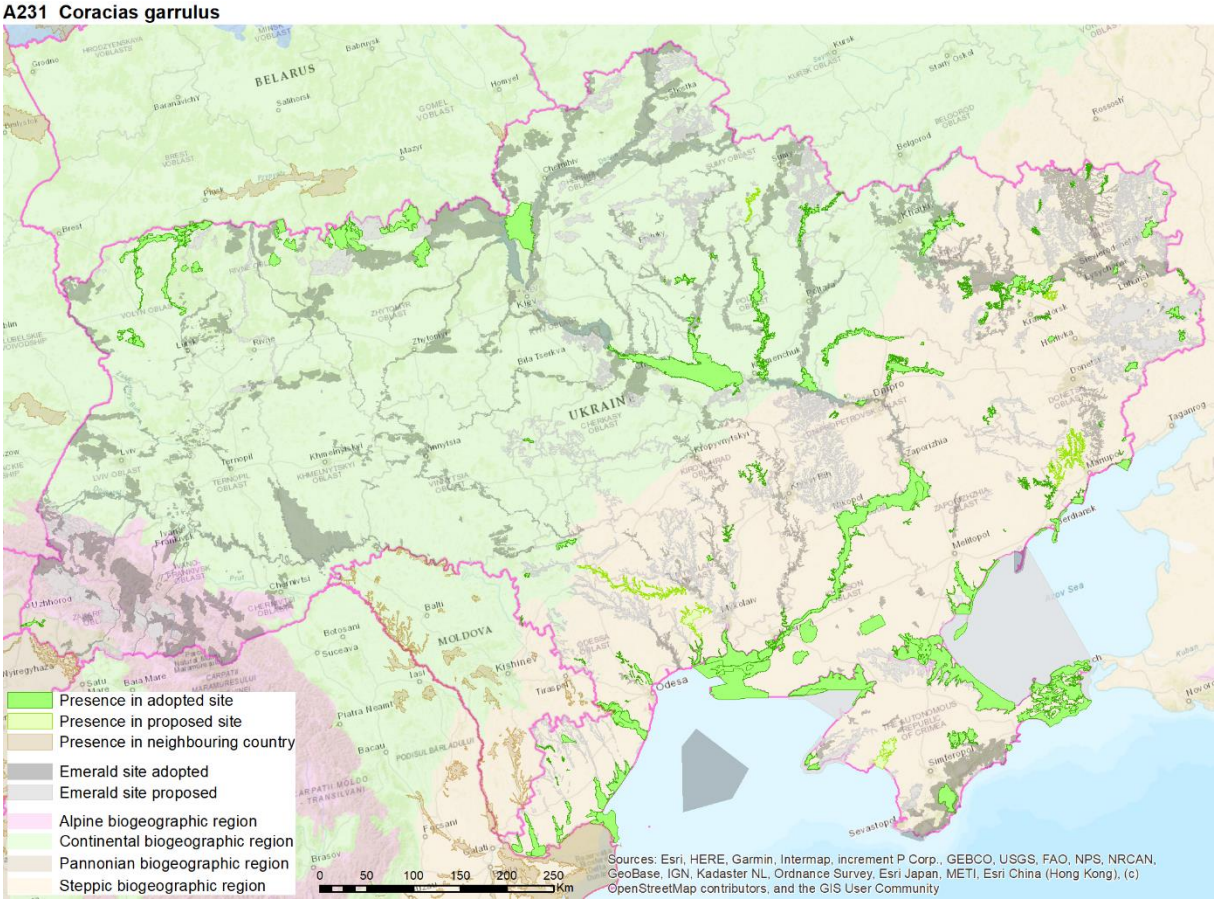
BGR	A224 Caprimulgus europaeus	
Not applicable	Num. of sites:	294 (B:3, C:272, D:19)
	BGR seminar 2018 conclusion:	IN MOD/CD Kharkiv, Donetsk regions, Upper Dnister
	Recommendation 2025:	Species added to 114 sites, including territories, as concluded in the last assessment. Probably sufficient.
	Comments from external experts:	ERL: (16,000–19,000 bp); SDF: r = (37–88 i and 4,996–6,162 p); c = (8,428–3,828 i) Removed due to previous database: UA0000301.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A224 Caprimulgus europaeus



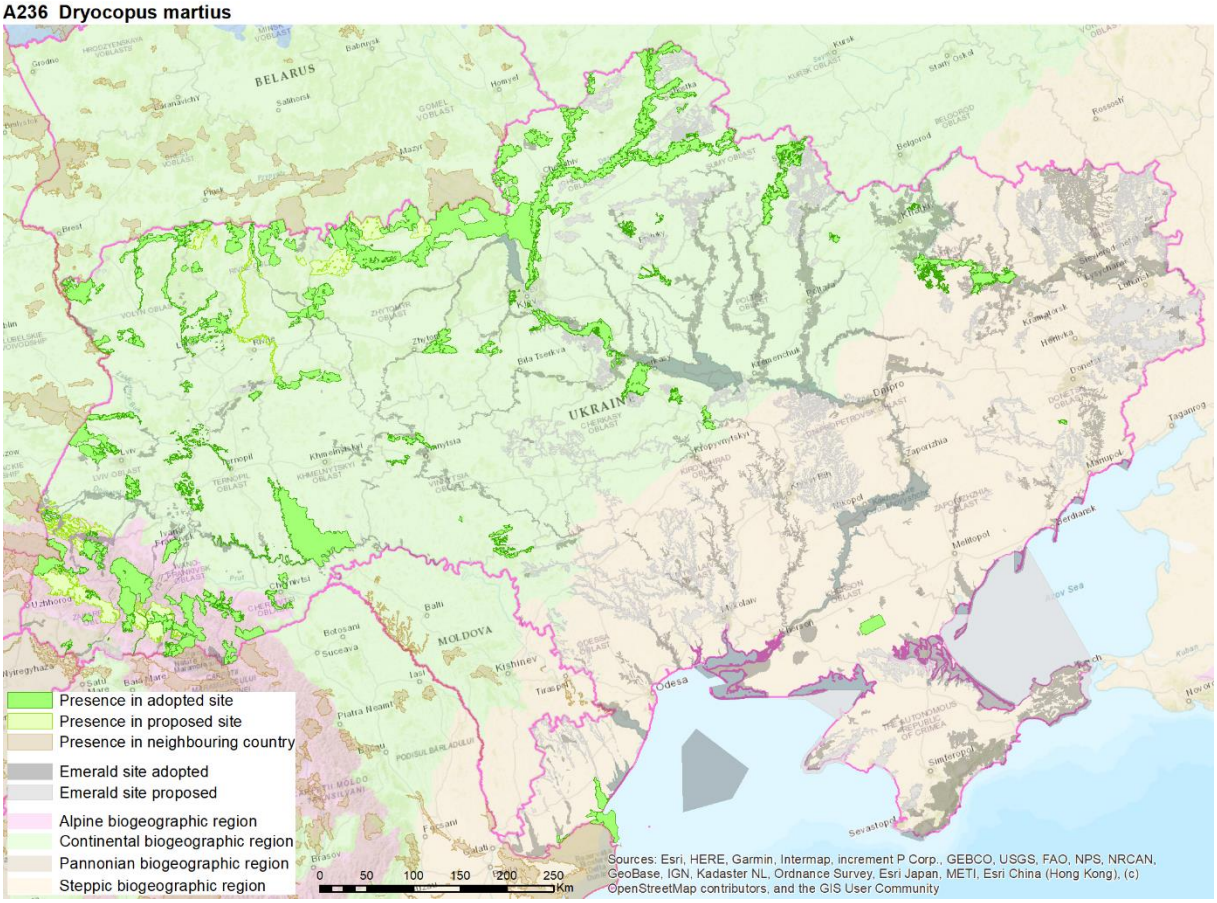
BGR	A231 Coracias garrulus	
Not applicable	Num. of sites:	143 (B:3, C:121, D:19)
	BGR seminar 2018 conclusion:	IN MOD/CD East part of Ukraine, Crimea, Kirovograd region; CD: west
	Recommendation 2025:	Species added to 41 sites, including territories as concluded in the last assessment. Probably sufficient.
	Comments from external experts:	ERL: (3,000–5,000 bp); SDF: r = (26–82 i and 522–559 p); c = (1,022–335 i); p = (1–2 p) Removed due to previous database: UA0000314; UA0000336; UA0000375.
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A231 Coracias garrulus



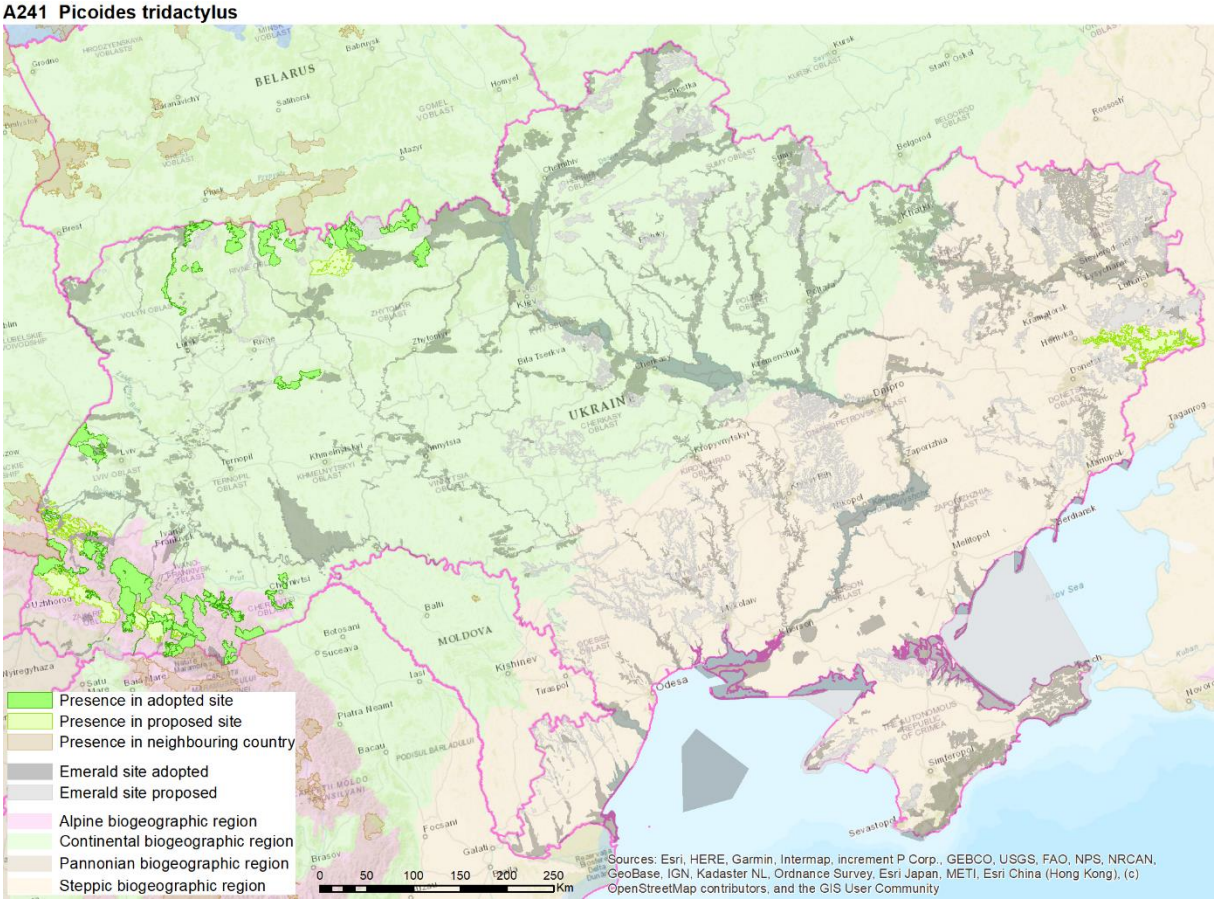
BGR	A236 Dryocopus martius	
Not applicable	Num. of sites:	128 (C:116, D:12)
	BGR seminar 2018 conclusion:	IN MOD/CD
	Recommendation 2025:	Species added to 22 sites, including territories as concluded in the last assessment. IN MIN: Verkhnie Pobozhzhia (UA0000169)
	Comments from external experts:	ERL: (3,000–8,000 bp); SDF: r = (45–170 i and 865–1,117 p); c = (2 i); p = (37–63 i and 1,271–1,823 p)
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A236 Dryocopus martius



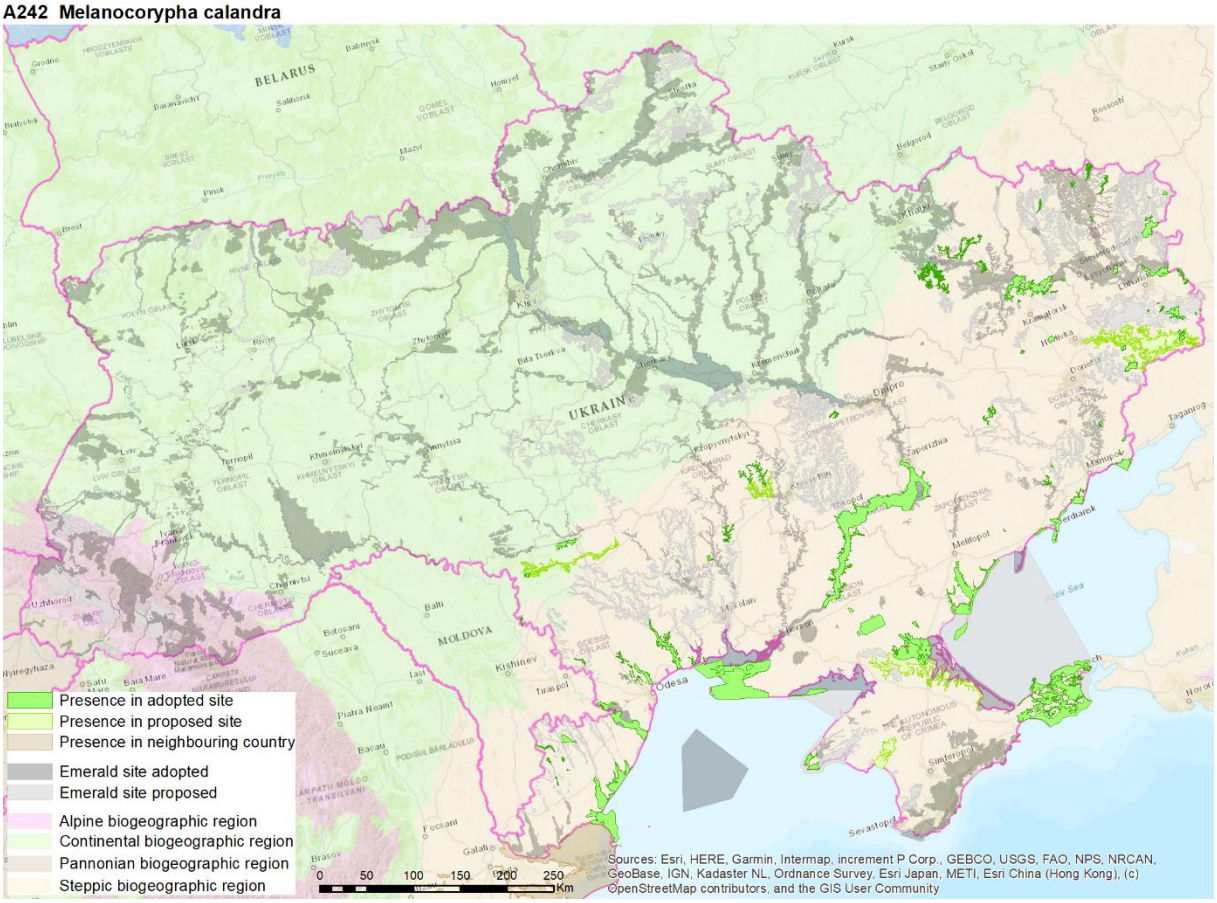
BGR	A241 Picoides tridactylus	
Not applicable	Num. of sites:	40 (B:8, C:20, D:12)
	BGR seminar 2018 conclusion:	IN MOD/CD CD: 6 sites
	Recommendation 2025:	Species added to 8 new sites, including the Carpathians, as concluded in the last assessment. Remove 2 Donetsk sites.
	Comments from external experts:	ERL: (800–1200 bp); SDF: r = (7–17 i and 484–431 p); c = (2–3 i); p = (37–53 p); w = (7–10 i); Species added to 8 new sites, including the Carpathians, as concluded in the last assessment. Except for 2 Donetsk sites, the southern sites have been deleted (are these Donetsk sites correct?). Probably sufficient.
	Comments from local experts:	Should be deleted from the Donetsk region; the species occurs only in the western and northwestern parts of the country.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A241 Picoides tridactylus



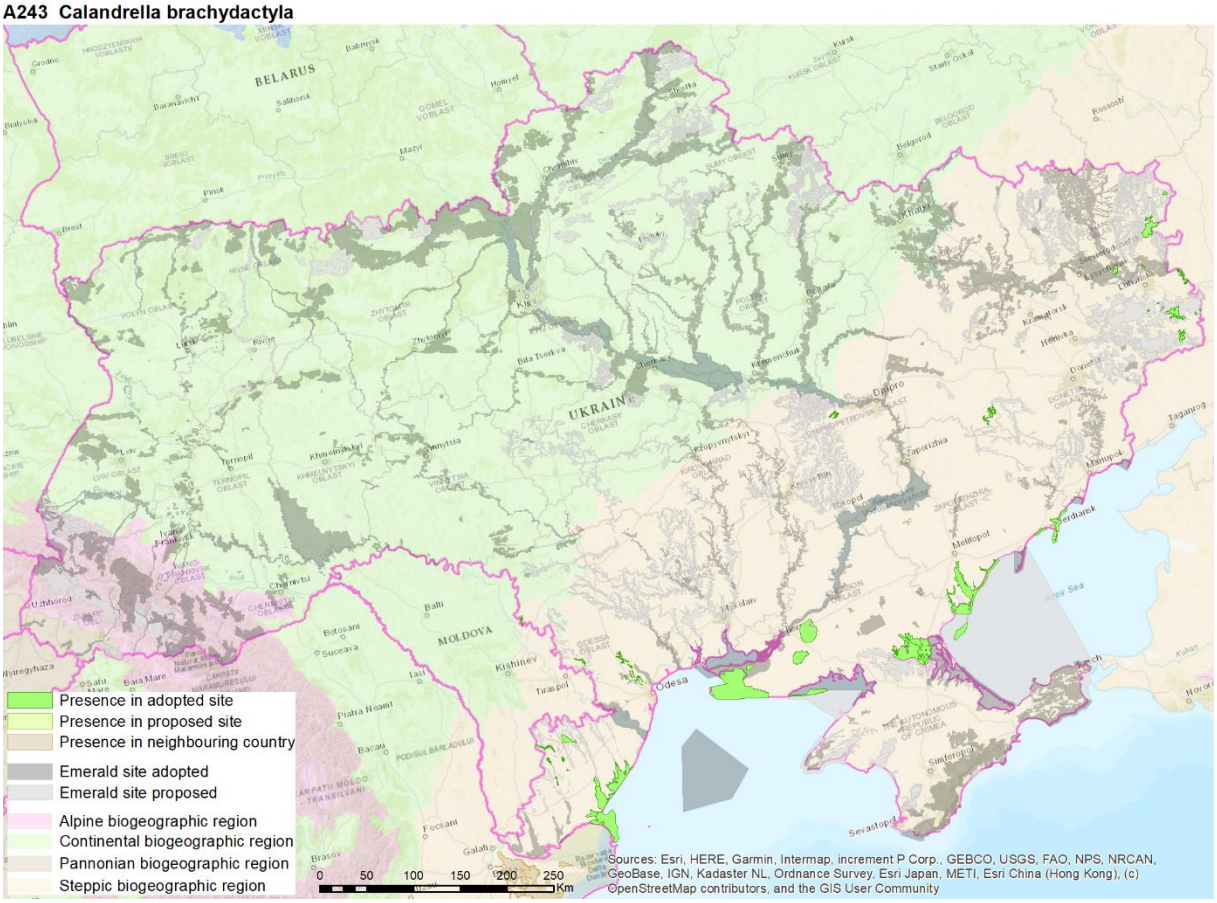
BGR	A242 Melanocorypha calandra	
Not applicable	Num. of sites:	117 (B:5, C:101, D:11)
	BGR seminar 2018 conclusion:	IN MOD/CD IN MOD: Kharkiv, Donetsk regions, Sivash, South Bug; CD: delete in some sites
	Recommendation 2025:	Species added to 56 sites, including territories as concluded in the last assessment. Probably sufficient.
	Comments from external experts:	ERL: (140,000–210,000 bp); SDF: r = (170–300 i and 5,493–5,297 p); c = (9,135–15,346 i); p = (239 i); w = (4,265–7,786 i and 200 nan) Unadded: Southern Bug and Snyvoda valleys in Vinnytsya region (UA0000333) (no data found on the occurrence of the species at the site).
	Comments from local experts:	Verify the records from the Vinnytsia region.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A242 Melanocorypha calandra



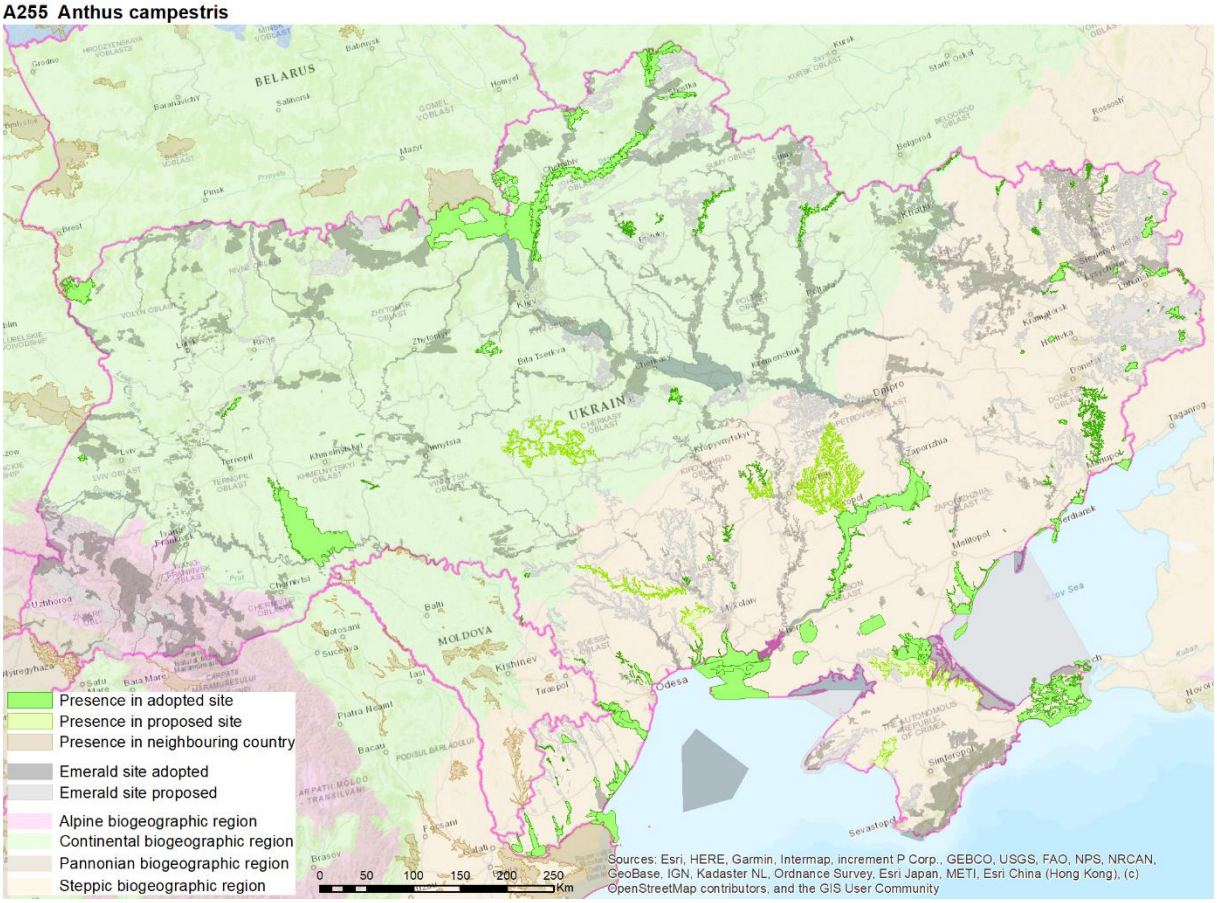
BGR	A243 Calandrella brachydactyla	
Not applicable	Num. of sites:	27 (B:1, C:26)
	BGR seminar 2018 conclusion:	SR
	Recommendation 2025:	IN MIN: Samarskyi Lis (Dnipro, UA0000212); SR east
	Comments from external experts:	ERL: (5,500–8,000 bp); SDF: r = (184–448 p); c = (546–445 i); Species added to 3 sites. IN MIN: Samarskyi Lis (Dnipro, UA0000212).
	Comments from local experts:	Verify all the records.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A243 Calandrella brachydactyla



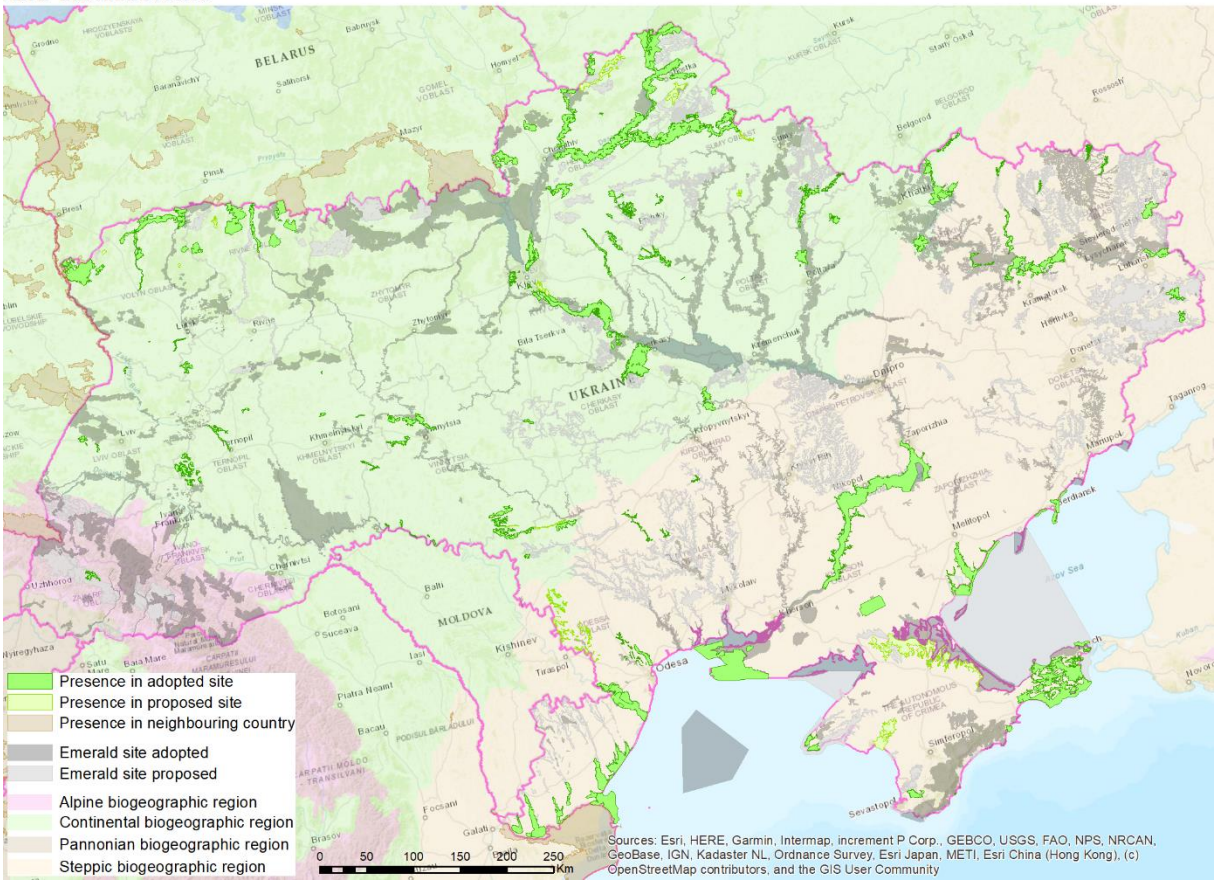
BGR	A255 Anthus campestris	
Not applicable	Num. of sites:	145 (B:3, C:130, D:12)
	BGR seminar 2018 conclusion:	IN MOD/CD Kharkiv, Lugansk regions, Upper Dnister
	Recommendation 2025:	IN MIN: Savakliy and Sugokliya river valleys (Proposed site: UA0000410), Dnistrovskyi Kanion NNP (UA0000122). Coverage gap in the N-W part (Rivne region).
	Comments from external experts:	Species added to 59 sites, including Kharkiv and Lugansk regions, as concluded in the last assessment. IN MIN: Savakliy and Sugokliya river valleys (Proposed site: UA0000410), Dnistrovskyi Kanion NNP (UA0000122). According to EBBA2 and available databases, there seems to be a coverage gap in the N-W (Rivne region).
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A255 Anthus campestris



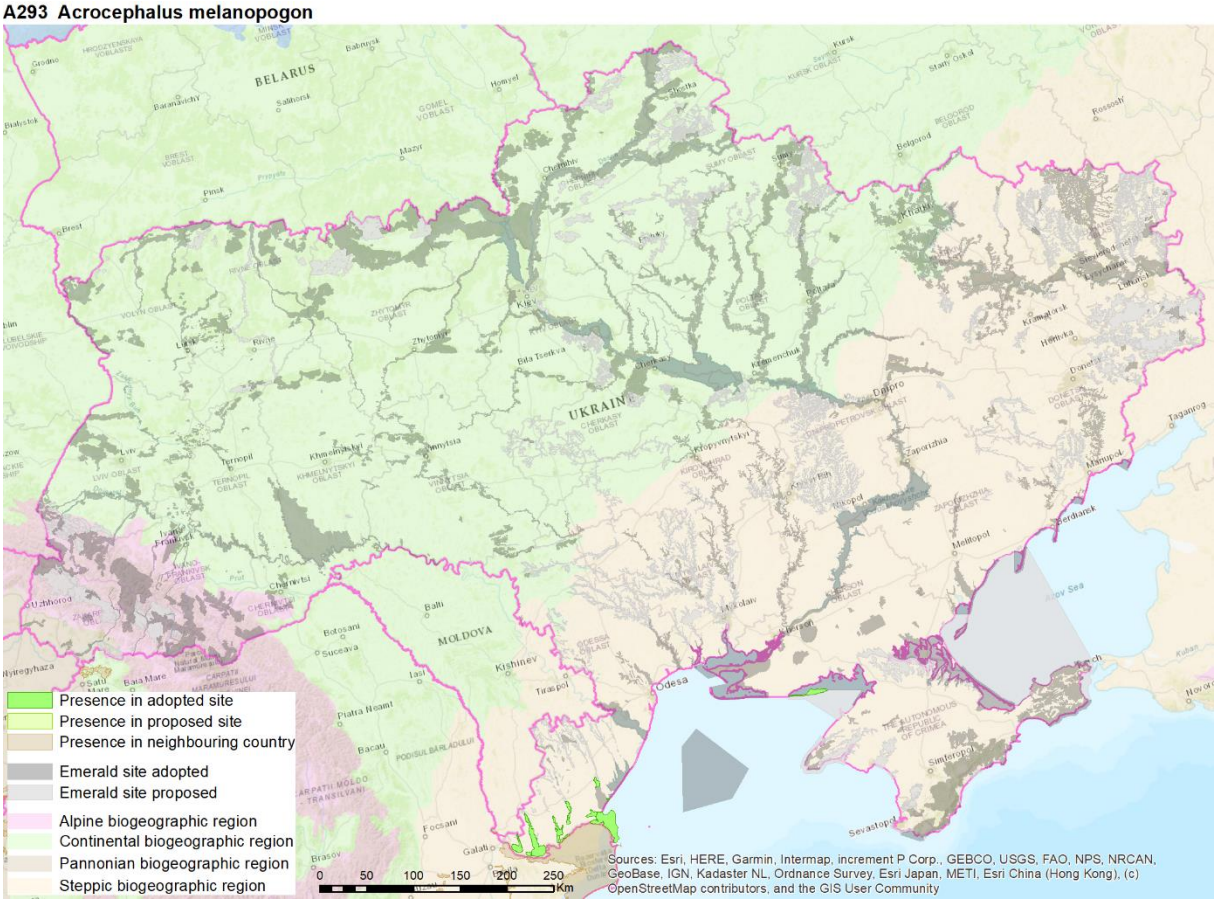
BGR	A272 Luscinia svecica	
Not applicable	Num. of sites:	142 (C:113, D:29)
	BGR seminar 2018 conclusion:	IN MOD/CD CD: status
	Recommendation 2025:	Species added to 46 sites. IN MIN: Horyn river valley in Rivne region (Proposed site: UA0000413); Verkhnie Pobozhzhia (UA0000169); Samarskyi Lis (Dnipro region: UA0000212); Dniprovske Reservoir (UA0000093);
	Comments from external experts:	ERL: (240,000–350,000 bp); SDF: r = (38–51 i and 6,829–9,791 p); c = (17,123–25,534 i and 350–700 p and 200–300 nan); p = (6–12 p); w = (6–10 i)
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A272 Luscinia svecica



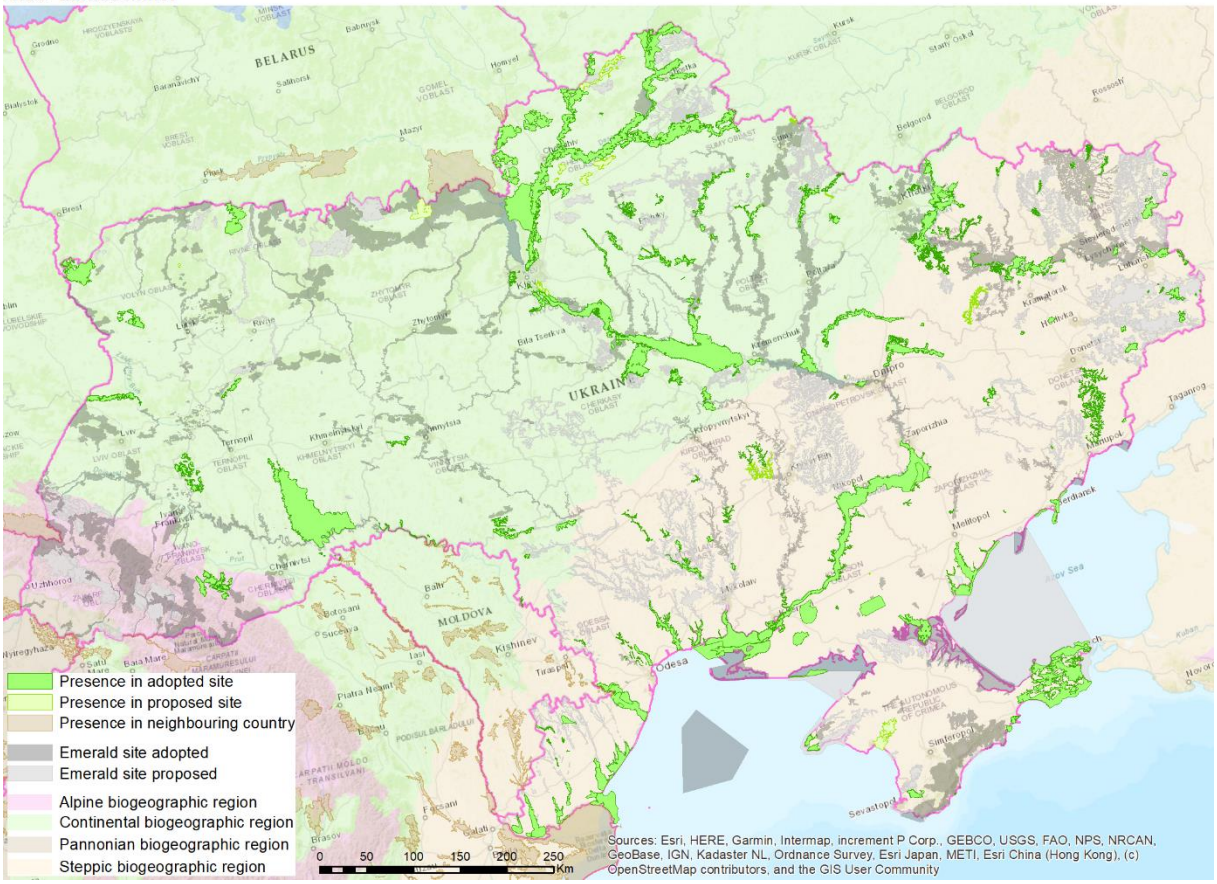
BGR	A293 Acrocephalus melanopogon	
Not applicable	Num. of sites:	6 (B:1, C:4, D:1)
	BGR seminar 2018 conclusion:	SR
	Recommendation 2025:	Species added to 3 sites. Probably sufficient given the available data.
	Comments from external experts:	ERL: (12 bp); SDF: r = (40 p); c = (201–10 i)
	Comments from local experts:	Agree
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A293 Acrocephalus melanopogon



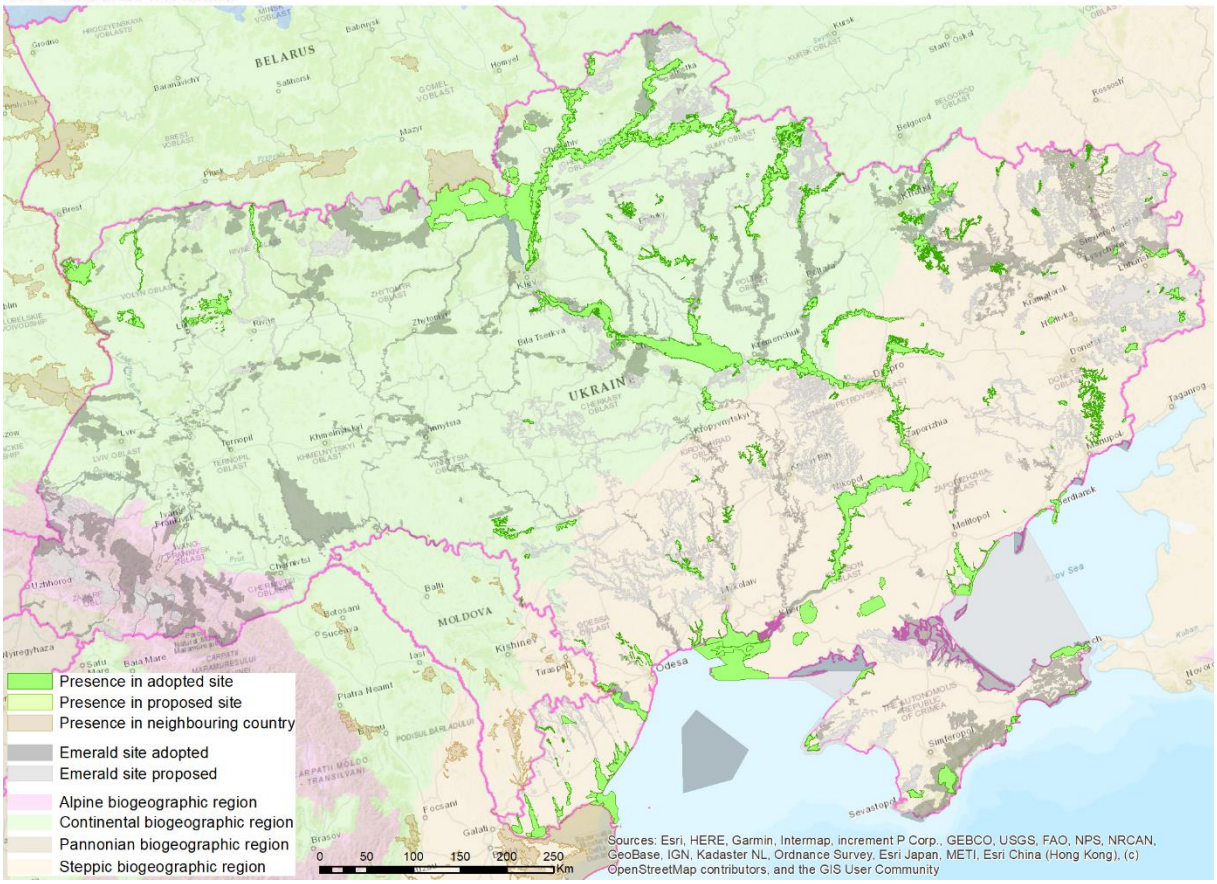
BGR	A339 Lanius minor	
Not applicable	Num. of sites:	249 (C:212, D:37)
	BGR seminar 2018 conclusion:	IN MOD/CD South Bug, Upper Dnister, Kharkiv, Lugansk regions
	Recommendation 2025:	Species added to 103 sites. IN MIN: Southern Bug and Snyvoda valleys in Vinnytsya region (UA0000333); Reevaluate the population type in SDF.
	Comments from external experts:	ERL: (30,000–60,000 bp); SDF: r = (60–150 i and 2,013–1905 p); c = (10,564–5,912 i); Species added to 103 sites. IN MIN: Southern Bug and Snyvoda valleys in Vinnytsya region (UA0000333)
	Comments from local experts:	Experts agree; maybe revise - reduce - population estimates.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A339 Lanius minor



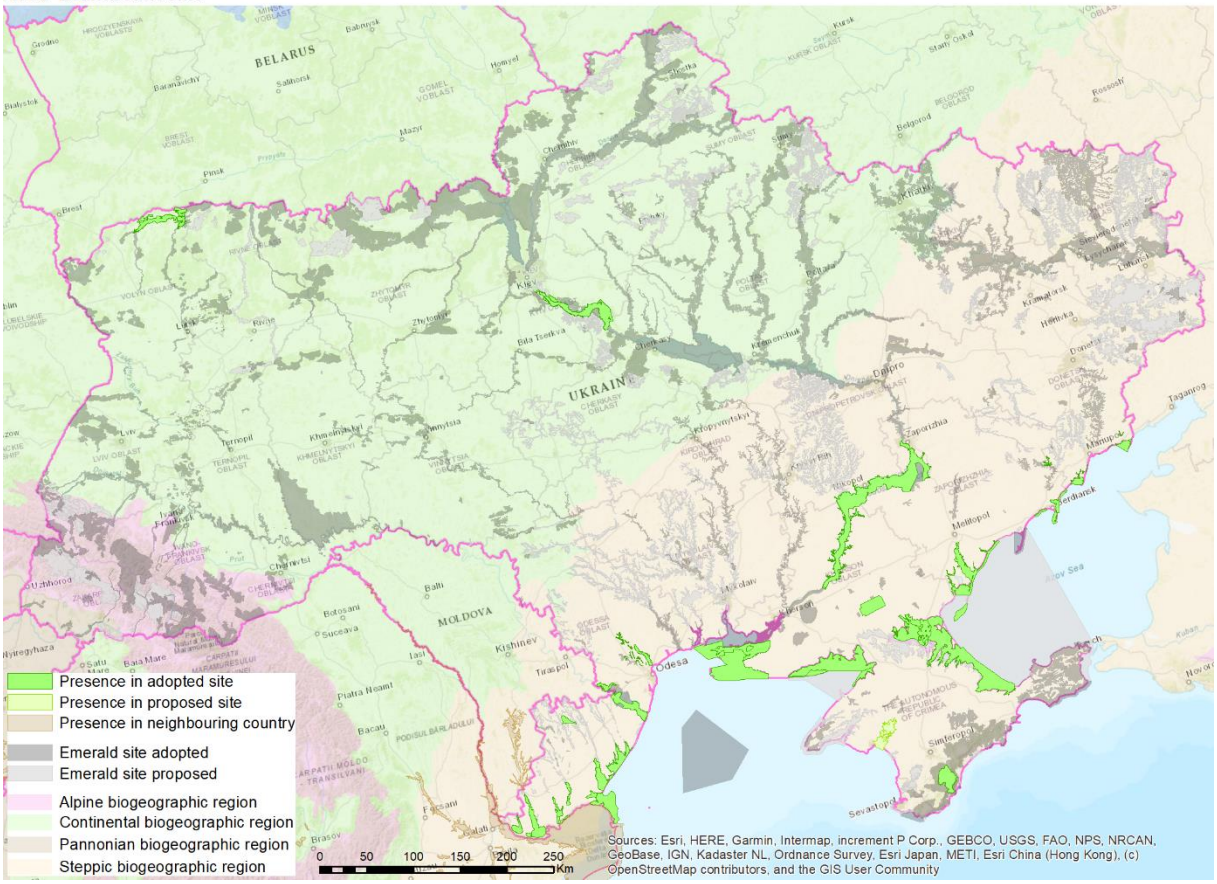
BGR	A379 Emberiza hortulana	
Not applicable	Num. of sites:	196 (B:2, C:170, D:24)
	BGR seminar 2018 conclusion:	IN MOD/CD South part of Ukraine, Kharkiv region, Teteriv, Psel
	Recommendation 2025:	Species added to 69 sites. Remains IN MIN: Teteriv river valley (UA0000320).
	Comments from external experts:	ERL: (100,000–150,000 bp); SDF: r = (50–200 i and 4,204–5,296 p); c = (14,477–9,820 i); Species added to 69 sites. Remains IN MIN: Teteriv river valley (UA0000320).
	Comments from local experts:	Drop data from birdwatchers (or indicate that these are data from birdwatchers, which are not verified).
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A379 Emberiza hortulana



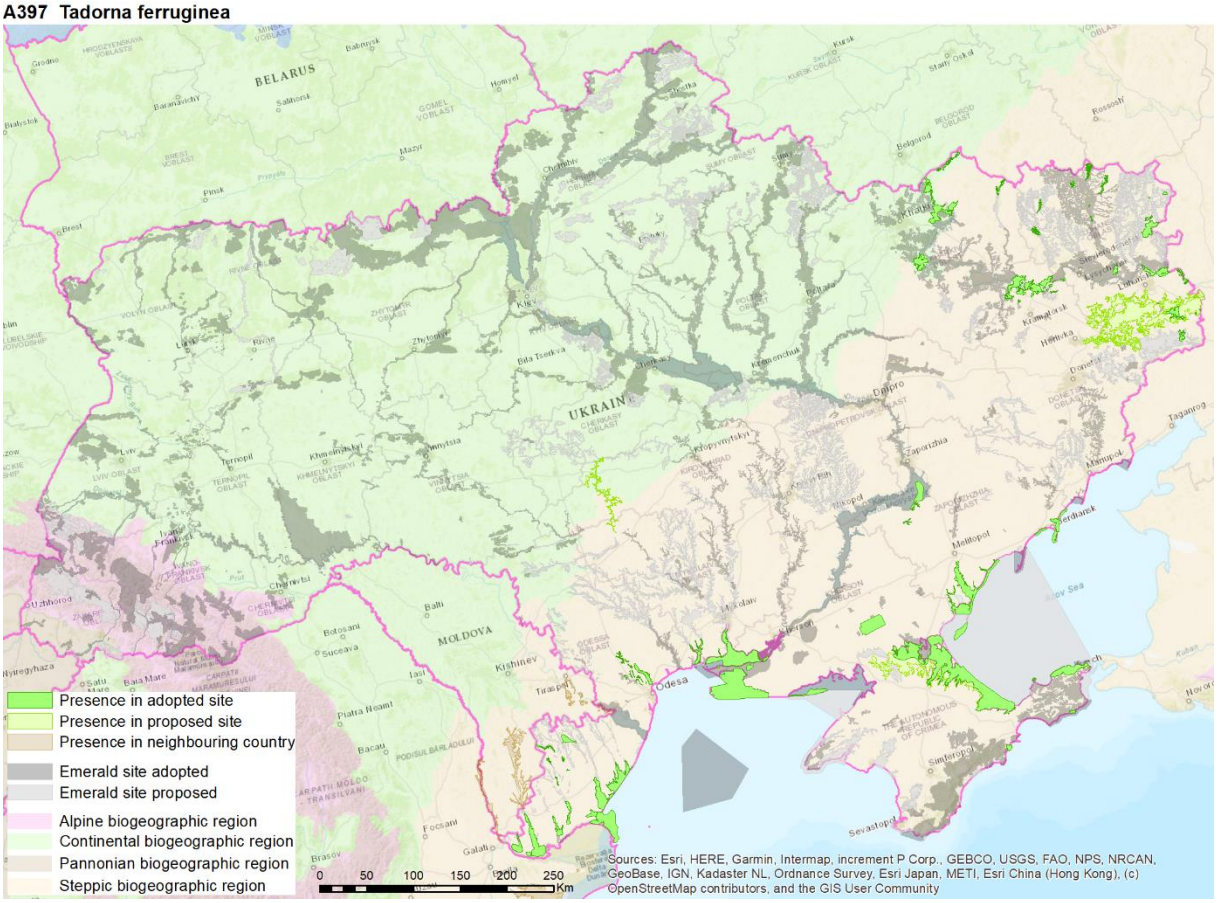
BGR	A396 Branta ruficollis	
Not applicable	Num. of sites:	33 (A:4, B:11, C:14, D:4)
	BGR seminar 2018 conclusion:	IN MAJ
	Recommendation 2025:	Species added to 10 sites. Add sites in the south of Crimea (outside the Crimean Mountains). Remove: Crimean Nature Reserve (UA0000005).
	Comments from external experts:	ERL: (2,000–5,500 bp); SDF: c = (5,022–880 i); w = (3,251–4,955 i); Removed due to previous database: UA0000411.
	Comments from local experts:	Records from the Dnipro region are not of major importance for conservation of the species; therefore, additional sites should be included. BirdLife data are considered the most reliable. The Crimean Mountains should be excluded, while the Lebiazhyi Islands remain.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A396 Branta ruficollis



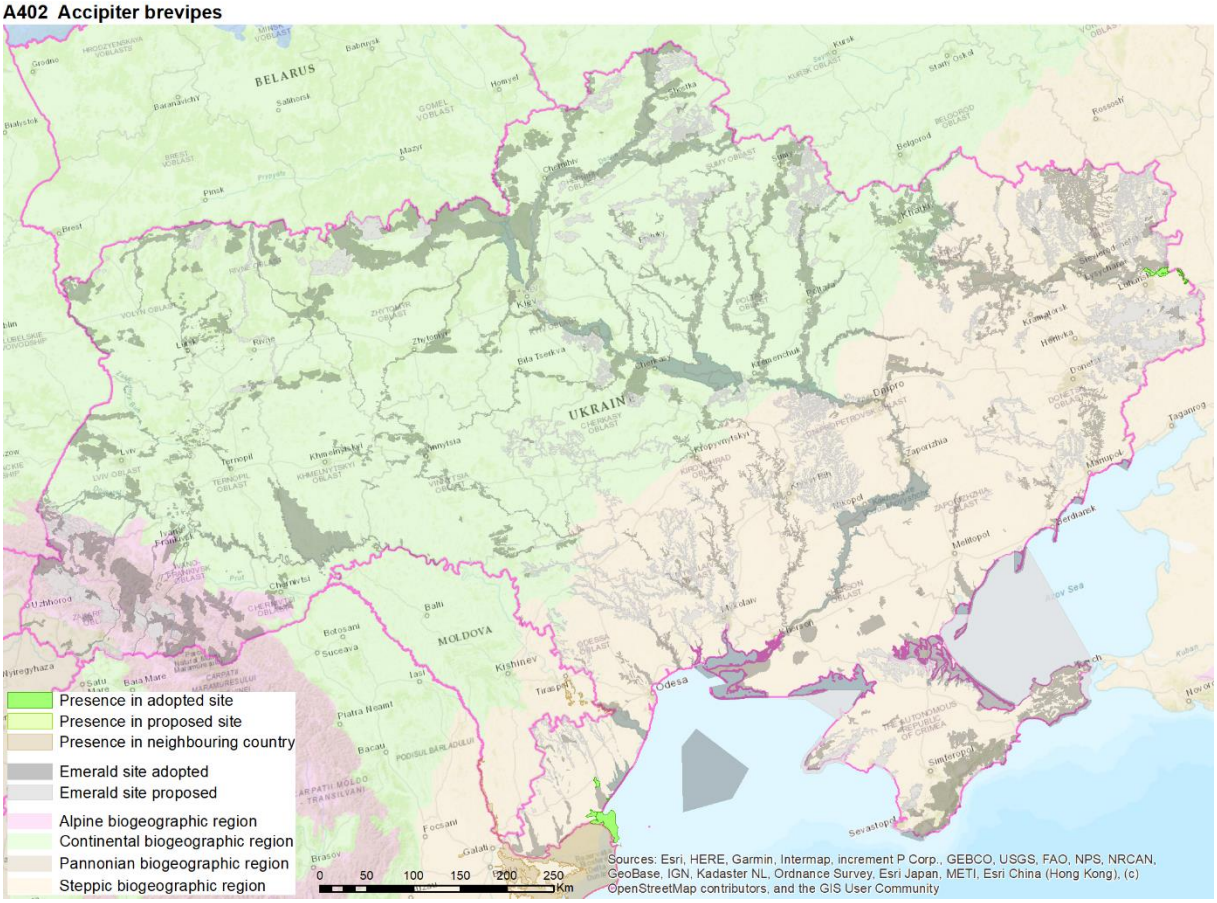
BGR	A397 Tadorna ferruginea	
Not applicable	Num. of sites:	60 (B:14, C:34, D:12)
	BGR seminar 2018 conclusion:	IN MIN/IN MOD IN MOD: Syvash, Donetsk region, Dnipropetrovsk region; IN MIN: Syvash
	Recommendation 2025:	Species added to 16 sites. IN MIN: Dniprovske Reservoir (UA0000093)
	Comments from external experts:	ERL: (300–500 bp); SDF: r = (20–9 i and 58–97 p); c = (574–605 i); p = (3–4 p); w = (252–505 i); Species added to 16 sites. IN MIN: Dniprovske Reservoir (UA0000093); Removed due to previous database: UA0000273; UA0000274; UA0000280; UA0000282; UA0000289; UA0000297; UA0000298; UA0000300; UA0000301; UA0000303; UA0000314; UA0000316; UA0000319; UA0000367; UA0000371; UA0000372; UA0000376; UA0000377; UA0000378; UA0000379; UA0000386; UA0000430; UA0000439; UA0000440; UA0000465; UA0000569; UA0000570; UA0000576; UA0000577; UA0000594; UA0000597.
	Comments from local experts:	Data from sites in Sumy Oblast should be verified, as breeding in this region appears unlikely.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A397 Tadorna ferruginea



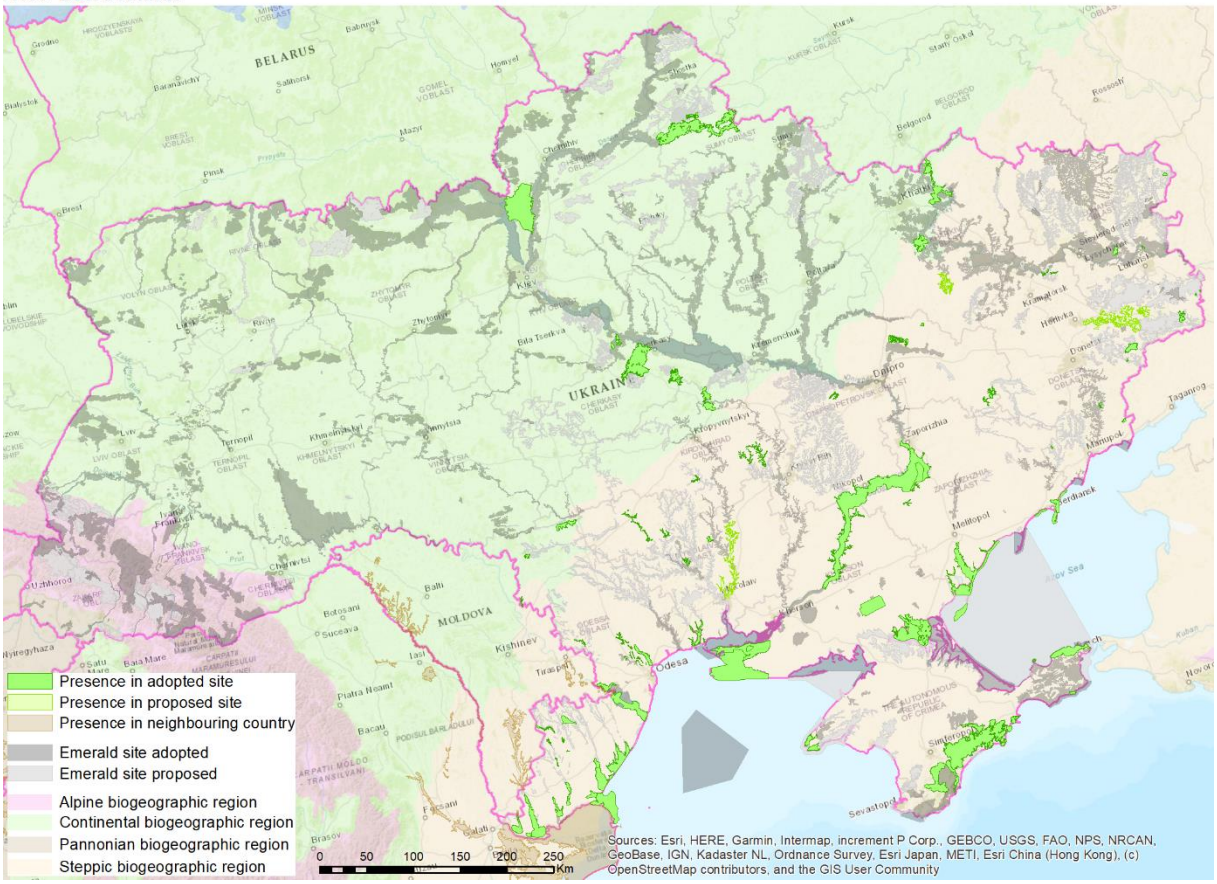
BGR	A402 Accipiter brevipes	
Not applicable	Num. of sites:	Adopted: 3 (A:1, C:1, D:1)
	BGR seminar 2018 conclusion:	SR/CD back to the deleted site
	Recommendation 2025:	SR Luhansk
	Comments from external experts:	ERL: (5–15 bp); SDF: r = (7–10 p); c = (1 i); Danube Biosphere Reserve site (UA0000018) is not a breeding site according to SDF? Non-breeding sightings are recorded from the surrounding area: Pryirpinnya and Chernechyi Forest (UA0000338) & Ponyzia Stuhny (Kyiv region: UA0000175).
	Comments from local experts:	Records from the Danube area and Kyiv Oblast should be excluded—particularly those originating from birdwatchers—since breeding in these areas is unlikely. The Luhansk Oblast should be retained.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A402 Accipiter brevipes



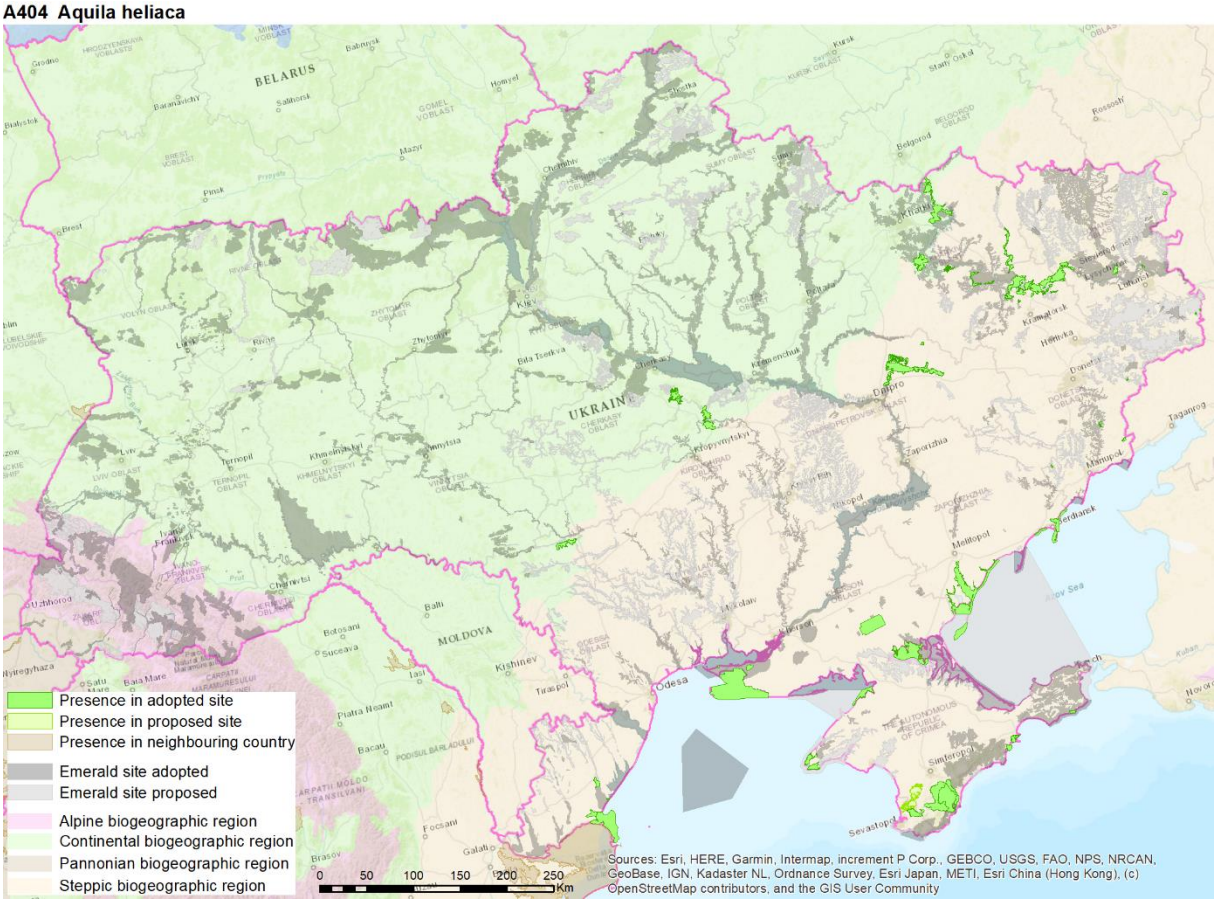
BGR	A403 Buteo rufinus	
Not applicable	Num. of sites:	87 (B:16, C:48, D:23)
	BGR seminar 2018 conclusion:	IN MOD/CD Kyiv, Kharkiv, Donetsk, Cherkasy regions, Girskiy Tikitch, Ingul, Ingulets, Sula, Eastern Sivash
	Recommendation 2025:	Species added to 29 sites since 2018. Remains IN MIN: Middle Inhulets river valley (Dnipropetrovsk Region, UA0000310); Sula river valley (UA0000309); Verify: Mizhrichynskyi Regional Landscape Park (UA0000047) and Chornobylskyi Biosphere Reserve (UA0000046).
	Comments from external experts:	ERL: (800–1000 bp); SDF: r = (10–23 i and 35–70 p); c = (107–145 i and 5 nan); w = (28–44 i); Species added to 29 sites since 2018. Remains IN MIN: Middle Inhulets river valley (Dnipropetrovsk Region, UA0000310); Sula river valley (UA0000309); Removed due to previous database: UA0000273; UA0000274; UA0000276; UA0000277; UA0000278; UA0000279; UA0000280; UA0000282; UA0000286; UA0000287; UA0000288; UA0000289; UA0000291; UA0000295; UA0000297; UA0000298; UA0000300; UA0000301; UA0000303; UA0000305; UA0000306; UA0000308; UA0000314; UA0000316; UA0000319; UA0000333; UA0000336; UA0000343; UA0000349; UA0000350; UA0000351; UA0000366; UA0000367; UA0000372; UA0000376; UA0000377; UA0000378; UA0000379; UA0000385; UA0000386; UA0000389; UA0000396; UA0000411; UA0000414; UA0000427; UA0000438; UA0000439; UA0000440; UA0000441; UA0000442; UA0000456; UA0000458; UA0000461; UA0000462; UA0000464; UA0000467; UA0000468; UA0000472; UA0000566; UA0000569; UA0000571; UA0000579; UA0000586; UA0000592; UA0000596; UA0000597.
	Comments from local experts:	Experts agree, but verify the Chernobyl area.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A403 Buteo rufinus



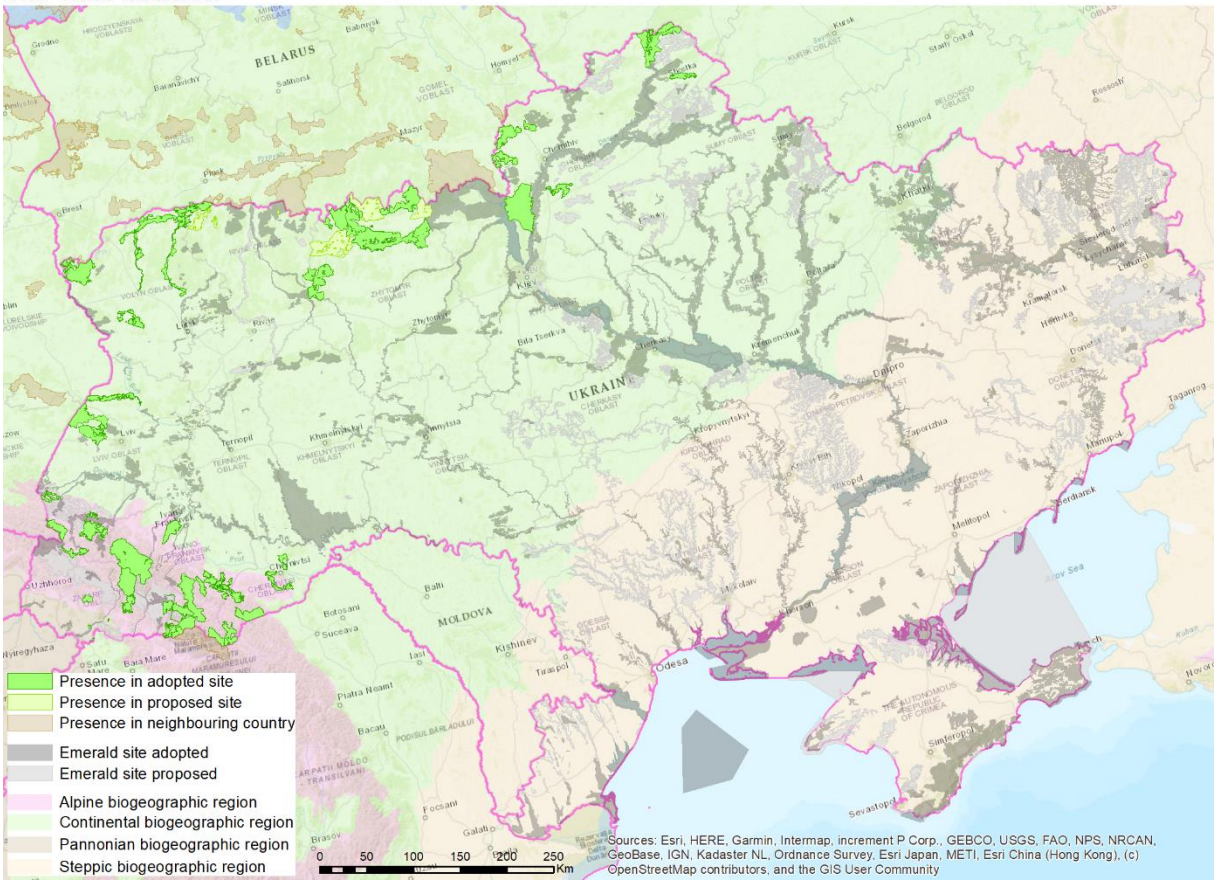
BGR	A404 Aquila heliaca	
Not applicable	Num. of sites:	37 (A:1, B:3, C:17, D:16)
	BGR seminar 2018 conclusion:	IN MOD Kharkivska region
	Recommendation 2025:	Species added to 9 sites, including Kharkiv. Sufficient?
	Comments from external experts:	ERL: (45–100 bp); SDF: r = (6–7 i and 15–24 p); c = (33–92 i); w = (5–13 i); Species added to 9 sites. According to EBBA2, breeding site coverage is sufficient. The number of bp differs from ERL. Sufficient? Removed due to previous database: UA0000273; UA0000275; UA0000277; UA0000279; UA0000280; UA0000283; UA0000284; UA0000286; UA0000288; UA0000291; UA0000296; UA0000297; UA0000298; UA0000299; UA0000301; UA0000309; UA0000310; UA0000314; UA0000315; UA0000316; UA0000317; UA0000318; UA0000355; UA0000373; UA0000376; UA0000377; UA0000378; UA0000384; UA0000399; UA0000411; UA0000414; UA0000465; UA0000564; UA0000598.
	Comments from local experts:	Experts agree, but information from birdwatchers without photographic evidence should not be considered reliable.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A404 Aquila heliaca



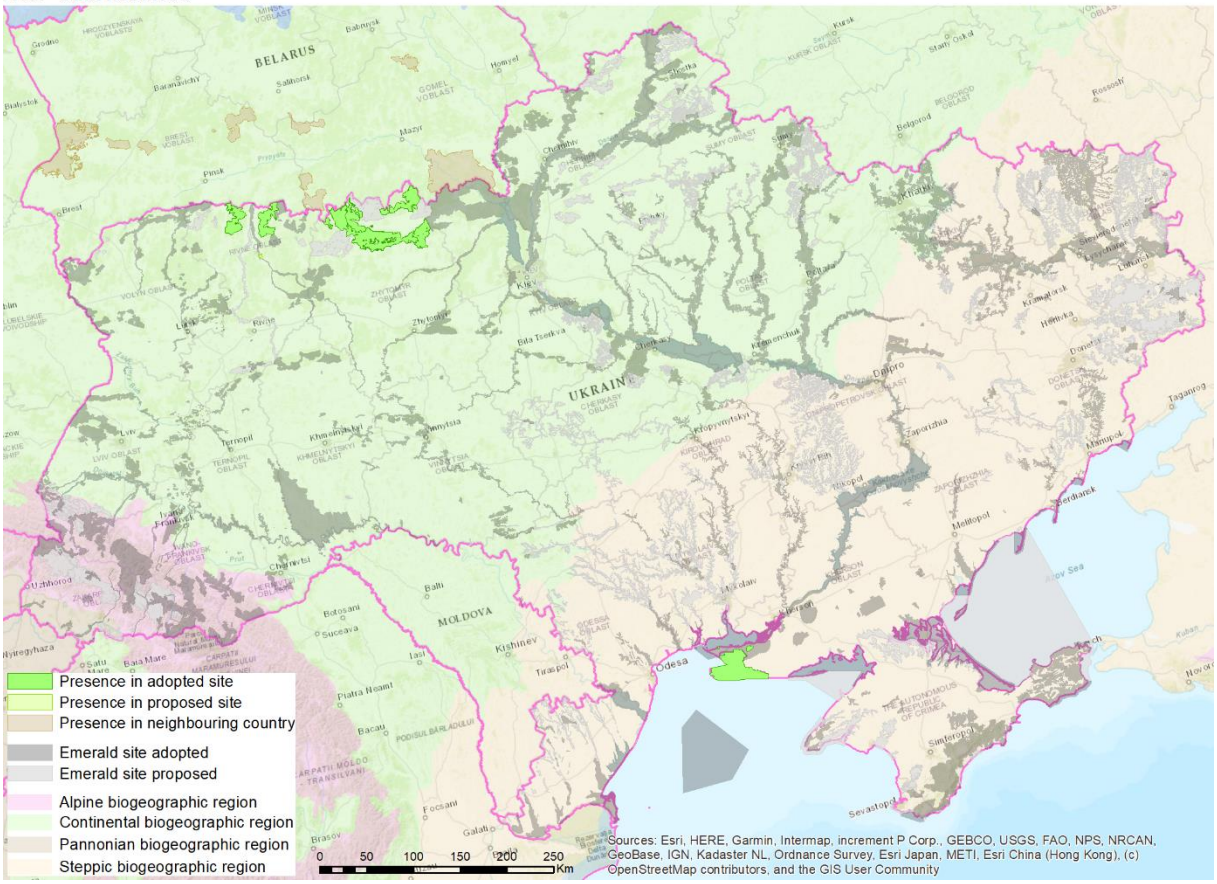
BGR	A409 Tetrao tetrix tetrix	
Not applicable	Num. of sites:	70 (B:24, C:45, D:1)
	BGR seminar 2018 conclusion:	IN MOD/CD Kharkivska region
	Recommendation 2025:	Species added to 23 sites. IN MIN: Gomilshanski Lisy NNP (Kharkiv: UA0000034)
	Comments from external experts:	ERL: (2,500–3,500 bp); SDF: r = (232–302 i and 117–215 p and 1,051–1,812 m); c = (15–60 i); w = (1,253–1,255 i); Species added to 23 sites. IN MIN: Gomilshanski Lisy NNP (Kharkiv: UA0000034).
	Comments from local experts:	No comments
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A409 Tetrao tetrix tetrix



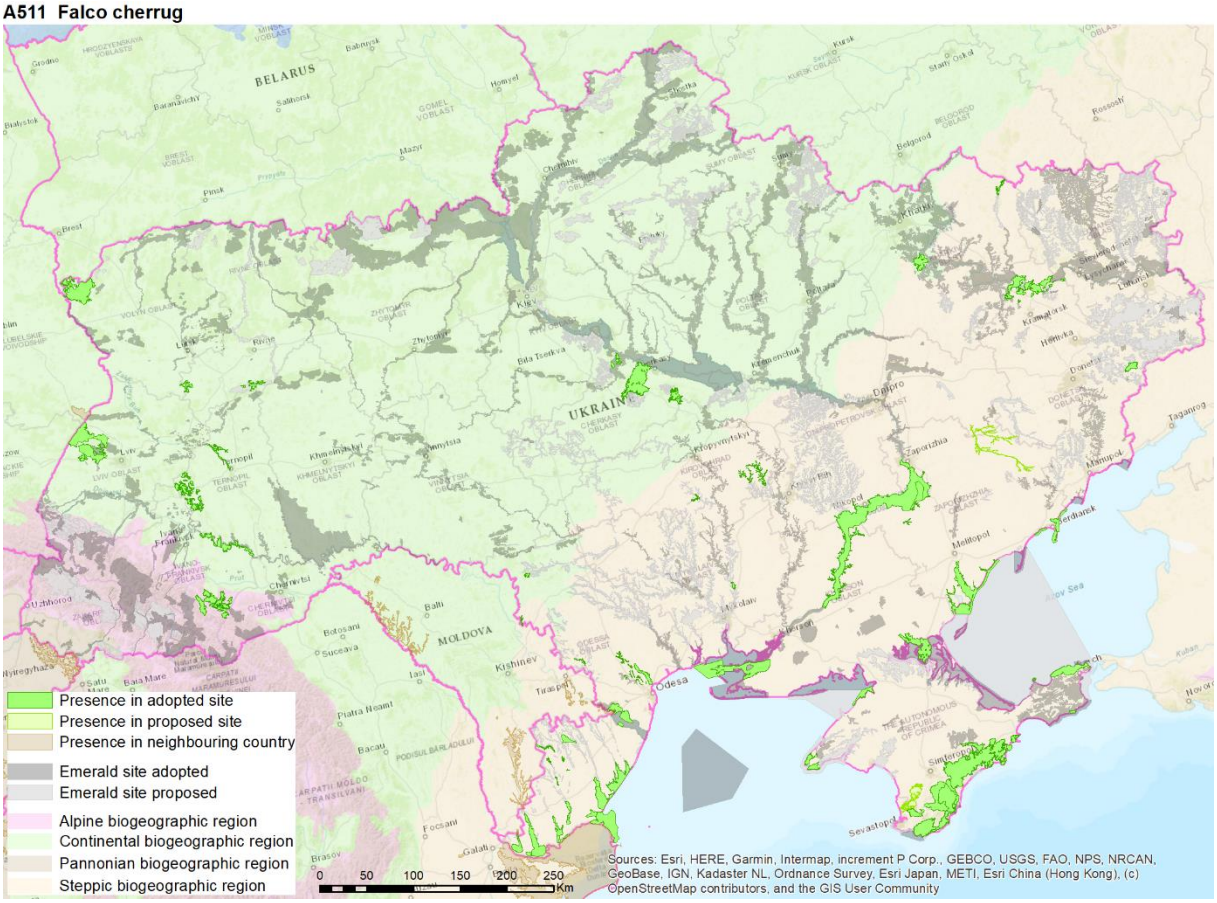
BGR	A457 Strix nebulosa	
Not applicable	Num. of sites:	11 (A:5, B:4, D:2)
	BGR seminar 2018 conclusion:	IN MOD/CD IN MOD: Polissya region, Kyiv region; CD: Askaniia-Nova
	Recommendation 2025:	Remove: Black Sea Biosphere Reserve (UA0000017); SR: Kyiv region
	Comments from external experts:	ERL: (100–200 bp); SDF: r = (43–62 p); p = (1 i); w = (21–65 i); Species added to 1 site and deleted from Askaniia-Nova Biosphere Reserve (UA0000016). Remove: Black Sea Biosphere Reserve (UA0000017); SR: Kyiv region; Removed due to previous database: UA0000335; UA0000413.
	Comments from local experts:	Exclude Black Sea Biosphere Reserve; it might be a technical mistake.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A457 Strix nebulosa



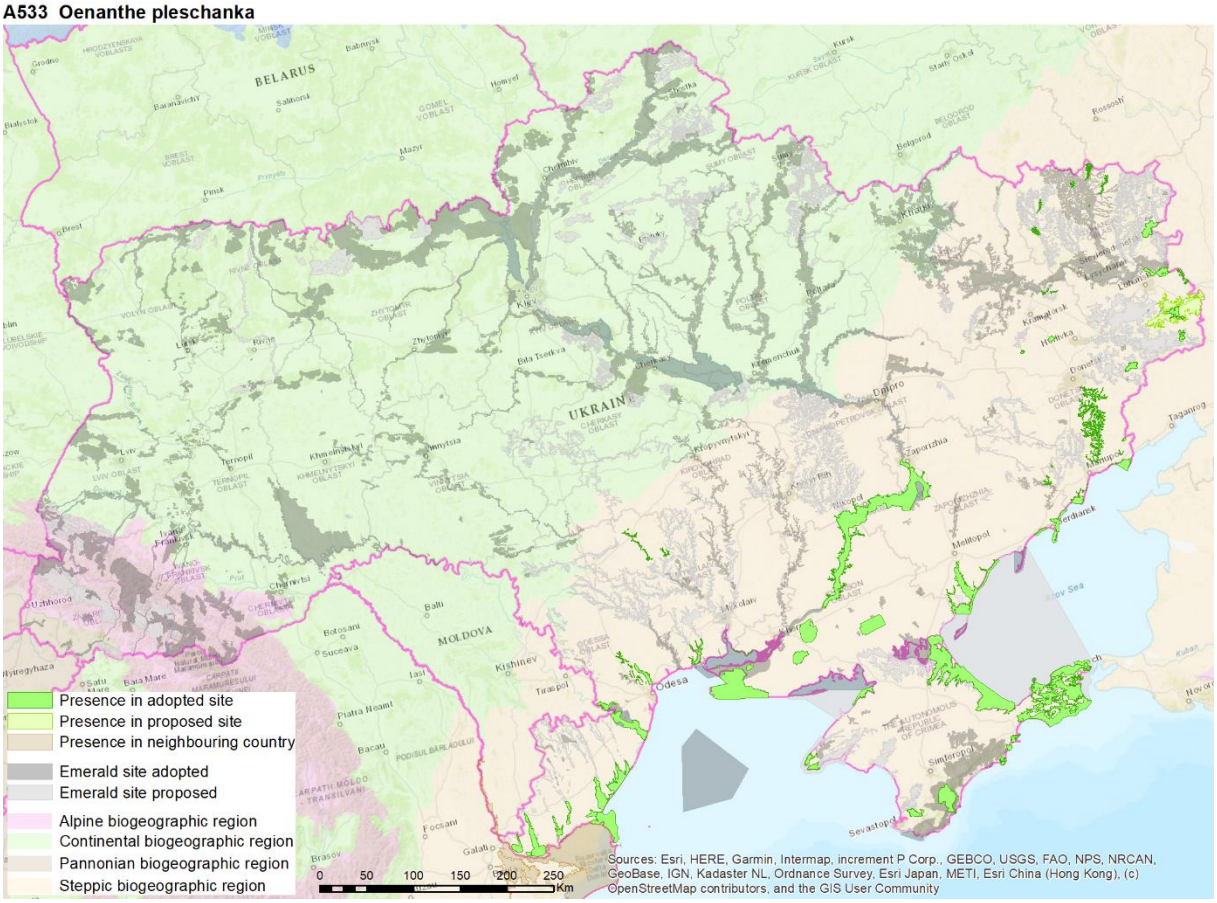
BGR	A511 Falco cherrug	
Not applicable	Num. of sites:	71 (B:14, C:34, D:23)
	BGR seminar 2018 conclusion:	IN MOD/CD
	Recommendation 2025:	IN MOD/CD Zhytomyr region, Khmelnytsky region
	Comments from external experts:	ERL: (170–200 bp); BiE3: (45–75 p); SDF: r = (4–11 i and 16–46 p); c = (122–172 i); w = (18–52 i); Species added to 9 sites. It is difficult to calculate the coverage of the breeding population because the numbers vary quite a lot for the total population. It is possible that about 10–70% of the breeding population is covered, which seems insufficient for this species. IN MOD/CD Zhytomyr region, Khmelnytsky region; Removed due to previous database: UA0000272; UA0000342; UA0000349; UA0000376; UA0000377; UA0000378; UA0000379; UA0000411; UA0000561; UA0000596; UA0000597.
	Comments from local experts:	Verify with the latest data.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A511 Falco cherrug



BGR	A533 Oenanthe pleschanka	
Not applicable	Num. of sites:	56 (C:48, D:8)
	BGR seminar 2018 conclusion:	IN MOD/CD Pivdenniy Buh, Donetsk region, Kalmius, Siverskyi Donets
	Recommendation 2025:	IN MIN: Tylihul steppes (UA0000458)
	Comments from external experts:	ERL: (2,400–3,800 bp); SDF: r = (11–50 i and 364–452 p); c = (314–402 i); Species added to 14 sites including Kalmius river valley (UA0000314) and Donets region. The addition of the sites Southern Bug and Snyvoda valleys in Vinnytsya region (UA0000333) and Siverskyi Donets river valley in Luhansk Oblast (UA0000315) from the previous assessment is questionable (no data from 2020 on the occurrence of the species at the site have been found).
	Comments from local experts:	Experts agree. Occurrence in the Vinnytsia region is not impossible, though it is not typical. Data from professional sources can be considered reliable; however, records from the first wave of submissions or originating from birdwatchers should be excluded.
	References:	BirdLife International 2021; eBird 2025; gbif.org; Keller et al. 2020; observation.org; uabirds.org

A533 Oenanthe pleschanka



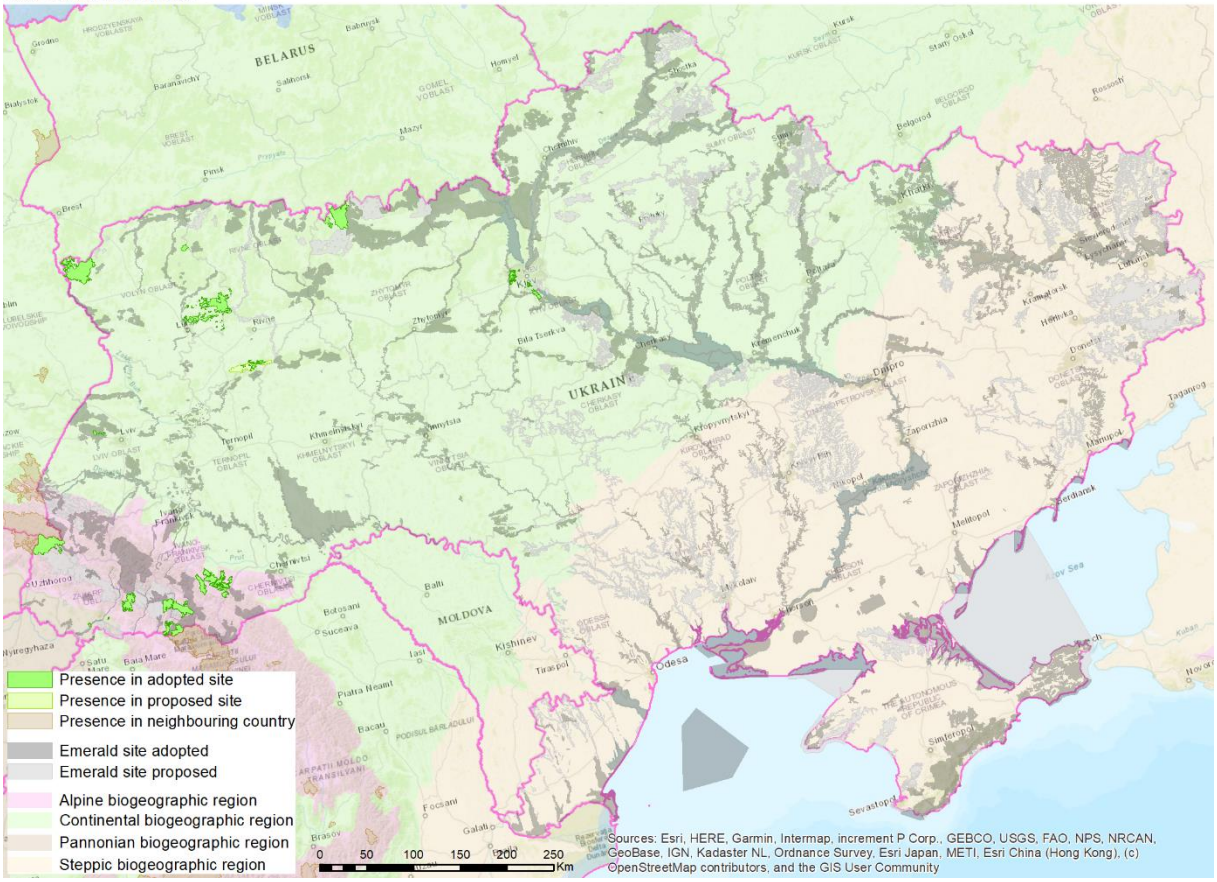
BGR	AAA1 Non-res 6 migratory birds 20000 waterfowl 10000 pairs of seabirds (crit. A4iii)	
Not applicable	Num. of sites:	0
	BGR seminar 2018 conclusion:	IN MOD Results of new surveys
	Recommendation 2025:	The most IBAs meeting criterion A4iii are covered by the Emerald Network. Kakhovs'ke Reservoir (Energodar) bypasses Kakhovske Reservoir (UA0000106). For several IBAs, these are so far considered Emerald Proposed sites.
	Comments from local experts:	n/a
	References:	BirdLife International 2021; gbif.org

BGR	AAA2 Non-Res 6 migratory birds 1 perc of flyway population	
ALP/CON/PAN/STE	Num. of sites:	0
	BGR seminar 2018 conclusion:	IN MOD Results of new surveys
	Recommendation 2025:	Most IBAs meeting criterion B1iiii are covered by the Emerald Network, but for several, this is only a partial coverage. There are differences in area for sites (IBAs being larger): Ikva river valley, Berdyans'ka peninsula, Molochna river valley, Pivdennyj Bug river valley (Goloskiv village), Burshtyns'ke reservoir, Sosyns'kyj protected area, Klivodyns'kyj protected locality, Kakhovs'ke reservoir (Energodar), Fishponds near Kukil'nyky village, Elanchyk river valley, Konka river mouth, Udaj river valley, Tarkhankuts'kyj peninsula, Dnestr valley between Staryj Martyniv and Marynopil' villages
	Comments from local experts:	n/a
	References:	BirdLife International 2021; gbif.org

Plants

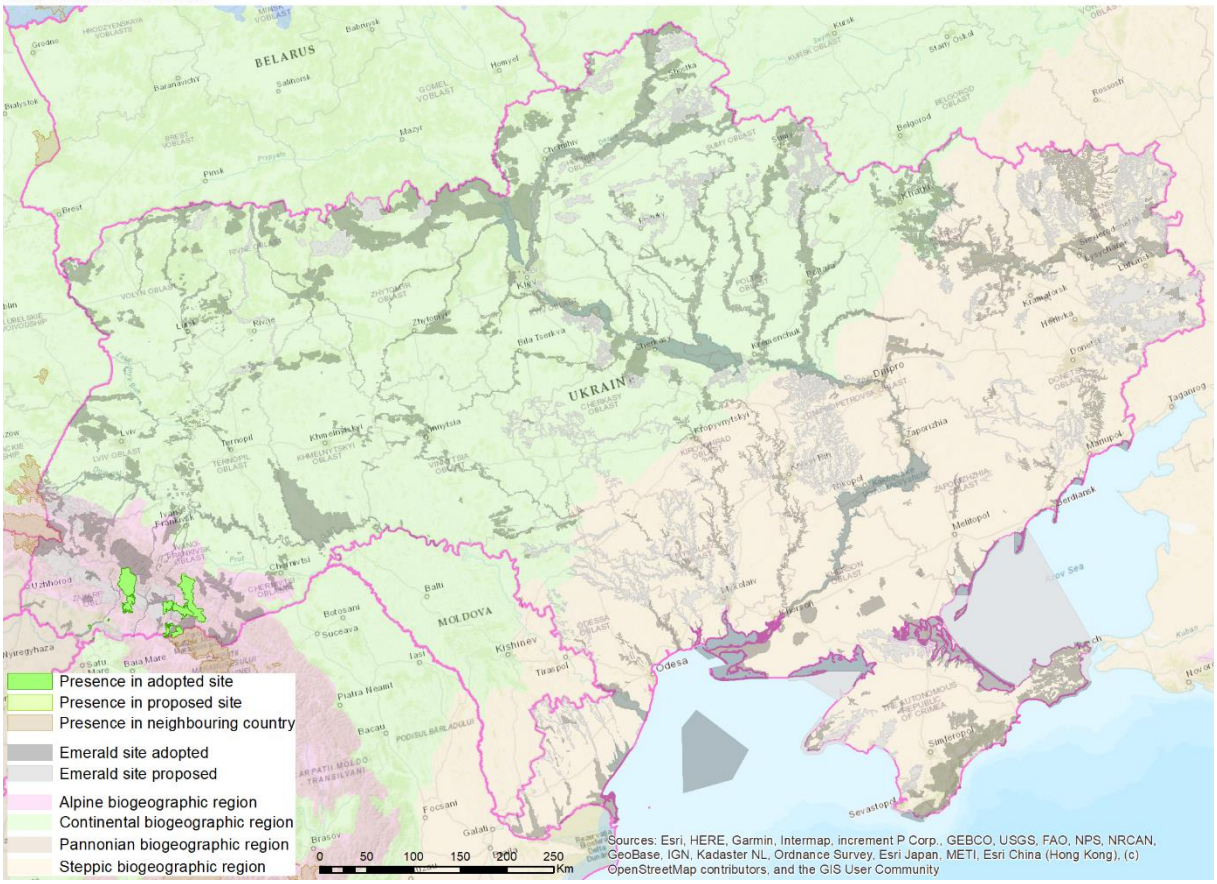
BGR	1381 Dicranum viride	
CON	Num. of sites:	Adopted: 7 (A:1, C:6), Proposed: 1 (D:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Species has been added to 5 sites; now probably sufficient.
	Comments from external experts:	Added to 4 remaining C sites and 1 proposed D site
	Comments from local experts:	Everything known is protected.
	References:	n/a
PAN	Num. of sites:	Adopted: 1 (B:1)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Further research is needed.
	Comments from external experts:	It is unclear whether *Dicranum viride* occurs in the Pannonian region of Ukraine, as no confirmed records exist in this area.
	Comments from local experts:	No further information
	References:	n/a

1381 Dicranum viride



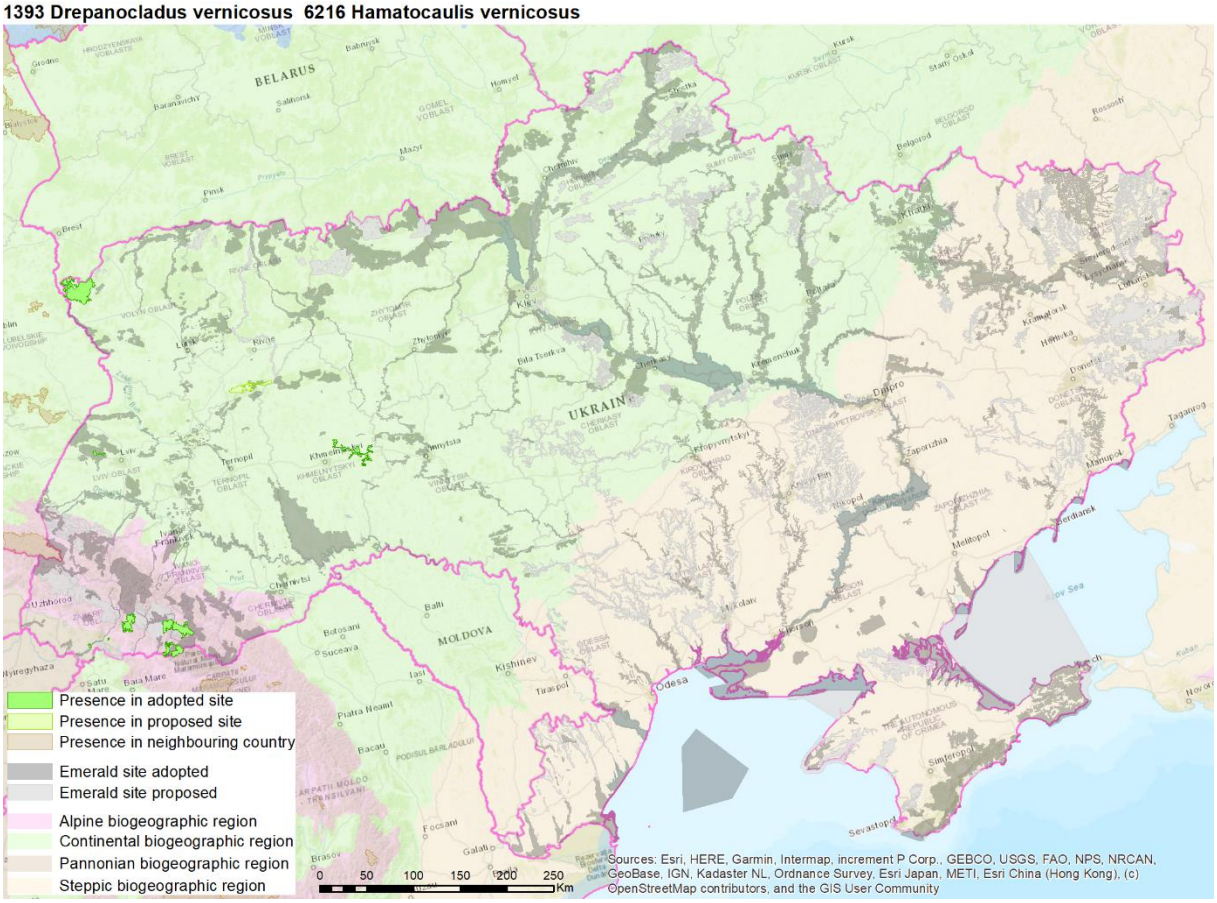
BGR	1386 Buxbaumia viridis	
CON	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MOD Lviv region
	Recommendation 2025:	Add to the region; further research is needed.
	Comments from external experts:	There is a confirmed presence in 49° 53' 53" N 23° 45' 30" E; could be added to site UA0000121 and nearby sites. Further research is needed.
	Comments from local experts:	Maybe more distributed in the western part. Need for a survey.
	References:	Pundiak 2023

1386 Buxbaumia viridis



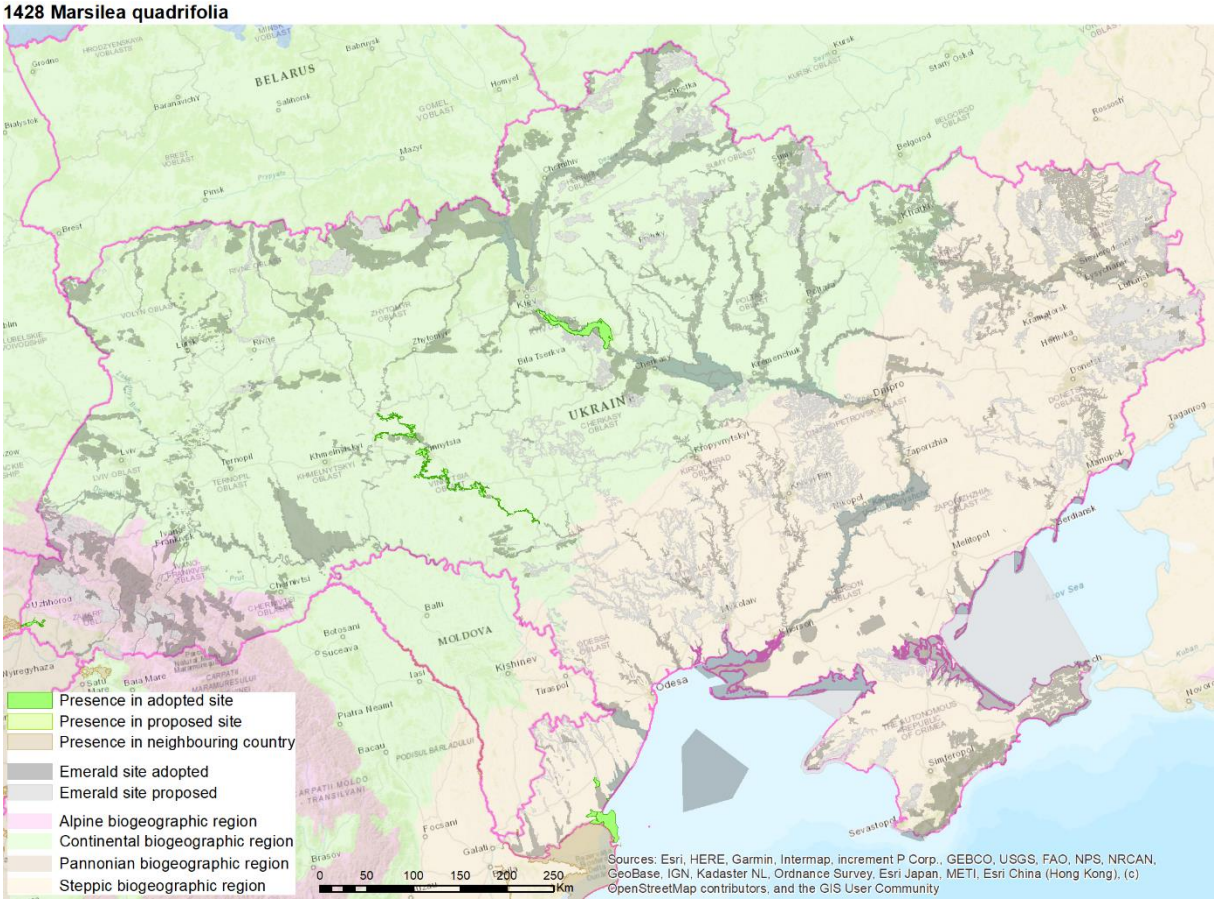
BGR	1393 Drepanocladus vernicosus 6216 Hamatocaulis vernicosus	
CON	Num. of sites:	Adopted: 3 (A:1, B:1, C:1)
	BGR seminar 2019 conclusion:	IN MOD 6 regions
	Recommendation 2025:	Further research is needed.
	Comments from external experts:	A species has been added to 1 proposed D site; further information is needed to map its distribution in the region accurately.
	Comments from local experts:	No additional information
	References:	n/a

1393 Drepanocladus vernicosus 6216 Hamatocaulis vernicosus



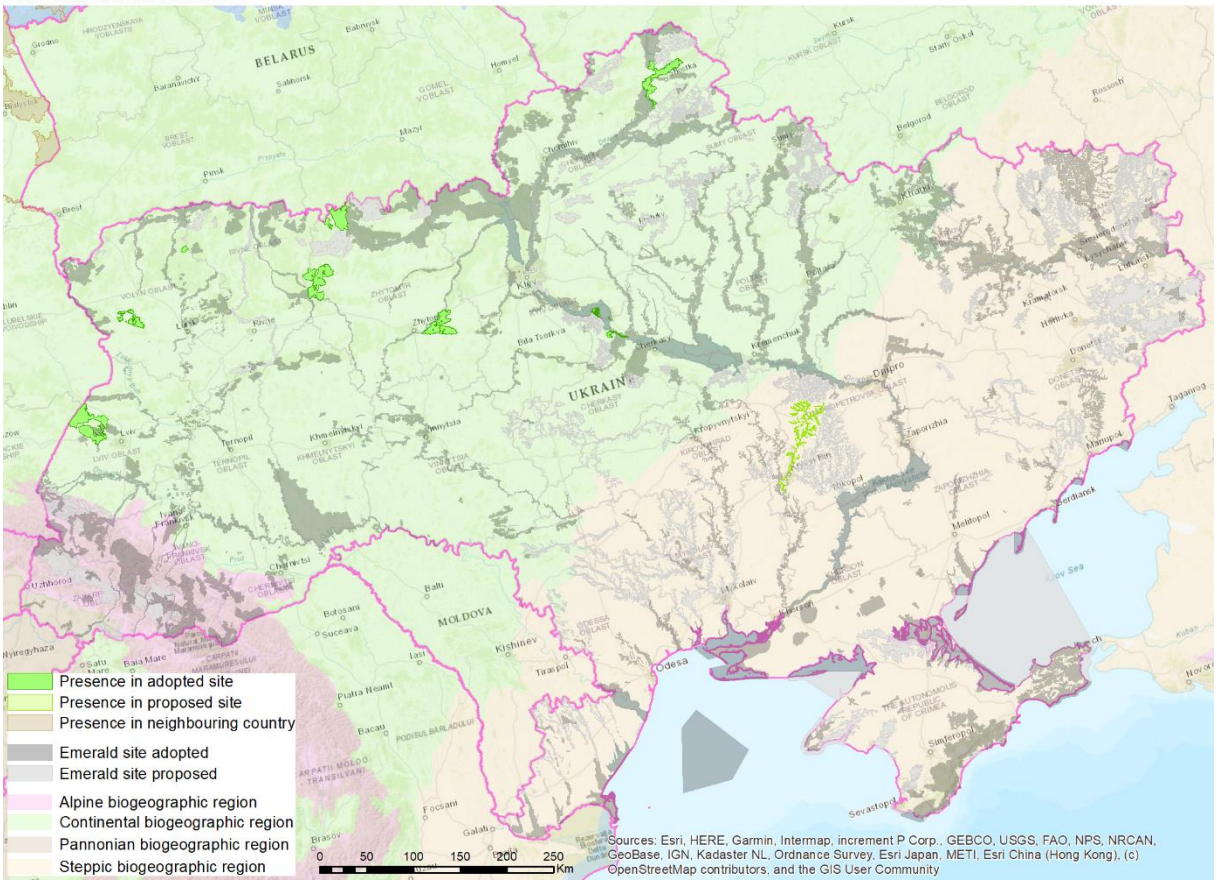
BGR	1428 Marsilea quadrifolia	
CON	Num. of sites:	Adopted: 2 (B:1, D:1)
	BGR seminar 2019 conclusion:	SR presence
	Recommendation 2025:	Revise known sites.
	Comments from external experts:	Deleted from B site UA0000025. Based on the literature, it is present in the CON region. According to the Red Book, it occurs in Zakarpattia (Latorytsia River basin), Western Polissya (Shatsk Lakes), and along the Dniester River (near Zalishchyky, Ternopil region) and the Danube River (near the Danube Lakes). Administrative regions: Volyn (Вл), Ternopil (Тр), Zakarpattia (Зк), Odesa (Ед). The distribution map of Marsilea quadrifolia in Ukraine shows a concentration of some localities north of the Chilia/Kilija branch of the Danube Delta, on the lower and upper Dniester/Nistru, on the Southern Bug, in the Zakarpatia region of Western Ukraine, and in the area of the Shatski Lakes, part of the Polessie Swamps (Shelyag-Sosonko 1996). An occurrence of Marsilea quadrifolia L. (Marsileaceae) in two localities in Kozynskyi reserve, within the Kozynka river valley near Kozyn village, Obukhiv District, Kyiv Region, is reported. Features of the species' habitat are described (Bezsmertna et al. 2015).
	Comments from local experts:	Old data from most sites. Kyiv region. The species is not around Lviv; occurrence close to Vinnycia is questionable and needs to be checked.
	References:	Shelyag-Sosonko 1996; https://redbook-ua.org/ru/item/marsilea-quadrifolia-l/; Bezsmertna et al. 2015; Schneider-Binder 2014

1428 Marsilea quadrifolia



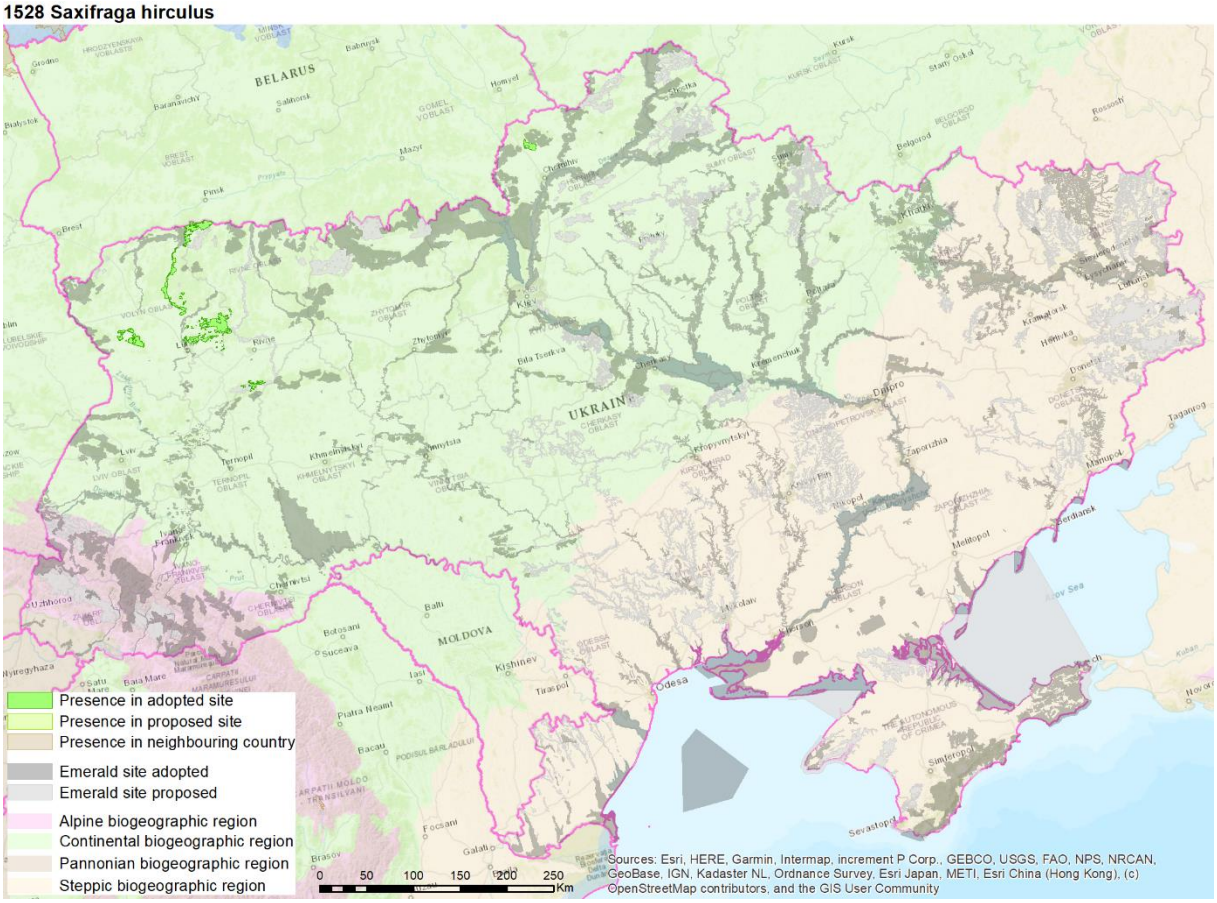
BGR	1437 Thesium ebracteatum	
CON	Num. of sites:	Adopted: 8 (A:3, B:3, C:2)
	BGR seminar 2019 conclusion:	IN MOD 6 regions
	Recommendation 2025:	Revise species distribution and add to suitable sites. Geographical gap in several regions of the Eastern part.
	Comments from external experts:	Other localities where species could be found are the Cherkasy region—Zolotonoshka river valley (SiteCode: UA0000329), Ros river valley (SiteCode: UA0000272), Kanivske Reservoir (SiteCode: UA0000111), Kyiv: confirmed near Urochyshche Babka and Chornobylskyi Biosphere Reserve (SiteCode: UA0000046), and Chernihivs'ka Oblast—Zamhlai (SiteCode: UA0000055).
	Comments from local experts:	Not confirmed from Roztočča. There are doubts about the occurrence in the Lviv region. Zolotonoša, Kyiv, Kaniv.
	References:	Shevchyk et al. 2023

1437 Thesium ebracteatum



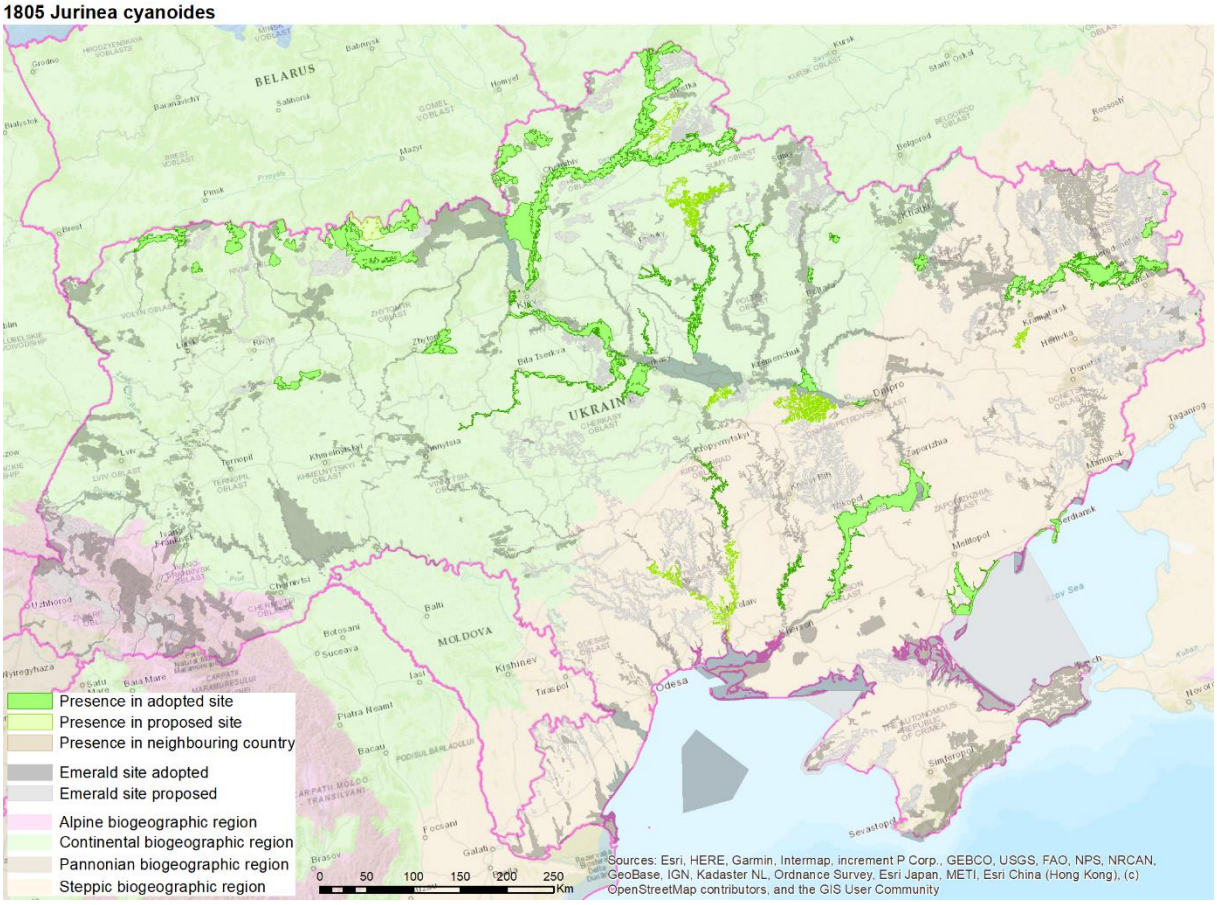
BGR	1528 Saxifraga hirculus	
CON	Num. of sites:	Adopted: 6 (A:2, B:4)
	BGR seminar 2019 conclusion:	SR presence
	Recommendation 2025:	Further research is needed. Possible presence in Polissya, with isolated occurrences in the Volyn-Podillia Upland.
	Comments from external experts:	Floristic occurrences of Saxifraga hirculus L., which are currently unconfirmed, were known based on the herbarium collections carried out in the Vydra swamp and the publications of F. Levina. Other locations of this species have also disappeared in the Left Bank Polesia, primarily in the sedge-hype swamp of the floodplains of the Kryukova River in the vicinity of the village of Velikiy Listven, Horodnyan district, Chernihiv region (Lukash 2023). According to the Red Book, it occurs in Polissya, with isolated occurrences in the Volyn Podillia Upland. Administrative regions: Volyn (Вл), Rivne (Рв), Zhytomyr (Жт), Kyiv (Кв), Chernihiv (Чн), Lviv (Лв), and Khmelnytskyi (Хм). Populations are sparse, often consisting of fewer than 10 individuals. Many known locations have disappeared.
	Comments from local experts:	The current occurrence is not clear. Old records; it disappeared from known sites. No occurrence in the Lviv region. Dermansko-Ostrozkyj NP - Bulšeč marsh—confirmed 7 years ago.
	References:	https://redbook-ua.org/; Lukash 2023

1528 Saxifraga hirculus



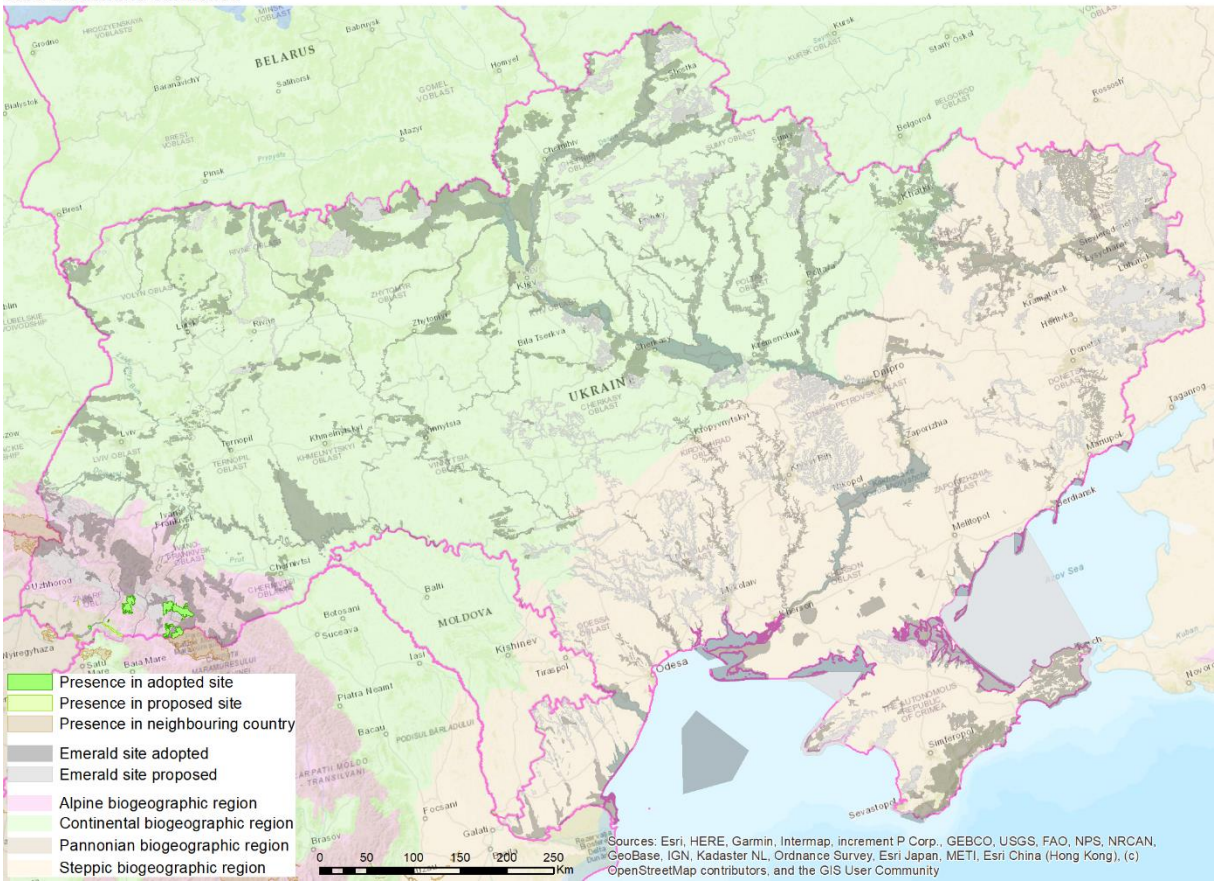
BGR	1805 Jurinea cyanoides	
STE	Num. of sites:	Adopted: 11 (B:8, C:2, D:1), Proposed: 7 (C:4, D:3)
	BGR seminar 2019 conclusion:	IN MOD Mikolajeviska region and Zaporoznij
	Recommendation 2025:	Has been added to the Mikolajeviska region and Zaporoznij (7 sites); now probably sufficient.
	Comments from external experts:	Has been added both to the Mikolajeviska region and Zaporoznij (7 sites); now probably sufficient.
	Comments from local experts:	n/a
	References:	n/a

1805 Jurinea cyanoides



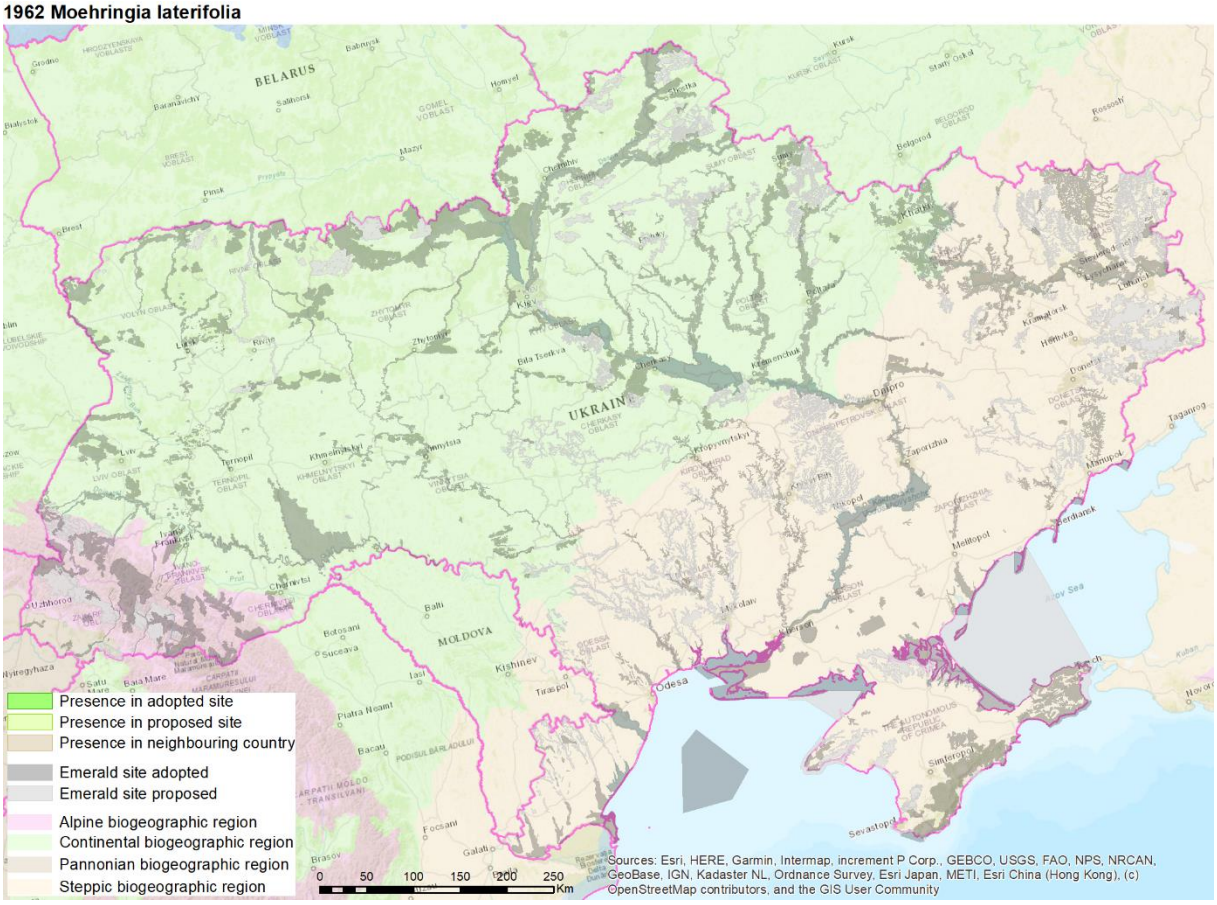
BGR	1898 Eleocharis carniolica	
ALP	Num. of sites:	Adopted: 1 (A:1)
	BGR seminar 2019 conclusion:	IN MOD Tisza basin
	Recommendation 2025:	Add to the Tisza basin region and eventually to the other mentioned sites.
	Comments from external experts:	Most commonly found in floodplain complexes of the Transcarpathian Plain (river valleys of Irshava, Borzhava, Latorica, and so on), where population status is stable.
	Comments from local experts:	Ivano-Frankivsk region, Rybnycia river valley: near Rivňa village
	References:	Ukrainian Biodiversity Information Network (accessed February 19, 2025), https://ukrbin.com/
CON	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR presence
	Recommendation 2025:	Further research is needed. Lviv Oblast, Northern part of Ivano-Frankivsk Oblast.
	Comments from external experts:	Additional research is needed. Lviv Oblast, Northern part of Ivano-Frankivsk Oblast.
	Comments from local experts:	The species occurrence has not been confirmed.
	References:	Solomakha et al. 2017
PAN	Num. of sites:	Adopted: 1 (A:1), Proposed: 3 (C:2, D:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Has been added to sites; now probably sufficient.
	Comments from external experts:	n/a
	Comments from local experts:	Sites close to Olešnyk village and close to Dibrova could be added to the Emerald Network.
	References:	n/a

1898 Eleocharis carniolica



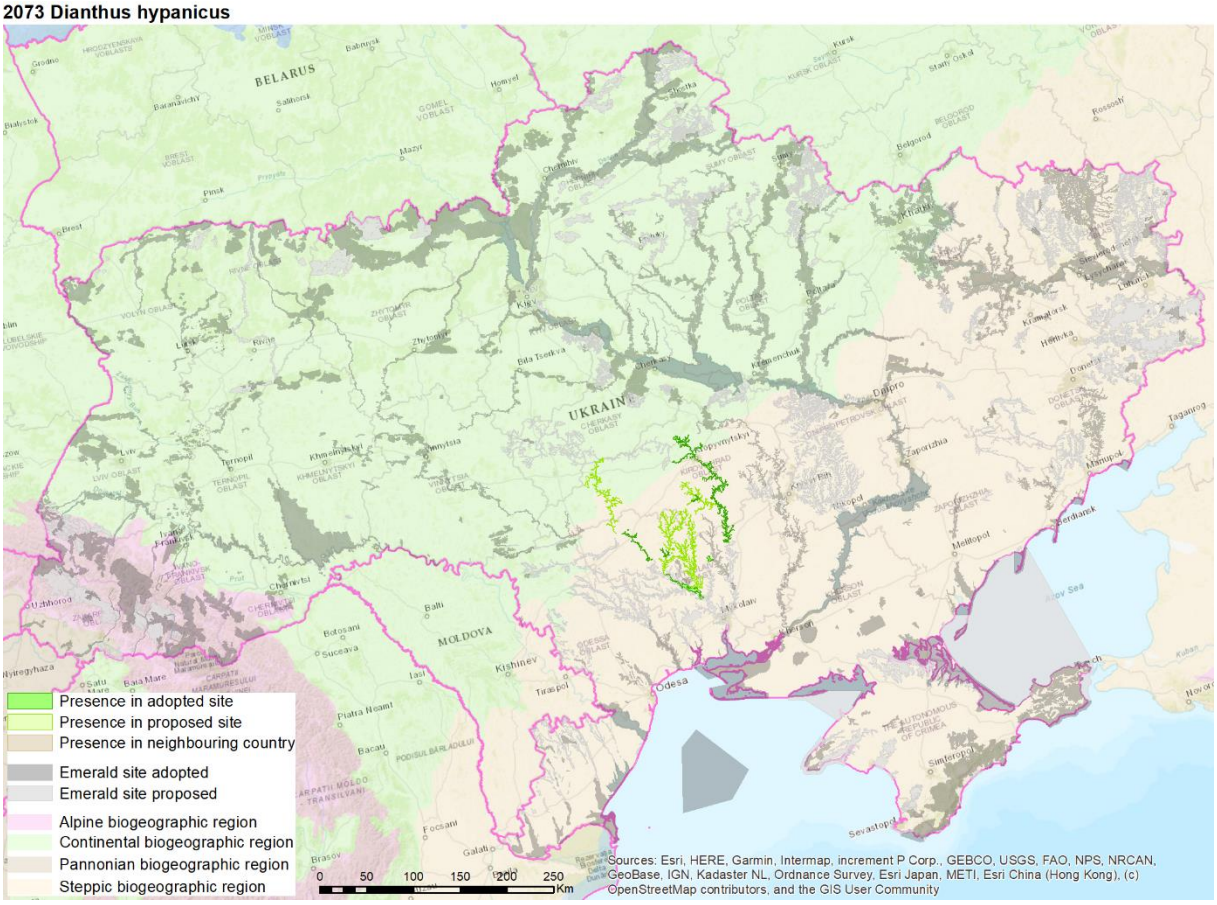
BGR	1962 Moehringia laterifolia	
CON	Num. of sites:	0
	BGR seminar 2019 conclusion:	SR REF
	Recommendation 2025:	Species has not been reported from the area, so further research is needed.
	Comments from external experts:	There is no information about the species from UA. According to GBIF, the species is present in Belarus, near Klubivka in the Chernihiv region, but it is not reported in Ukraine.
	Comments from local experts:	Not confirmed in recent years—only old records.
	References:	Global Biodiversity Information Facility, https://www.gbif.org/species/3085371

1962 Moehringia laterifolia



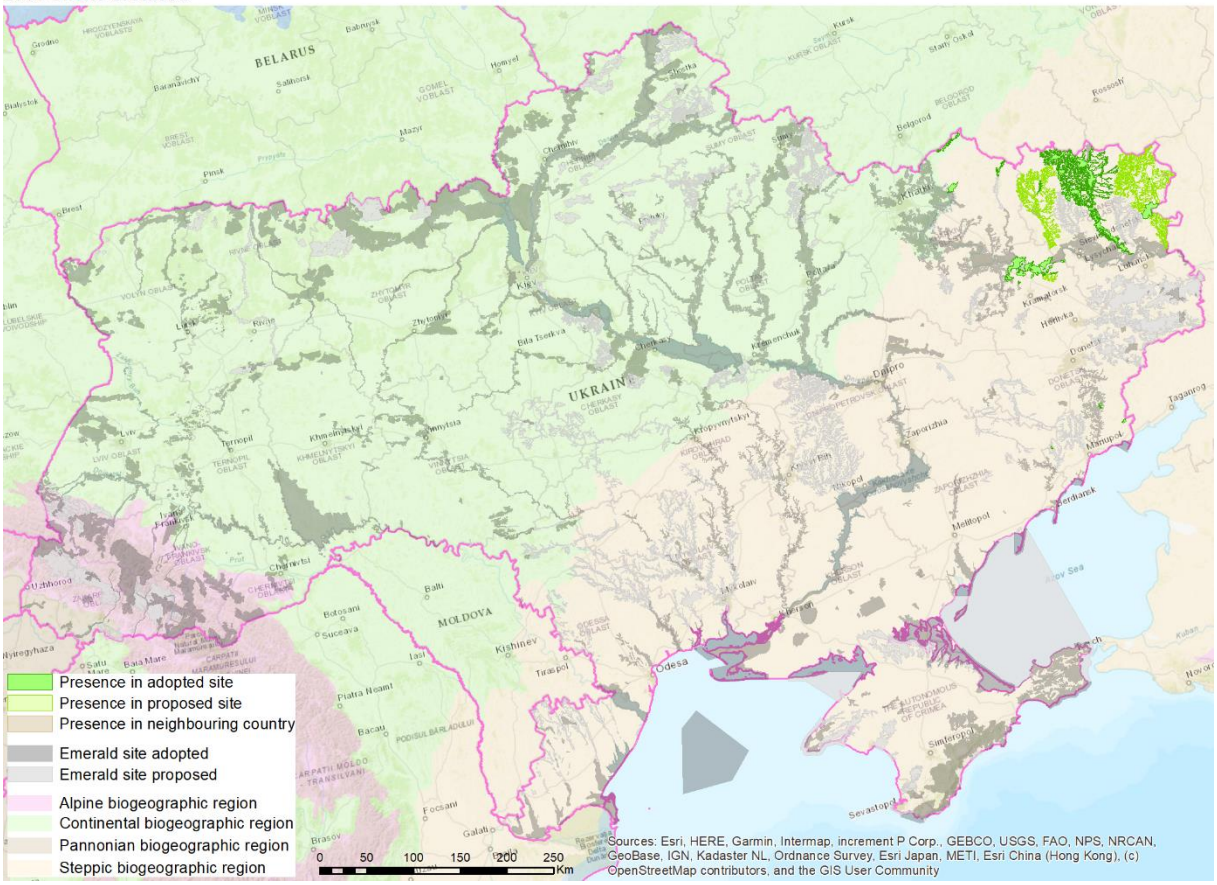
BGR	2073 Dianthus hypanicus	
CON	Num. of sites:	Proposed: 1 (B:1)
	BGR seminar 2019 conclusion:	IN MOD Kirovograd region
	Recommendation 2025:	Further research is needed. Has been added to 1 proposed B site; add to more sites.
	Comments from external experts:	It is found in the southern spurs of the Dnieper Upland, specifically in the interfluve of the Southern Bug and Inhul Rivers in STE within the Kirovohrad (Кд) and Mykolaiv (Мк) regions. In the CON region, most likely, areas are close to the STE border.
	Comments from local experts:	No more information
	References:	Ukrainian Biodiversity Information Network, https://ukrbin.com/
STE	Num. of sites:	Adopted: 7 (A:3, B:3, D:1), Proposed: 3 (C:3)
	BGR seminar 2019 conclusion:	IN MOD Should be added to Mikolaiv region
	Recommendation 2025:	Has been added to the region - 3 proposed C sites; add more.
	Comments from external experts:	More confirmed sites: SiteCode: UA0000019, proposed SiteCode: UA0000386, SiteCode: UA0000069, SiteCode: UA0000040, Semenivka, Семенівка, Mykolaivs'ka Oblast'. Possible presence in areas of habitats E1.11 Euro-Siberian rock debris swards and H3.1 Acid siliceous inland cliffs, which are some of the most representative and important habitats of the rare endemic species *Dianthus hypanicus.*
	Comments from local experts:	Confirmed at Mikolaiv region, Inhul. Kirovograd region.
	References:	Melnyk 2015; Solomakha et al. 2017

2073 Dianthus hypanicus



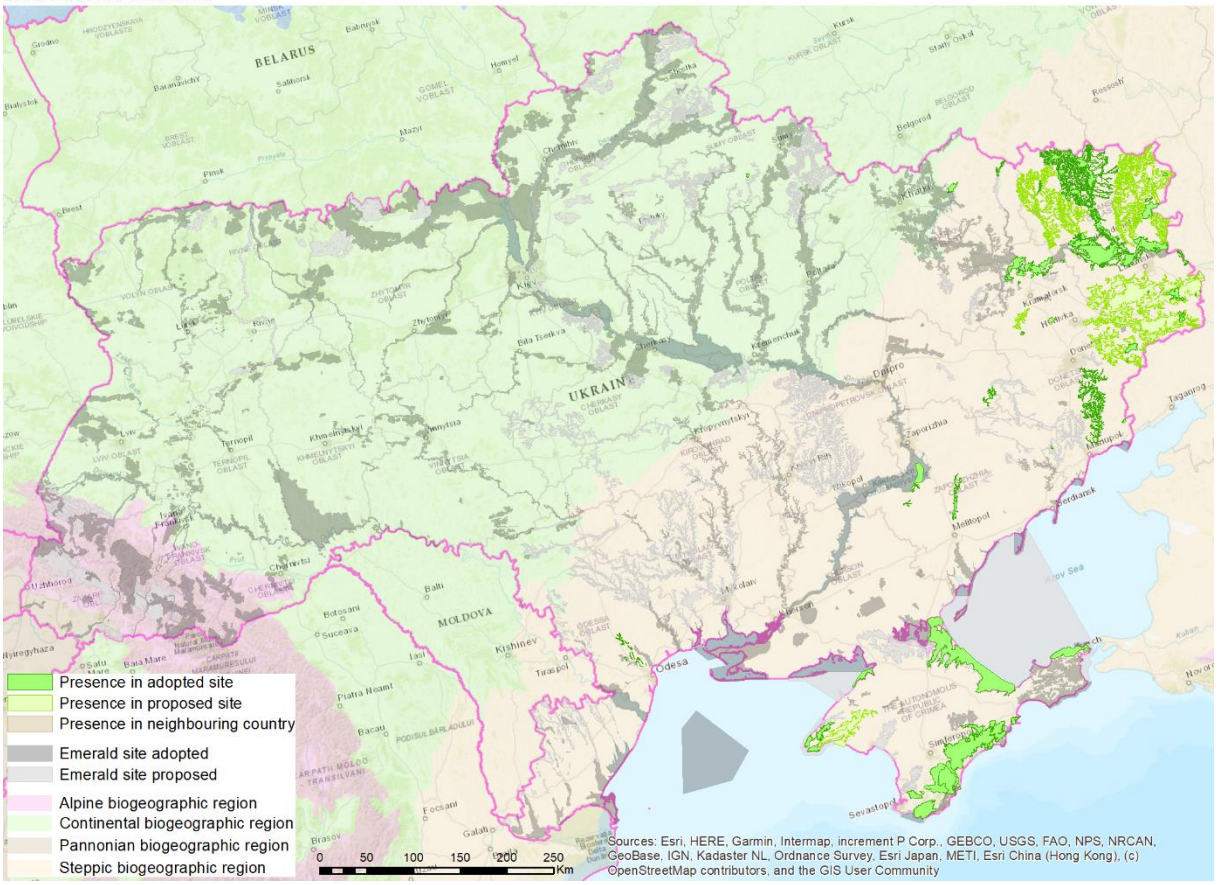
BGR	2081 Silene cretacea	
STE	Num. of sites:	Adopted: 12 (A:3, B:9), Proposed: 4 (C:4)
	BGR seminar 2019 conclusion:	IN MOD Doneck and Luhansk region
	Recommendation 2025:	Added to Doneck and Luhansk region - 4 proposed C sites; now probably sufficient.
	Comments from external experts:	n/a
	Comments from local experts:	No more information
	References:	n/a

2081 Silene cretacea



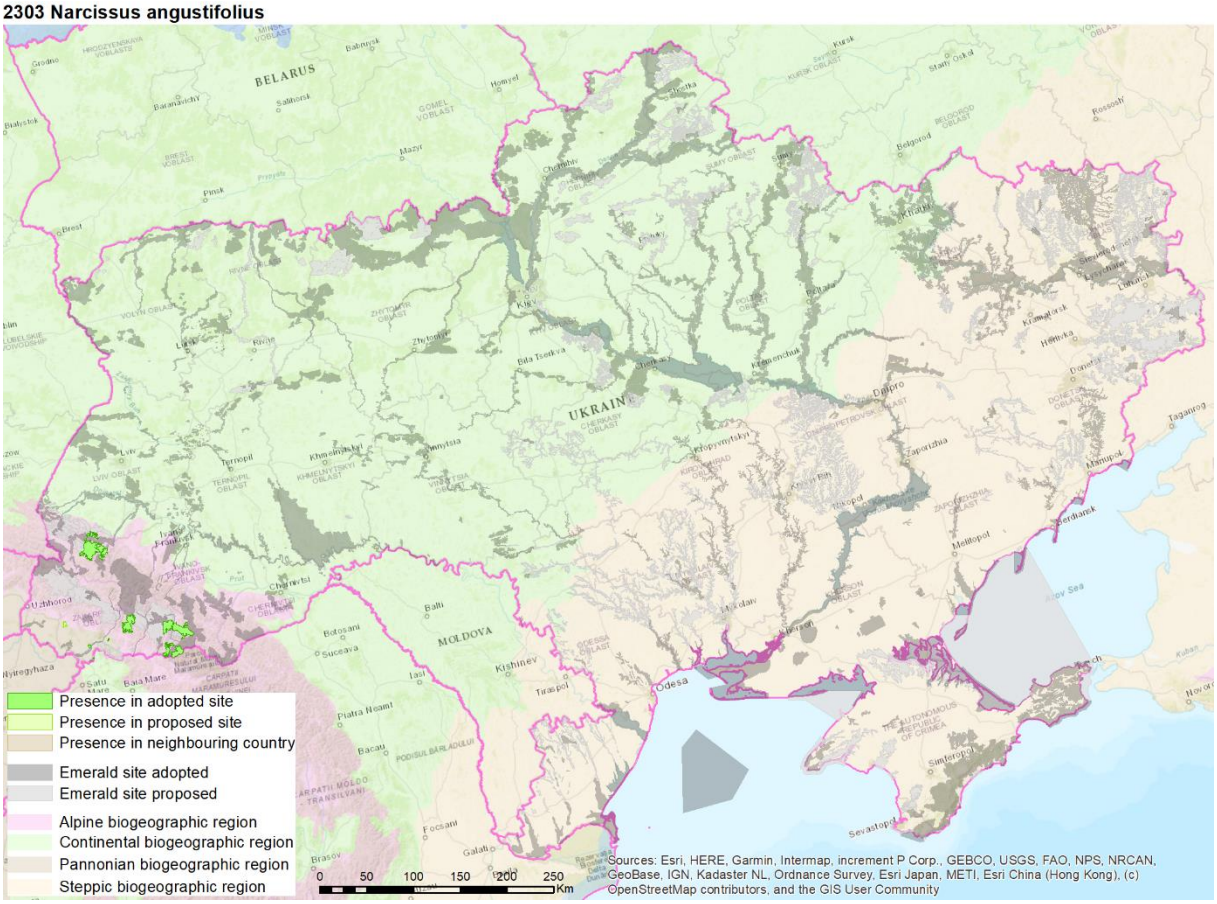
BGR	2098 Paeonia tenuifolia	
CON	Num. of sites:	Adopted: 1 (B:1)
	BGR seminar 2019 conclusion:	SR
	Recommendation 2025:	Revise old records and select sites accordingly. Further research is needed.
	Comments from external experts:	According to the sources, species should grow in the Sumy and Poltava regions but only a few populations.
	Comments from local experts:	Only old records exist; no recent confirmation. Doubts about occurrence at Sumy; probably this information is related to Kharkiv region.
	References:	Solomakha et al. 2017; Червона книга України [Red Book of Ukraine] (accessed February 19, 2025), https://redbook-ua.org/
STE	Num. of sites:	Adopted: 39 (A:7, B:26, C:6), Proposed: 12 (C:9, D:3)
	BGR seminar 2019 conclusion:	IN MOD/CD new sites at the eastern and southern parts of region/ CD for population assessment
	Recommendation 2025:	Has been added to the region (12 proposed sites - 9C, 3D); now probably sufficient
	Comments from external experts:	n/a
	Comments from local experts:	No more information
	References:	n/a

2098 Paeonia tenuifolia



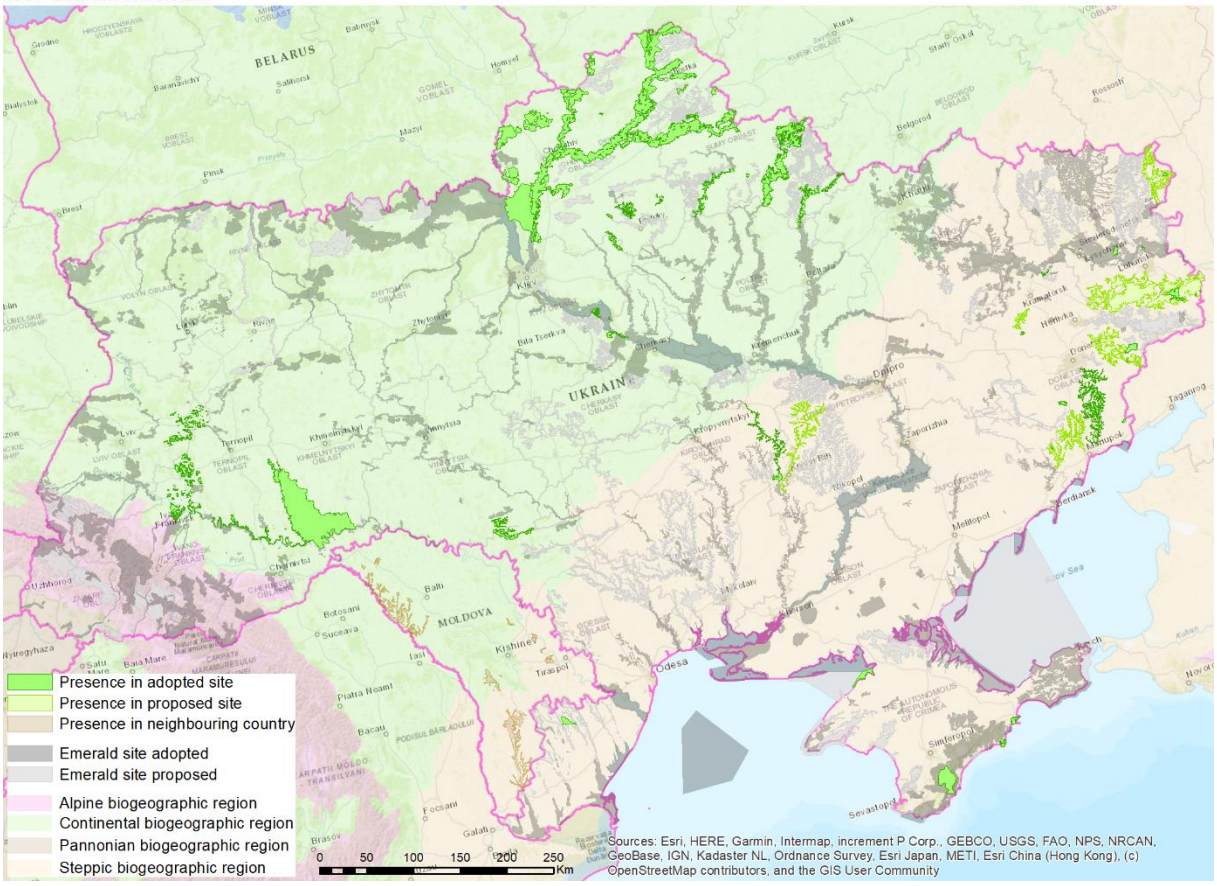
BGR	2303 Narcissus angustifolius	
ALP	Num. of sites:	Adopted: 2 (A:1, B:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Add to more sites. Check the presence in sites UA0000610, UA0000608, and the regions mentioned below.
	Comments from external experts:	Close to Bronka (48°24'02.710"N 23°16'45.370"E). Possible presence in sites UA0000610 and UA0000608.
	Comments from local experts:	Carpathian Biosphere Reserve, Schidni Svydovets - Tataruka, Marmaroš
	References:	Solomakha et al. 2017; Ukrainian Biodiversity Information Network, https://ukrbin.com/
PAN	Num. of sites:	Adopted: 1 (A:1), Proposed: 1 (C:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Consider the site near Bushtyno and other sites—the survey is needed.
	Comments from external experts:	It has been added to 2 proposed sites (1C, 1D). The largest population occupies an area of 200 ha in the Carpathian Biosphere Reserve UA0000006.
	Comments from local experts:	Confirmed occurrence near Bushtyno
	References:	Solomakha et al. 2017; Ukrainian Biodiversity Information Network (accessed February 19, 2025), https://ukrbin.com/

2303 Narcissus angustifolius



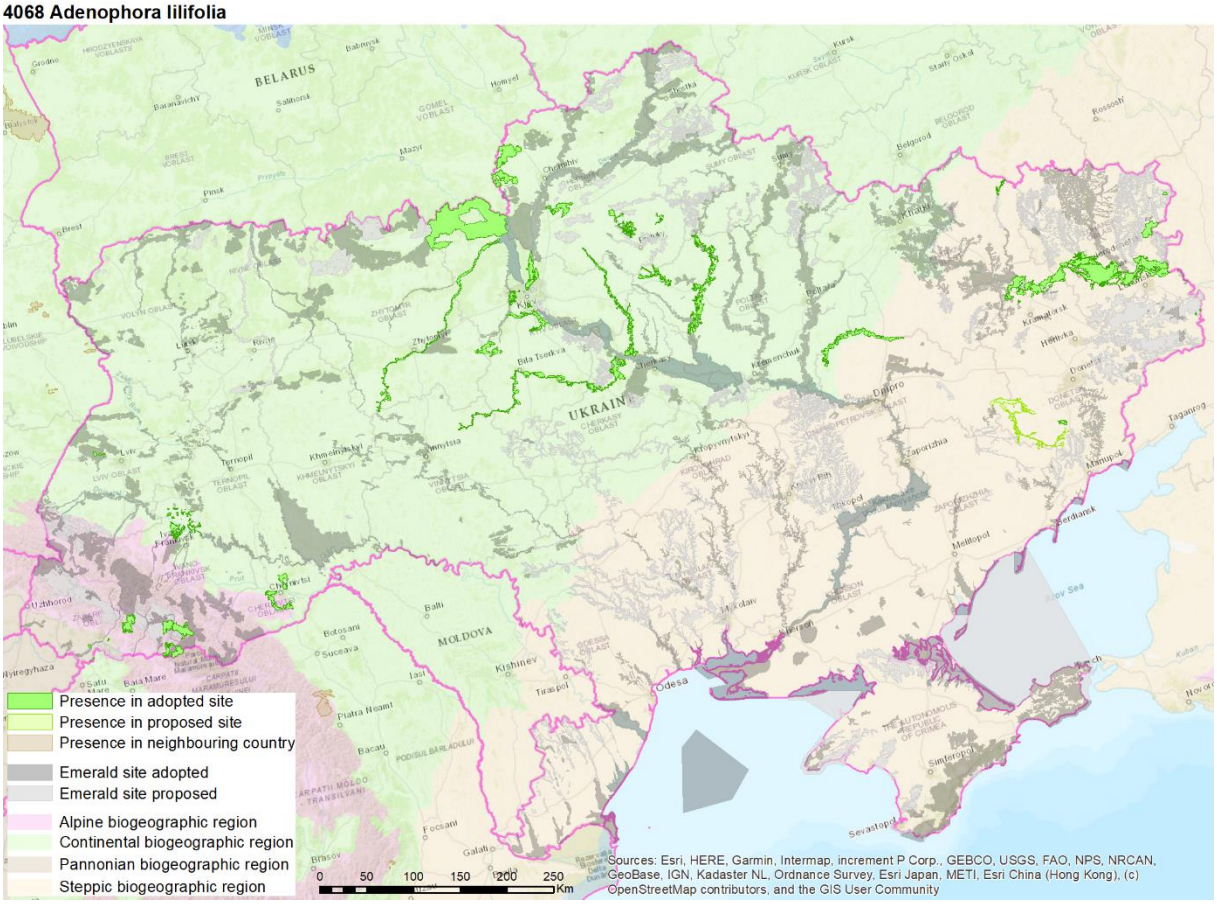
BGR	4067 Echium russicum	
STE	Num. of sites:	Adopted: 12 (A:2, B:9, C:1), Proposed: 8 (C:6, D:2)
	BGR seminar 2019 conclusion:	IN MOD/IN MIN Doneck, Crimea
	Recommendation 2025:	Probably sufficient
	Comments from external experts:	Has been added to the region - 8 proposed sites - 6C, 2D; now probably sufficient.
	Comments from local experts:	No more information
	References:	n/a

4067 Echium russicum



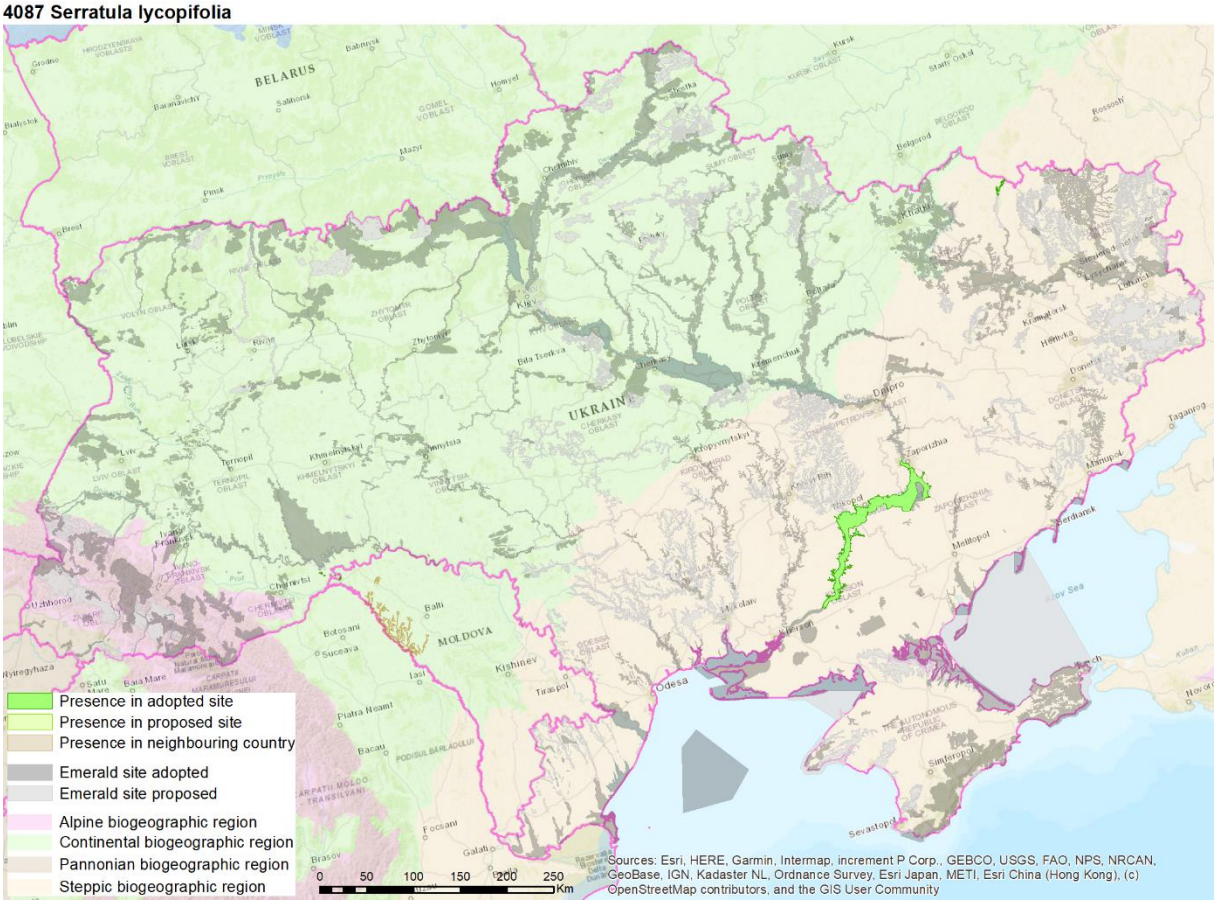
BGR	4068 Adenophora lilifolia	
CON	Num. of sites:	Adopted: 22 (A:2, B:6, C:14)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Probably sufficiently represented in the Emerald Network
	Comments from external experts:	Now probably sufficient
	Comments from local experts:	No more information
	References:	n/a
PAN	Num. of sites:	Adopted: 1 (B:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Knowledge is not sufficient; surveys and mapping are needed to identify additional sites.
	Comments from external experts:	Added to 1 proposed C site; add to more sites. Limited data from the PAN region.
	Comments from local experts:	Two sites only known; no information about other. Research needed.
	References:	n/a

4068 Adenophora lilifolia



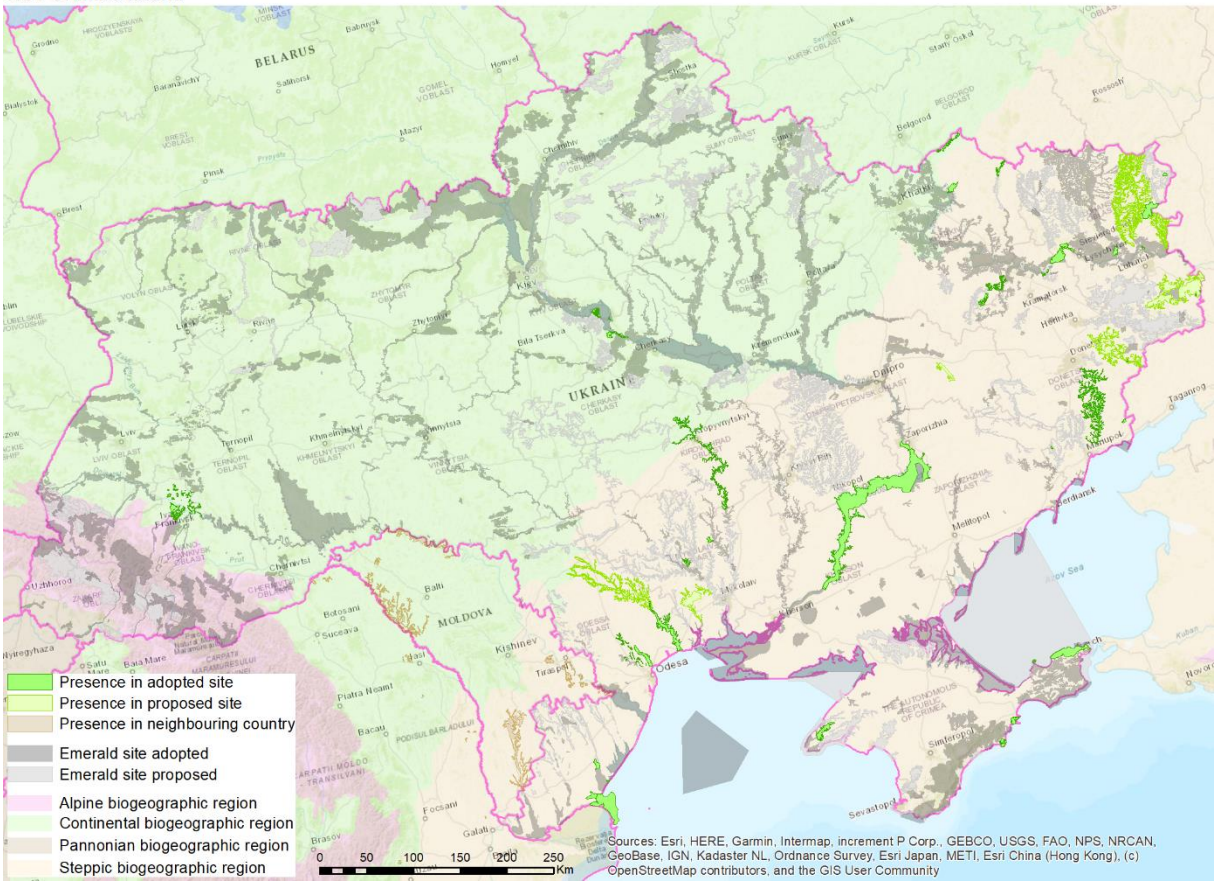
BGR	4087 Serratula lycopifolia	
CON	Num. of sites:	Adopted: 1 (A:1)
	BGR seminar 2019 conclusion:	IN MOD several regions
	Recommendation 2025:	Add to more sites. Consider addition to sites UA0000359 and UA0000362 and site Chortova hora.
	Comments from external experts:	Occurrence at Chortova hora near Rohatyn (49°24’03.8”N 24°39’54.5”E) confirmed in 2009. It could be found in UA0000359 and UA0000362.
	Comments from local experts:	Chortova hora - to be added. Check Podilski Tovtri NPP and Halič̆skij NPP—if these correspond to the abovementioned sites.
	References:	Lysenko et al. 2021; Onyshchenko et al. 2017
STE	Num. of sites:	Adopted: 2 (A:1, D:1)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Further research is needed. Check presence in sites UA0000341 and UA0000040.
	Comments from external experts:	Possible presence in UA0000341 and UA0000040
	Comments from local experts:	No more information.
	References:	Драбинюк and Романенко 2021

4087 Serratula lycopifolia



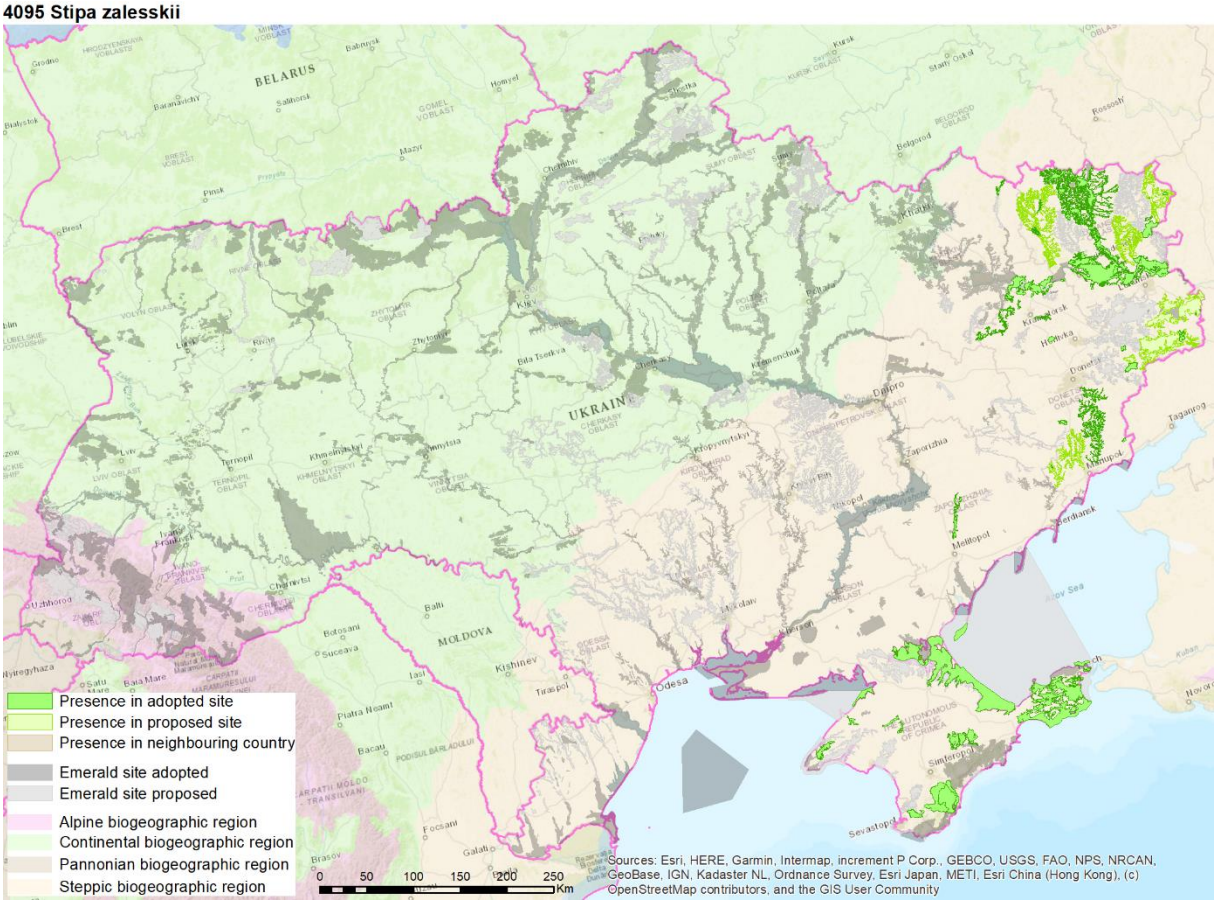
BGR	4091 Crambe tataria	
STE	Num. of sites:	Adopted: 22 (A:2, B:16, C:2, D:2), Proposed: 7 (C:5, D:2)
	BGR seminar 2019 conclusion:	IN MOD Odessa, Dnepropetrovsk, Doneck regions
	Recommendation 2025:	Probably sufficiently represented
	Comments from external experts	Species has been added to 7 proposed sites (2D, 5C); probably sufficient.
	Comments from local experts:	No more information
	References:	n/a

4091 Crambe tataria



BGR	4095 Stipa zalesskii	
STE	Num. of sites:	Adopted: 30 (A:5, B:7, C:7, D:11), Proposed: 7 (C:5, D:2)
	BGR seminar 2019 conclusion:	IN MOD add in Doneck and Luhansk region, Crimea
	Recommendation 2025:	Probably sufficient
	Comments from external experts	Added to 11 C and 13 D sites; now probably sufficient.
	Comments from local experts:	No more information
	References:	n/a

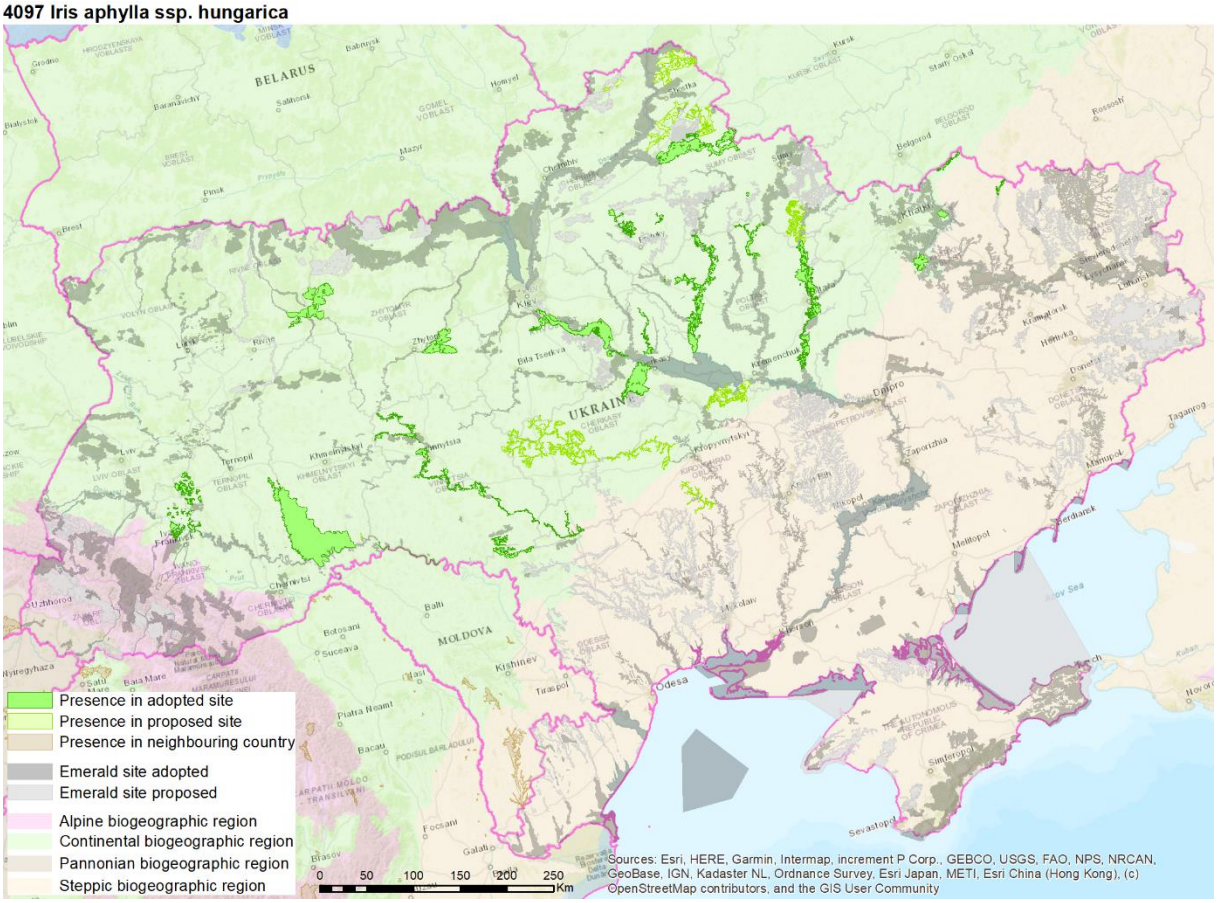
4095 Stipa zalesskii



BGR	4097 Iris aphylla ssp. hungarica	
CON	Num. of sites:	Adopted: 29 (A:6, B:19, C:4), Proposed: 13 (B:2, C:1, D:10)
	BGR seminar 2019 conclusion:	IN MOD
	Recommendation 2025:	Probably sufficient, but site in Pivdenne Podillia to be considered.
	Comments from external experts:	The species has been added to 13 proposed sites (2B, 1C, 10D); now probably sufficient.
	Comments from local experts:	Pivdenne Podillia—big population
	References:	n/a
PAN	Num. of sites:	0
	BGR seminar 2019 conclusion:	IN MOD/IN MIN
	Recommendation 2025:	Further research is needed. Also check the site UA0000113.
	Comments from external experts:	It could be present in SiteCode: UA0000113, as it grows on the common border of Slovakia, Hungary, and Ukraine.
	Comments from local experts:	No more information
	References:	Казакова et al. 2019
STE	Num. of sites:	Adopted: 2 (B:1, C:1), Proposed: 2 (D:2)
	BGR seminar 2019 conclusion:	SR taxonomy
	Recommendation 2025:	Add to the southeast area. Revise the occurrence in the site specified by Kazakova et al. (2019).
	Comments from external experts:	Has been added to 2 proposed D sites. Referenced as Iris furcata in the Red Book - Kharkiv, Donetsk, Luhansk. According to Казакова et al. (2019), new isolated sites were found in the southeast of Ukraine.
	Comments from local experts:	The occurrence at the site specified by Kazakova is to be revised. Close to Nikolaiv, Chervonyi Maiak, Charkiv region - Dergači. These sites are in occupied territories, and it is not possible to check them.

	References:	Казакова et al. 2019; Червона книга України [Red Book of Ukraine] (accessed February 19, 2025), https://redbook-ua.org/

4097 Iris aphylla ssp. hungarica



4. Activities required for further improvement of the national Emerald Network

Based on the analysis of the evaluated species and habitats, the following recommendations emerged:

- After the previous biogeographical seminar, Ukraine proposed new sites for the UA Emerald Network. These newly added sites have the status “proposed” and are not currently enshrined in national legislation. Therefore, it is important to continue the legislation process for the adoption of these sites.
- During the last few years, many Emerald sites were damaged or destroyed due to the ongoing military operations. When the invasion ends, its consequences on the national Emerald Network needs to be assessed. This assessment should result in decisions at both the site and network levels. At the site level, it should be decided if the site still has value for protecting the respective species and/or habitats and thus whether to keep it in the Emerald Network or not. At the national level, a coherence and sufficiency analysis should be conducted to improve the protection of Emerald species and habitats.
- Regarding marine and coastal habitats, we recommend that the sufficiency of marine features be addressed once the EEA establishes the link to the Red List of Marine Habitats factsheets. In particular, the habitat distribution maps in these factsheets should serve as a primary resource for surveying habitat presence and establishing the first formal conclusions for these features.
- Some species and habitats belong to the MBLS BGR, which is not recognized in the current Emerald Network for Ukraine. The MBLS should be added to the Ukrainian Emerald Network, and the respective species and habitats (for example, Tursiops truncatus, Phocoena phocoena, habitats A1.22, A5, and so on) should be removed from the BLS region and added to the MBLS region.
- Despite the rich literature on vegetation and habitats, information about habitat distribution is insufficient, and distribution maps are available for only a limited number of Emerald habitats or specific regions of Ukraine. We understand that Ukraine is a large country, and preparing habitat maps is not an easy task, especially for abundant habitat types. Nevertheless, we propose to mobilize the existing knowledge of Ukrainian scientists and other experts and carry out field habitat mapping to resolve the gaps in knowledge and develop or improve the distribution maps. Without distribution maps, it is difficult to assess whether the habitat type is sufficiently represented in Emerald sites and whether the eventual internal variability of habitat types is adequately reflected in protection at individual sites. In addition, new knowledge achieved allows better protection of species and habitats and/or selects the most valuable sites for protection.
- Three species are not listed in the Reference list but require further research. *Vertigo moulinsiana* (STE) was recorded only at a small site in the Crimean Mountains, which was disturbed, likely leading to its extinction by 2015. However, its presence in the region is still possible (Balashov and Palatov 2011; Balashov 2013, 2016). *Dytiscus latissimus* (STE) has not been recorded in the region, so further research is required. *Lycaena helle* (ALP) was recorded in Cheremosh NNP but is not associated with any designated site (Yuzyk 2022).
- In Ukraine, invertebrates are generally studied much less than vertebrates and very unevenly, particularly the low coverage level of taxonomic groups (lack of records on Mollusca, Odonata, Orthoptera, Coleoptera, Lepidoptera, and so on). It is necessary to pay closer attention to the study of these animal groups.
- Population size assessments are also problematic. They can be determined through only intensive research and long-term monitoring. The populations of many species are insufficiently represented in the Ukrainian Emerald Network (only a few percent, often listed in D population with coverage near 0 percent, and so on).
- From a geographical point of view, there are some gaps in the Emerald Network for some species. The addition of new site(s) should also consider these geographical aspects.

- For some terrestrial vertebrates and plants, there are doubts about the occurrence of a permanent population in the country; therefore, further research is needed. For example, *Nymphalis vaualbum*, *Vertigo moulinsiana* in the STE region, and *Dytiscus latissimus* in the STE region.
- Monitoring of all Emerald habitats and species is desirable. The results of long-term monitoring should form the basis for determining the population sizes of the Emerald species, assessing their changes over time, and identifying trends to which conservation management measures can then be linked.

During the self-evaluation workshop held in Kyiv on October 9–10, 2025, local experts provided the following recommendations:

- When conditions allow, areas most affected—especially along the contact zones—should be surveyed and reassessed. Particular attention is required for the area impacted by the destruction of the Kakhovka Reservoir.
- A large portion of existing information on the distribution of habitats and species is not publicly available. The Ministry of Economy, Environment and Agriculture should support scientists, NGOs, and data holders in making these data accessible online.
- A mechanism for systematic data collection and monitoring of Emerald sites should be created. The Ministry of Economy, Environment and Agriculture plans to invest more money in mapping and research. Staff of national parks and reserves should be involved in the data update.
- More resources should be allocated for the protection and monitoring of Emerald Network sites.
- A legal framework for the territorial nature protection and management (including the Emerald Network) should be developed and implemented (especially for habitats). Landowner involvement is a key issue; the negotiations with stakeholders should become an inevitable part of the designation process.
- The designation of new sites should be guided by existing data and carried out in consultation with landowners.
- Enhance the protection of coastal habitats located between Odesa and Tiligul Estuary, sandy beaches of Dniester and Budaki estuaries, Crimea, Zmijnyj island, along the Danube River, and within the transboundary zone with Romania.
- Split the Crimean Nature Reserve (UA0000005) into two separate sites. The reserve currently consists of two areas more than 120 km apart. The southern area is situated in the mountains and is characterized by mountainous species and habitats, while the northern area lies in the lowlands and hosts coastal species and habitats. Dividing the site would enable more transparent, precise reporting and management.
- Split the Carpathian Biosphere Reserve along the boundaries of the BGRs. The site currently consists of seven separate areas—four within the Alpine BGR and three within the Pannonian region. Dividing the site according to these regions would result in more accurate and consistent reporting.
- Establish a new site along the Uzh River, noted for its high occurrence of Emerald species, especially fish species.

The main purpose of this document is to serve as a tool to help prepare Ukraine for the next round of biogeographical seminars and to support further development of the Emerald Network. The timing for the next database submission was not specified during the self-evaluation workshop held in Kyiv on October 16, 2025. The invasion has had a significant impact on the Emerald Network, rendering several sites inaccessible. Areas most affected—particularly along the contact zones—should be surveyed and reassessed. However, we encourage the Ministry of Economy, Environment, and Agriculture of Ukraine to allocate necessary resources to prepare and officially submit an updated database to the Bern Secretariat, when it is possible. This action is crucial for advancing the future development of the Emerald Network.

4. Заходи, необхідні для подальшого вдосконалення національної Смарагдової мережі

На основі аналізу оцінених видів і оселищ були сформульовані такі рекомендації:

- Після попереднього біогеографічного семінару Україна запропонувала нові території для української частини Смарагдової мережі. Ці новододані території мають статус «запропоновані» та наразі не закріплені в національному законодавстві. Тому важливо продовжити законодавчий процес щодо їх затвердження.
- Протягом останніх кількох років багато територій Смарагдової мережі було пошкоджено або знищено внаслідок воєнних дій. Після завершення повномасштабного вторгнення неминуче постане потреба оцінити її наслідки для національної Смарагдової мережі. За результатами цієї оцінки мають бути ухвалені рішення як на рівні окремих територій, так і на рівні мережі. На рівні територій слід визначити, чи зберегла територія природоохоронну цінність для охорони відповідних видів та/або оселищ і, відповідно, чи доцільно залишати її у Смарагдовій мережі. На національному рівні слід провести аналіз узгодженості та достатності мережі для посилення охорони видів і оселищ Смарагдової мережі.
- Щодо морських і прибережних оселищ ми рекомендуємо розглядати питання достатності морських елементів після того, як EEA забезпечить посилання на «factsheets Red List of Marine Habitats». Зокрема, карти поширення оселищ у цих «factsheets» мають слугувати основним джерелом для перевірки наявності оселищ і формування первинних офіційних висновків щодо цих елементів.
- Деякі види та оселища належать до морського біогеографічного регіону Чорного моря (MBLS), який не врахований у чинній Смарагдовій мережі для України. Регіон MBLS слід додати до Смарагдової мережі України, а відповідні види та оселища (наприклад, *Tursiops truncatus*, *Phocoena phocoena*, оселища A1.22, A5 тощо) слід вилучити з регіону BLS і віднести до регіону MBLS.
- Попри значний обсяг наукової літератури щодо рослинності та оселищ, інформації про поширення оселищ бракує, а карти поширення наявні лише для обмеженої кількості оселищ Смарагдової мережі або для окремих регіонів України. Ми розуміємо, що Україна є великою країною, а підготовка карт оселищ — складне завдання, особливо для широко поширених типів оселищ. Водночас ми пропонуємо залучити наявні знання українських науковців та інших експертів і виконати польове картографування оселищ, щоб усунути прогалини в знаннях та розробити або вдосконалити карти поширення. Без карт поширення складно оцінити, чи достатньо тип оселища представлений на територіях Смарагдової мережі та чи належним чином у межах охорони на окремих територіях відображено внутрішню мінливість типів оселищ. Крім того, нові отримані дані дають змогу краще охороняти види та оселища та/або обирати найцінніші території для охорони.
- Три види не включені до Довідкового списку, але потребують подальших досліджень. *Vertigo moulinsiana* (STE) було зареєстровано лише на невеликій ділянці в Кримських горах, яка зазнала порушення, що, ймовірно, призвело до зникнення виду на цій території до 2015 року. Водночас наявність виду в регіоні все ще можлива (Balashov & Palatov 2011; Balashov 2013, 2016). *Dytiscus latissimus* (STE) у регіоні не реєстрували, тому потрібні додаткові дослідження. *Lycaena helle* (ALP) було зареєстровано в національному природному парку «Черемоський», але цей запис не пов’язаний із жодною визначеною територією Смарагдової мережі (Yuzyk, 2022).
- В Україні безхребетних тварин загалом вивчають значно менше, ніж хребетних, і дуже нерівномірно. Це, зокрема, означає низький рівень охоплення таксономічних груп (нестачу даних щодо *Mollusca, Odonata, Orthoptera, Coleoptera, Lepidoptera* тощо). Необхідно приділяти більше уваги дослідженню цих груп тварин.
- Оцінювання чисельності популяцій також є проблемним і можливе лише за умови інтенсивних досліджень та довгострокового моніторингу. Популяції багатьох видів

недостатньо представлені у Смарагдовій мережі України (лише кілька відсотків; часто віднесені до категорії D із покриттям, близьким до 0% тощо).

- З географічного погляду, у Смарагдовій мережі існують певні прогалини щодо окремих видів, і під час додавання нових територій також слід враховувати ці географічні аспекти.
- Щодо деяких наземних хребетних тварин і рослин існують сумніви щодо наявності в країні сталих (постійних) популяцій, тому потрібні подальші дослідження. Наприклад, *Nymphalis vaualbum, Vertigo moulinsiana* у регіоні STE та *Dytiscus latissimus* у регіоні STE.
- Бажано здійснювати моніторинг усіх оселищ і видів Смарагдової мережі. Результати довгострокового моніторингу мають бути основою для визначення чисельності популяцій видів Смарагдової мережі, оцінювання змін у часі та виявлення тенденцій, із якими надалі можна пов'язувати природоохоронні заходи управління.

Під час семінару із самооцінювання, що відбувся в Києві 9–10 жовтня 2025 року, місцеві експерти надали такі рекомендації:

- Коли умови дозволять, найбільш уражені території — особливо вздовж ліній зіткнення — слід обстежити та оцінити повторно. Особливу увагу слід приділити території, що постраждала внаслідок руйнування Каховського водосховища.
- Значна частина наявної інформації про поширення оселищ і видів не є загальнодоступною. Міністерство повинне підтримати вчених, НУО та розпорядників/власників даних у забезпеченні онлайн-доступу до цих даних.
- Слід створити механізм для систематичного збору даних та моніторингу територій Смарагдової мережі. Міністерство планує спрямувати/передбачити більше коштів на картографування та дослідження. Працівників національних парків та заповідників слід залучити до оновлення й актуалізації даних.
- Слід спрямувати/виділити більше ресурсів на охорону та моніторинг територій Смарагдової мережі.
- Слід розробити та впровадити нормативно-правову базу для територіальної охорони природи та управління природоохоронними територіями (включно зі Смарагдовою мережею), особливо щодо оселищ. Ключовим питанням є залучення землевласників; переговори із зацікавленими сторонами мають стати невід'ємною частиною процесу визначення (відбору) територій.
- Визначення нових територій має ґрунтуватися на наявних даних і здійснюватися після консультацій із землевласниками.
- Посилити охорону прибережних оселищ у районі між Одесою та Тилігульським лиманом, на піщаних пляжах Дністровського та Будацького лиманів, у Криму, на острові Зміїний, уздовж річки Дунай, а також у межах транскордонної зони з Румунією.
- Розділити Кримський природний заповідник (UA0000005) на дві окремі території. Заповідник наразі складається з двох територій, розташованих на відстані понад 120 км одна від одної. Південна територія розташована в горах і характеризується гірськими видами та оселищами, тоді як північна територія розташована у низовині та є оселищем для прибережних видів і прибережних оселищ. Поділ території дасть змогу забезпечити більш прозору та точну звітність і управління.
- Розділити Карпатський біосферний заповідник відповідно до меж біогеографічних регіонів. Наразі заповідник складається з семи окремих територій — чотири з них розташовані в альпійському біогеографічному регіоні, а три — у паннонському. Поділ заповідника за цими регіонами дасть змогу забезпечити більш точну та послідовну звітність.
- Створити нову територію вздовж річки Уж, де часто трапляються види Смарагдової мережі, особливо види риб.

Основна мета цього документа — слугувати інструментом, який допоможе Україні підготуватися до наступного раунду біогеографічного семінару та сприятиме подальшому розвитку Смарагдової мережі. Під час семінару з самооцінки, що відбувся в Києві 16 жовтня 2025 року, не було визначено строки наступного подання даних до бази даних. Повномасштабне вторгнення суттєво вплинуло на Смарагдову мережу та зробило частину територій Смарагдової мережі недоступними. Території, що постраждали найбільше — особливо вздовж ліній зіткнення — слід

обстежити та переоцінити. Однак ми закликаємо Міністерство економіки, довкілля та сільського господарства України передбачити/виділити необхідні ресурси для підготовки та офіційного подання оновленої бази даних до Секретаріату Бернської конвенції, коли це стане можливим. Цей крок має вирішальне значення для подальшого розвитку Смарагдової мережі.

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