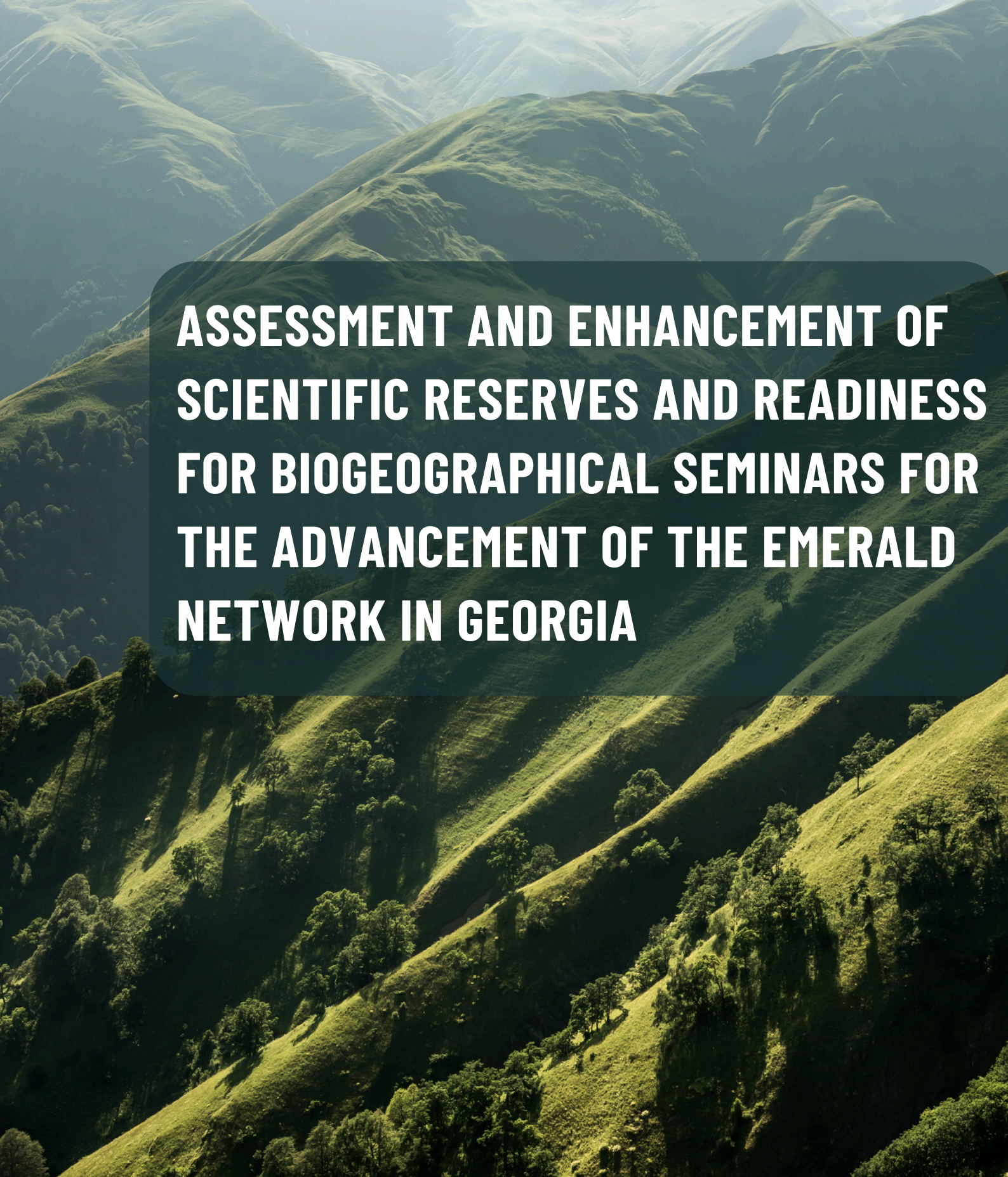




Funded by
the European Union

EU4Environment
Green Economy in Eastern Partner Countries

A wide-angle photograph of a mountain range with rolling green hills and valleys. The foreground shows steep slopes with patches of forest and open grassland. The background features more distant, hazy mountain peaks under a clear sky.

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

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

December 2025

This report was prepared under the EU-funded 'European Union for Environment Programme' (EU-4Environment), implemented by the OECD, UNECE, UNEP, UNIDO, and the World Bank.

The views expressed herein are those of the authors only and can in no way be taken to reflect the official opinion of the European Union, its members, the Governments of the Eastern Partnership Countries or the implementing partners.

This report and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

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

It is permitted to use the text of this report on condition that proper reference to the source is provided. Sale of this document is prohibited.

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 Georgia*.

This document presents the results of the assessment and enhancement of Scientific Reserves and the evaluation of readiness for Biogeographical Seminars in support of the advancement of the Emerald Network in Georgia. It is provided for informational and advisory purposes under the EU4Environment Programme and does not constitute an official policy document.

The content is intended to support Georgia and relevant institutions in updating the Emerald Network database for submission to the Bern Convention Secretariat and in further developing the Emerald Network in Georgia.

The findings and recommendations presented in this document may be used by the stakeholders in Georgia to support national decision-making processes. Their application remains subject to national legislation and site-specific assessments.

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, and 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 inputs provided by national experts and institutions in Georgia, including specialists on the Emerald Network and on habitat and species distribution. In particular, the team thanks **Konstantine Kereselidze, Giorgi Iankoshvili, Bela Japoshvili, Zurab Javakhishvili, Kakha Artsivadze, Dachi Kanchaveli, Tamar Uguzashvili, Tornike Bubashvili, Nika Budagashvili, and Sandro Kolbaia** for their expert contributions, data sharing, and participation in technical consultations and the self-evaluation workshop held in Tbilisi.

Substantive technical guidance and country-level coordination were provided by **Darejan Kapanadze**, Senior Environmental Specialist and World Bank Programme Coordinator in Georgia and **Nino Inasaridze**, EU4Environment World Bank Activity Coordinator in Georgia.

Table of Contents

1. Introduction.....	1
2. Available scientific knowledge useful for the Emerald Network development.....	4
3. Progress, current situation, gaps, and recommendations for the next round of biogeographical seminars.....	6
Habitats.....	6
Mammals.....	62
Fish.....	73
Invertebrates.....	75
Birds.....	82
Plants.....	107
4. Activities required for further improvement of the national Emerald Network.....	109
References.....	115

Acronyms and Definitions

A-sites for habitats	Sites where the habitat covers more than 15 percent of the total habitat coverage of the country
A-sites for species	Sites that contain more than 15 percent of the total population of species in the country
ALP	Alpine Biogeographic region
B-sites for habitats	Sites where the habitat covers 2–15 percent of the total habitat coverage of the country
B-sites for species	Sites that contain 2–15 percent of the total population of species in the country
bp	Breeding pair
BGR	Biogeographical region
BLS	Black Sea Biogeographic region
CD	Correct data
C-sites for habitats	Sites where the habitat covers less than 2 percent of the total habitat coverage of the country
C-sites for species	Sites that contain less than 2 percent of the total population of species in the country
D-sites	Nonsignificant population or habitat cover
EBBA2	European Breeding Bird Atlas 2 (Keller et al. 2020)
ELLE	Estonian, Latvian & Lithuanian Environment
ERL	European Red List
EU	European Union
ILE SAS	Institute of Landscape Ecology of Slovak Academy of Sciences
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 a 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 habitats or species need to be declared.
MR	Marine Reserve
NGO	Nongovernmental organization
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
- STE** Steppic Biogeographic region
- SUF** Sufficient protection of specific species or habitat by the Emerald Network

1. Introduction

This report is an output of the project ‘Regional Collaboration in Protecting Biodiversity & Ecosystems in Eastern Partnership Countries’. This report was prepared within the framework of the World Bank-executed ‘Ecosystem Services and Livelihoods’ pillar of the EU-funded European Union for Environment (EU4Environment) Programme. Within this pillar, the report contributes to the sub-component focused on advancing the Emerald Network in the Eastern Partnership countries. The document is intended to assist Georgia in preparing the next version of its Emerald database for submission to the Bern Secretariat. It should serve the Georgian 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 Georgia.

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 Georgia. The report summarizes the analytical work conducted to assess progress in knowledge about Bern Convention species and habitats in Georgia. It draws on information presented in the pre-scoping document ‘Review of Progress in Scientific Knowledge of Emerald Habitats and Species Distribution in Georgia’. 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 of those Bern Convention species and habitats identified in the last biogeographical seminar as not sufficiently represented in the Emerald Network in Georgia 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 Georgia. Its findings were then discussed with local experts during the self-evaluation workshop in Tbilisi on November 11, 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 Georgia 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 December 15–16, 2021. 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 Georgia (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 Tbilisi workshop also provided an opportunity to discuss more general aspects of the Emerald Network development in Georgia. Results of this discussion were used to formulate recommendations for the future improvement of the Emerald Network, the protection of Emerald species and habitats, and the 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.

1. შესავალი

წინამდებარე ანგარიში შემუშავდა აღმოსავლეთ პარტნიორობის ქვეყნებში ბიომრავალფეროვნებისა და ეკოსისტემების (ზურმუხტის ქსელი) დაცვისთვის რეგიონული თანამშრომლობის ფარგლებში, რაც „აევროკავშირი გარემოსთვის“ (EU4Environment) პროგრამის ნაწილს წარმოადგენს. იგი მიზნად ისახავს ხელი შეუწყოს საქართველოს მხრიდან პასუხისმგებელ უწყებებს ბერნის სამდივნოსთვის წარსადგენი ზურმუხტის ქსელის მონაცემთა ბაზის მომდევნო ვერსიის მომზადებაში. ესაა ინსტრუმენტი, რომელიც დაეხმარება საქართველოს მთავრობას, შესაბამის სახელმწიფო დაწესებულებებს, მეცნიერებს, ექსპერტებს, არასამთავრობო ორგანიზაციებსა და ადგილობრივ დაინტერესებულ პირებს უკეთ მოემზადონ მომდევნო ბიოგეოგრაფიული სემინარისთვის და განავითარონ ზურმუხტის ქსელი საქართველოში.

დოკუმენტში წარმოდგენილია მიგნებები საქართველოს ზურმუხტის ქსელში ბერნის კონვენციით დაცული სახეობებისა და ჰაბიტატების შესახებ. იგი ასახავს ამ მიმართულებით გადადგმულ ნაბიჯებს, არსებულ მდგომარეობასა და ხარვეზებს. ანგარიში მიმოიხილავს ანალიტიკურ სამუშაოს, რომელიც განხორციელდა ბერნის კონვენციით დაცული სახეობებისა და ჰაბიტატების შესახებ საქართველოში დაგროვილი ცოდნის შესაფასებლად. ანგარიშს საფუძვლად დაედო წინასწარი მოკვლევის დოკუმენტი სახელწოდებით „საქართველოში ბიომრავალფეროვნებისა და სახეობების გავრცელების შესახებ არსებული სამეცნიერო ცოდნის დაგროვების პროცესის მიმოხილვა“. წინასწარი მოკვლევის მოსამზადებლად ჩატარდა ზურმუხტის ქსელის განვითარების ეროვნული გეგმების ანალიზი და ლიტერატურის ვრცელი მიმოხილვა, რომელმაც მოიცვა სამეცნიერო სტატიები, ანგარიშები, კონსერვაციის ეროვნული ნუსხები, მონაცემთა ბაზები და მოსახლეობაში დაგროვილი ცოდნა. ეს მასალა გამოყენებული იქნა ბერნის კონვენციით დაცული იმ სახეობების და ჰაბიტატების შესახებ არსებული ინფორმაციის შესაჯამებლად, რომლებიც ბოლო ბიოგეოგრაფიული სემინარის დასკვნით საქართველოს ზურმუხტის ქსელში არასაკმარისადაა წარმოდგენილი ან რომელთა შესახებ არსებული მონაცემები მწირია და დამატებით შესწავლას საჭიროებს. რეკომენდაციების შემუშავებაში გამოყენებული იყო ხელმისაწვდომი მონაცემები, რომელთა წყაროები მითითებულია დოკუმენტის შესაბამის ნაწილებსა და ლიტერატურის ჩამონათვალში.

წინასწარი მოკვლევის დოკუმენტი გაეგზავნა საქართველოს მთავრობის წარმომადგენლებისა და ექსპერტებს. შემდეგ ძირითადი მიგნებები განხილული იქნა ადგილობრივ ექსპერტებთან თვითშეფასების სამუშაო შეხვედრაზე, რომელიც 2025 წლის 11 ნოემბერს ჩატარდა თბილისში. ამ განხილვისას შეგროვილი დამატებითი ინფორმაცია შესულია მე-3 თავის ცხრილებში სათაურით „ადგილობრივ ექსპერტთა მოსაზრებები“. კვლევის მიგნებებმა შეავსო მეცნიერულ ცოდნაში არსებული დანაკლისი და საფუძველი შეუქმნა საქართველოში ზურმუხტის ქსელის განვითარებისთვის რეკომენდაციების შემუშავებას.

დოკუმენტის ძირითად ნაწილში ყურადღება გამახვილებულია იმ ცალკეულ სახეობებსა და ჰაბიტატებზე, რომლებიც არასაკმარისად არის დაცული ზურმუხტის ქსელის ფარგლებში. მათი იდენტიფიცირება ეფუძნება ბოლოდროინდელი ბიოგეოგრაფიული სემინარების დასკვნებს, კერძოდ: 2019 წლის 18-19 ივნისს ჩატარებულ სემინარს ცხოველურ და მცენარეულ სახეობებსა და ჰაბიტატებზე და 2021 წლის 15-16 დეკემბერს ჩატარებულ სემინარს ფრინველებზე. წინამდებარე კვლევა უღრმავდება იმ სახეობებს, რომელთა შესახებ არსებული ცოდნა არასაკმარისია (დასკვნა: SR¹), რაც არ იძლევა იმის საშუალებას რომ დადასტურდეს საქართველოს

¹ SR – scientific reserve: insufficient knowledge about habitats or species - სამეცნიერო ნაკრძალი: ჰაბიტატების ან

ბიოგეოგრაფიულ რეგიონებში ამგვარი სახეობებისა და ჰაბიტატების არსებობა ან არარსებობა (დასკვნა: SR REF²); აგრეთვე, სახეობებისა და ჰაბიტატების არასაკმარისი დაცულობა (დასკვნა: IN MOD³) ან სრული დაუცველობა (დასკვნა: IN MAJ⁴) ზურმუხტის ქსელით. ზურმუხტის ქსელის ფარგლებში სახეობების ამჟამინდელი გავრცელების არელების გადამონშებით, ლიტერატურის მიმოხილვითა და ბიოგეოგრაფიული სემინარების დასკვნებზე დაყრდნობით შემუშავებულია რეკომენდაციები თითოეული შეფასებული სახეობისა და ჰაბიტატის თაობაზე.

ცალკეული სახეობებისა და ჰაბიტატების სტატუსისა და მათ შესახებ არსებული შეხედულებების გადამონშების გარდა, თბილისში გამართულ სამუშაო შეხვედრისას საუბარი შეეხო ზურმუხტის ქსელის განვითარების უფრო ზოგად საკითხებსაც. ამ მსჯელობის შედეგები აისახა რეკომენდაციებში, რომლებიც შემუშავდა ზურმუხტის ქსელის სამომავლო გაუმჯობესებისთვის, აგრეთვე ზურმუხტის ქსელის სახეობებისა და ჰაბიტატების დაცვისა და ზურმუხტის ქსელის ტერიტორიების მართვისთვის. რეკომენდაციები მოცემულია ანგარიშის მე-4 თავში და აჯამებს ამ დოკუმენტის წინა თავებში მოტანილ და თვითშეფასების სემინარზე განხილულ რჩევებს.

სახეობების შესახებ არასაკმარისი ცოდნა

² SR REF – scientific reserve on reference list: insufficient knowledge about the presence of habitats or species in the respective biogeographical region of the country - საკვლევ სიაში შეტანილი სამეცნიერო ნაკრძალი: არასაკმარისი ცოდნა ქვეყნის ბიოგეოგრაფიულ რეგიონში ჰაბიტატის ან სახეობის არსებობის შესახებ

³ IN MOD – 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 - ჰაბიტატი ან სახეობა დაცულია ზურმუხტის ქსელის ფარგლებში. დაცულობა არასაკმარისია და საჭიროა ჰაბიტატების ან სახეობებისთვის მეტი ტერიტორიების გამოყოფა.

⁴ IN MAJ – habitat or species is present but is not protected by the Emerald Network - ჰაბიტატები ან სახეობები არსებობენ, მაგრამ არ არიან დაცულნი ზურმუხტის ქსელის ფარგლებში.

2. Available scientific knowledge useful for the Emerald Network development

Between 2009 and 2017, Georgia developed its national database for Emerald Network sites, species, and habitats with the support of the Council of Europe and the European Union (EU). This project, focused on the creation of the Emerald Network of Areas of Special Conservation Interest (ASCI), operates under the Bern Convention (1979). The network currently comprises 66 sites, 62 habitat types, and 214 species, with terrestrial sites covering **18.5 percent** of the country's territory. All these sites have been officially adopted into the Emerald Network.

During the preparation of this document, a review of existing literature revealed that bibliographical data regarding the distribution of **habitat** types are scarce. In addition to individual papers, books have been published in Georgia that use the Natura 2000 habitat classification (Akhalkatsi 2019; Akhalkatsi and Tarkhnishvili 2012) and vegetation classification (Nakhutsrishvili 2013). Where distribution is mentioned, it is typically in a general form; detailed distribution maps are entirely absent. Furthermore, the literature indicates that the territory of Georgia has been unevenly studied. **Kolkheti lowlands, mountain areas, and the Javakheti Plateau appear** to be more extensively documented than other regions, particularly regarding wetland habitats.

The occupied territories of the Abkhazia and South Ossetia regions have been fully considered in this evaluation; indeed, sites have already been designated within these areas. However, it is difficult to conclude whether habitat representation will become sufficient even if all proposed areas are designated. Because habitat mapping is currently unavailable, we cannot accurately deduce the proportion of each habitat type that would be covered or the overall variety of habitats included. Most habitats currently lack coverage data, and in several instances, relative surface area values remain blank. For certain SRs, we propose discussing habitat interpretation with Armenia to ensure regional coherence and continuity. It is also worth considering Armenia's interpretation for other habitat types not currently IN MOD (such as H2.3) to ensure broader regional alignment.

Data on **mammals** are currently very limited and frequently lack specific location data. The published annotated list of Georgian mammals (Bukhnikashvili and Kandaurov 2004) is outdated, lacks maps, and provides only general descriptions of species distributions. However, for some species, records with exact locations do exist. A reliable source for chiropterans is 'Bats of Georgia. Version 1.2. Occurrence dataset' (Natradze et al. 2023), which compiles historical and contemporary records through 2022. Regarding other mammal groups, excellent current data on cetaceans are available in the final report by Shvelidze (2019) 'Conservation Actions of Cetaceans in the Georgian Territorial Waters'. Notably, marine mammal species are currently listed in the Black Sea BGR but should be reassigned to the Marine Black Sea biogeographical region (MBLS).

Regarding **fish** fauna, two species were evaluated. Data on the occurrence of the European sea sturgeon (*Acipenser sturio*) in the Rioni River consist mainly of historical records, which suggest a declining population in Georgia; however, breeding grounds still exist near Samtredia. Additionally, a population of Asp (*Aspius aspius*) has been recorded at a new locality within the study area (Rioni, Pal-iastomi Lake). Literature for these species includes studies by Kolman (2011) 'European sturgeon, *Acipenser sturio* in Georgia', and Mamcarz et al. (2008) '*Asp Aspius aspius* Linnaeus, 1758 monography'.

Birds are a taxonomic group for which there is relatively good knowledge in Georgia. Information on bird species is derived primarily from the European Breeding Bird Atlas 2 ((Keller et al. 2020). The European Breeding Bird Atlas 2 (EBBA2) provides critical data on breeding species, with their distribution mapped at a 50 km square resolution. Data were collected between 2013 and 2017. Important information is available through the Important Bird Areas (IBA) database, maintained by BirdLife International, which highlights sites of significance for bird biodiversity. There are 31 IBAs in Georgia. Among the important sites not covered by the Emerald Network are Lake Kartsakhi and Lake Pharavani. A comprehensive source of data on birds of prey is the book 'Raptors and Owls of Georgia' (Galvez et al. 2005). More recent records are available through web-based databases, including Global Biodiversity Information Facility (GBIF) (www.gbif.org/), eBird.org, iNaturalist (www.inaturalist.org/observations/), TrekTellen (www.trektellen.org/), Xeno-canto (www.xeno-canto.org/), and Observation.org (www.observation.org/). Emerald Network coverage was assessed for 27 species (Falconiformes: 12, Charadriiformes: 4, Gruiformes: 3, Pelecaniformes: 2, Passeriformes: 2, Ciconiiformes: 1, Coraciiformes: 1).

formes: 1 Anseriformes: 1, Procellariiformes: 1). The largest coverage gap for breeding or migratory populations is found in Javakheti National Park, specifically at Bugdasheni (GE0000005), Madatapha (GE0000004), and Khanchali (GE0000017). The SDF lacks numerical data on population status at the sites. Additionally, no marine sites have been included for *Puffinus yelkouan*.

Only two **plant species** were assessed: *Paeonia tenuifolia* and *Hamatocaulis vernicosus*. Specific Georgian-language publications on *H. vernicosus* are scarce, reflecting a general lack of targeted research on this species within the country; consequently, further research is required to confirm its presence and review its distribution. While *P. tenuifolia* has been more widely studied, the available literature is limited to sites where the species is already protected. To address these data gaps, GBIF was utilized to identify potential new sites.

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

This section 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 Georgia, we considered 154 cases:

- Present habitat or species but is not protected by the Emerald Network (conclusion **IN MAJ**): 2 cases.
- Habitat or species with known presence in a specific Emerald site. Protection of habitat or species needs to be declared in a specific Emerald site (conclusion **IN MIN**): 2 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**): 30 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**): 84 cases.
- Insufficient knowledge about habitats or species, additional research is needed (conclusion **SR**): 35 cases.
- Insufficient knowledge about the presence of habitats or species in the respective BGR of the country (conclusion **SR REF**): 1 case.

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 2021 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 review conducted by external experts, presented in the pre-scoping document ‘Review of Progress in Scientific Knowledge of Emerald Habitats and Species Distribution in Georgia’ (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.

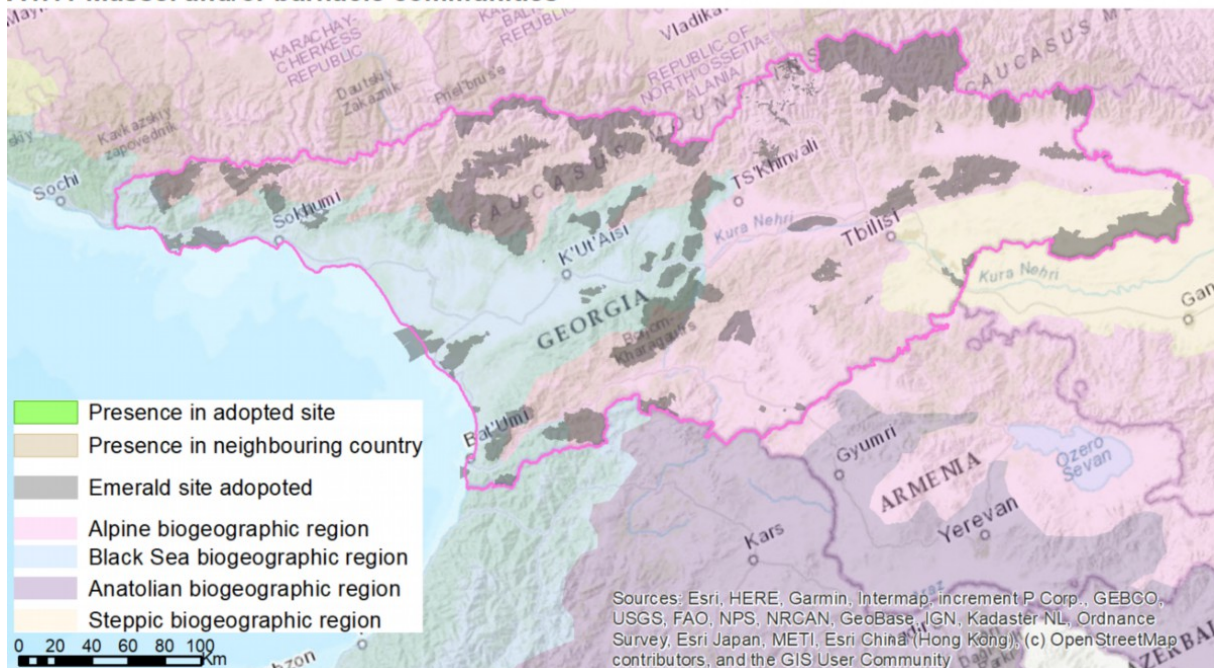
Each table is accompanied by a map showing the distribution of the habitat or species within the Emerald Network. **These maps include data for all site categories (Adopted, Proposed, Candidate)**; however, in Georgia’s case, every site has already been fully Adopted.

Habitats

BGR	A1.11 Mussel and/or barnacle communities
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN/MR (marine reserve)
	Recommendation 2025: Marine Reserve for review, as some relevant information is available—MBLS is covered by EMODnet and WISEmarine. It is recommended to engage with the Bucharest Convention to support mapping of marine habitats, at least in inshore waters. Use the results of the GeoEcoMar 2021 project and check the Black Sea coast near Kvriati village and elsewhere in the Batumi region. Use knowledge of Molluscs experts for the identification of sites. The MBLS region should be specified in the database.
	Comments from external experts: Marine Reserve was agreed at the last seminar in 2021 because

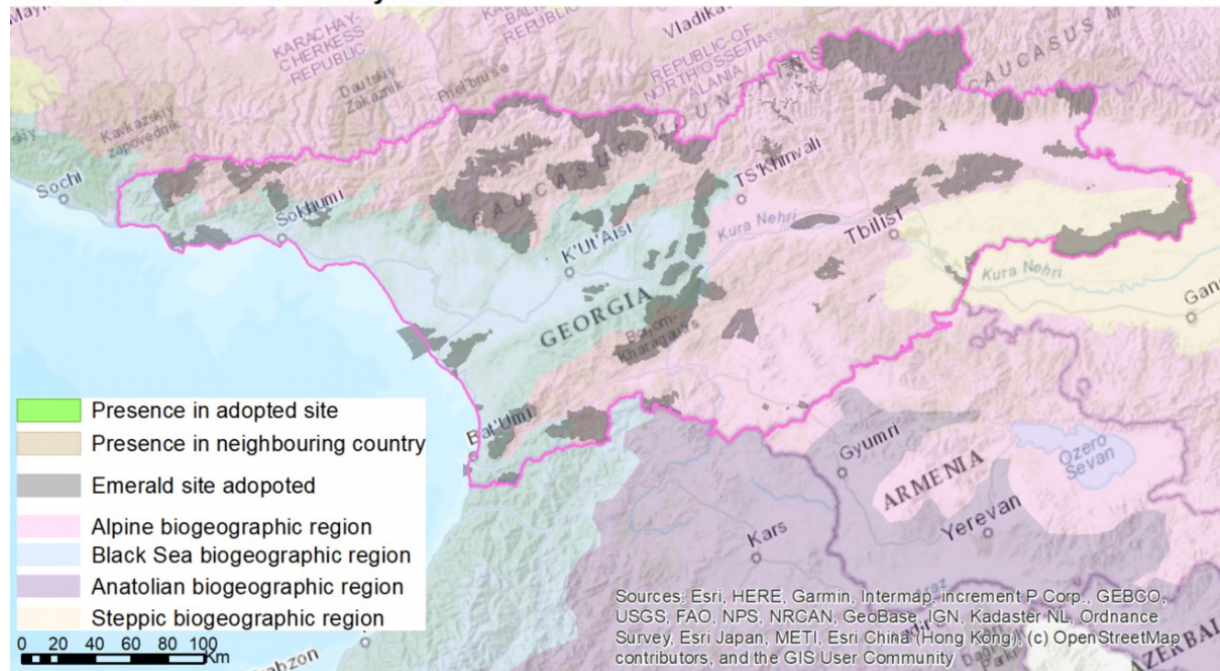
<p>of the lack of marine data. No sites have been designated for this habitat type in GE_MBLs (Emerald_2024.db). Therefore, it should be included in the MAJ. Nevertheless, rocky marine habitats are less represented than sandy habitats in inshore and coastal waters, and the literature is limited. Some survey sample points are located along the Georgian coast under the project GeoEcoMar 2021 - Occurrence of the Black Sea Shelf Benthic Habitats in Ukraine and Georgia (EMBLAS Project). Contact: GeoEcoMar - adrianxteaca@yahoo.com, Event IDs: EMBLAS II: GeoEcoMar: NPMS GE: MN149_01 to _13. However, the results from these surveys are not publicly available (or could not be located). Japoshvili et al. (2015) reported on major benthic animal groups in the Black Sea near Kvartavi village; therefore, this area should be investigated further—two relevant survey points correspond to the abovementioned project (Event IDs: MN149_01 and MN149_02).</p>
<p>Comments from local experts: Habitat occurs close to Batumi and in Abkhazia. Mollusc specialists could help specify sites.</p>
<p>Reference: EMODnet Map Viewer: https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010.8019#level_8019.</p>

A1.11 Mussel and/or barnacle communities



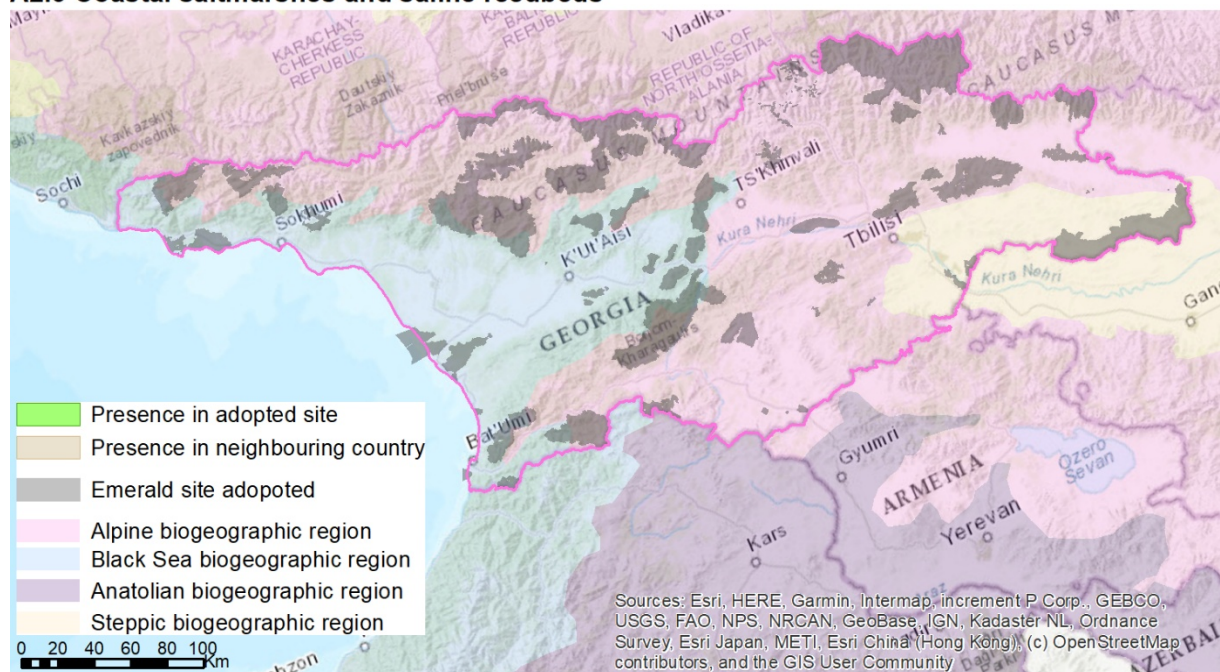
BGR	A2.2 Littoral sand and muddy sand
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MAJ
	Recommendation 2025: No sites. Check estuaries of main rivers—Rioni, Enguri, and Kodori, area around GE0000006, and along the coast of Abkhazia, particularly sandbanks next to Samegrelo. Consider area outside Kolkheti site GE0000006 and Chorokhi River Delta. The MBLs region should be used.
	Comments from external experts: No sites. The definition of this habitat type is quite broad, including mudflats, sandflats, or coastal lagoons. This habitat is present in the main estuaries of the country, such as Rioni River estuary, Enguri estuary, or Kodori estuary. Likely present around GE0000006 and along the coast of Abkhazia, particularly sandbanks next to Samegrelo.
	Comments from local experts: To check Kolkheti—existing sites and area just outside Emerald site (GE0000006), especially the beach, area between its terrestrial and marine parts. Habitat could also occur in the Chorokhi River Delta.
	Reference: 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



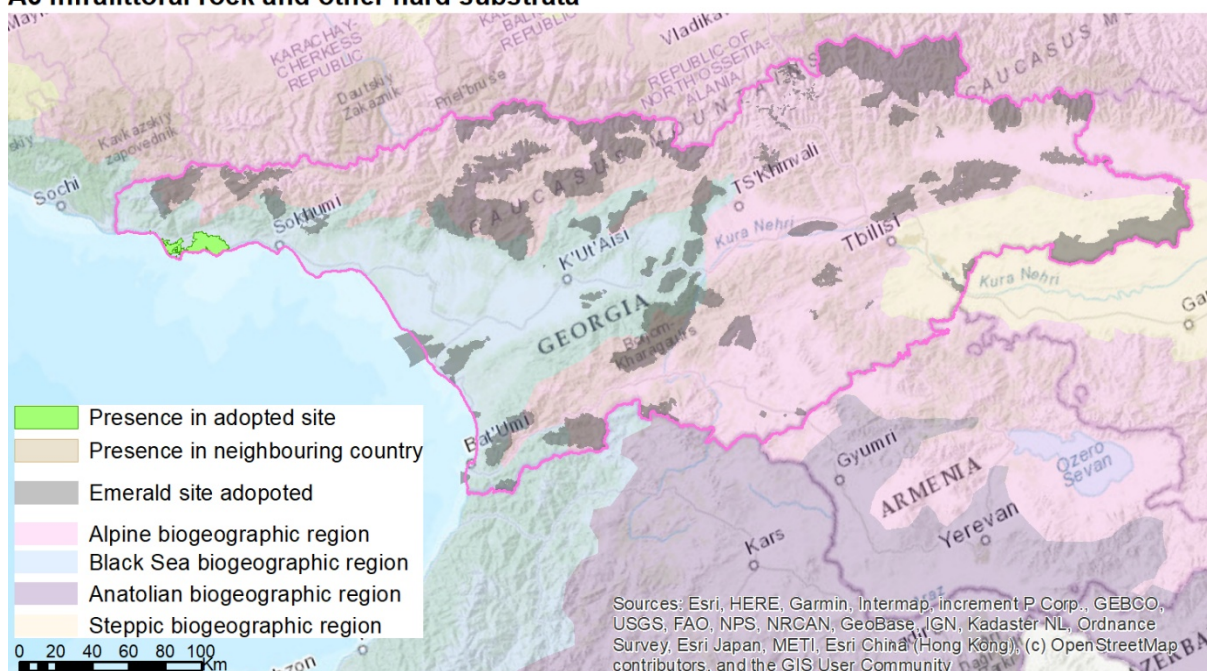
BGR	A2.5 Coastal saltmarshes and saline reedbeds
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Lack of information; research and mapping is needed. The MBLs region should be used.
	Comments from external experts: Not enough information for this habitat type. No sites; it should be IN MAJ.
	Comments from local experts: No information. Further research is needed.
	Reference: EMODnet Map Viewer: https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010,8019#level_8019 .

A2.5 Coastal saltmarshes and saline reedbeds



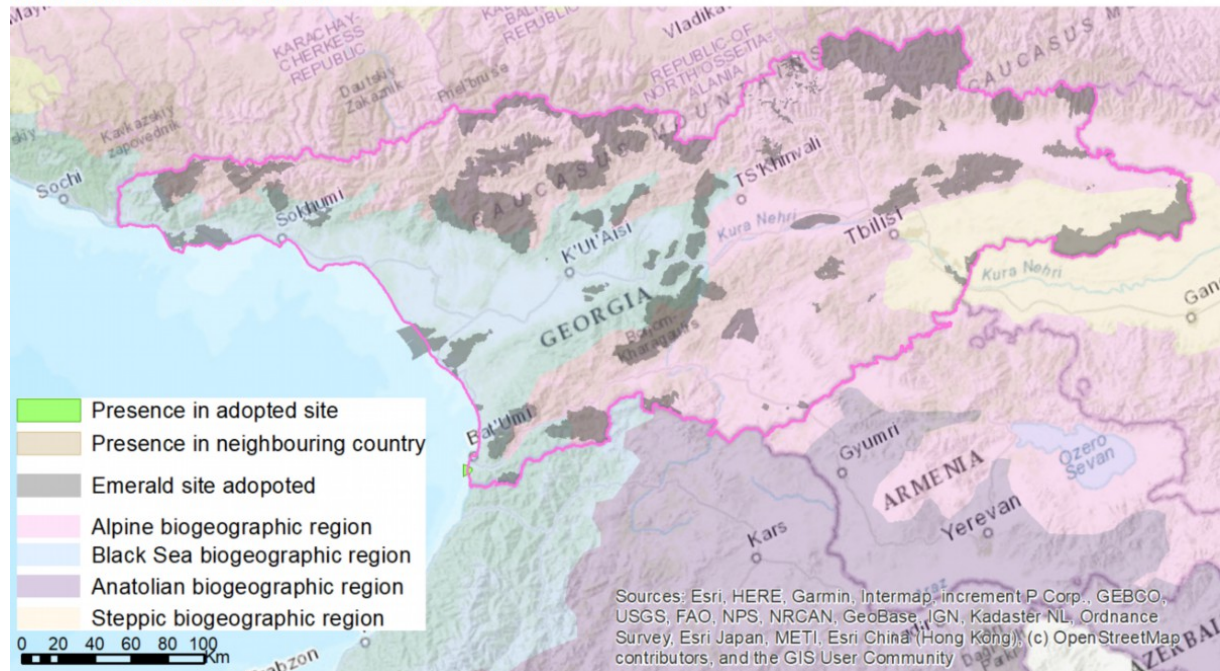
BGR	A3 Infralittoral rock and other hard substrata
BLS	Num. of sites: 1 (A:1)
	BGR seminar 2021 conclusion: IN MOD/MR no change; previous conclusion still valid; 'South and Abkhazia'
	Recommendation 2025: Approach Bucharest Convention to map marine habitats, at least in inshore waters. Check presence in Abkhazia and the South (for example, Tsikhisdziri area). Presence of <i>Laminaria</i> in Georgia to be confirmed. Marine caves to be located. The MBL region should be used.
	Comments from external experts: Marine Reserve was agreed at the last seminar in 2021 because of the lack of marine data. There is 1A site designated in the north: GE0000025. Possible rocky marine habitats are less represented than sandy habitats in inshore and coastal waters and the literature is scarce, so the Marine Reserve can be maintained.
	Comments from local experts: Tsikhisdziri in the south and the coast of Abkhazia
	Reference: 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



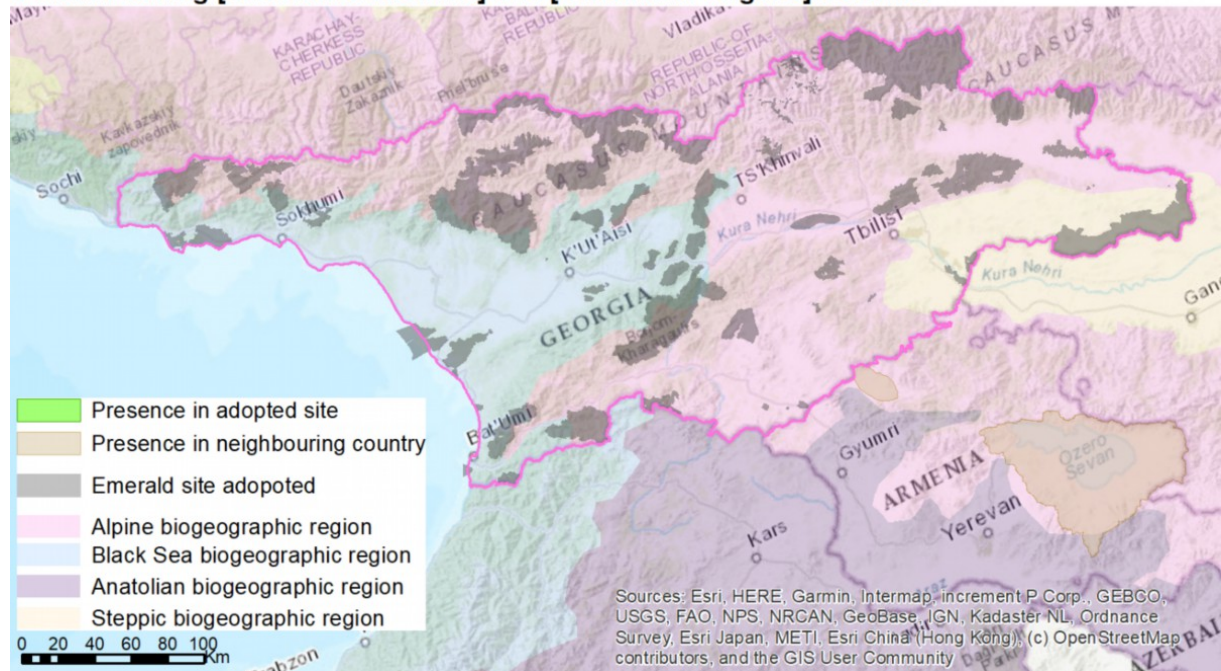
BGR	B1.6 Coastal dune scrub
BLS	Num. of sites: 1 (No data: 1)
	BGR seminar 2021 conclusion: IN MOD a.o. Kolkheti
	Recommendation 2025: Check presence on dunes south of Poti, north of Kulevi village, around Sukhumi, and eventually enlarge site GE0000006 Kolkheti. Survey of Chorokhi Delta area to be done. The MBL region should be used.
	Comments from external experts: One site (Chorokhi Delta) lacks information. Likely present on dunes south of Poti, but apparently the area is outside GE0000006 Kolkheti (if confirmed, the site should be enlarged, which will improve coherence of the site because this polygon has been excluded from the site). In the narrow littoral line north of Kulevi village, relict vegetation of ancient Mediterranean flora can be found. Coastal scrub of secondary origin is found near Sukhumi.
	Comments from local experts: Chorokhi Delta, Kolkheti
	References: https://eunis.eea.europa.eu/habitats-code-browser-redlist.jsp?expand=8010.8019#level_8019 . Akhalkatsi and Tarkhnishvili 2012; Denk et al. 2001

B1.6 Coastal dune scrub



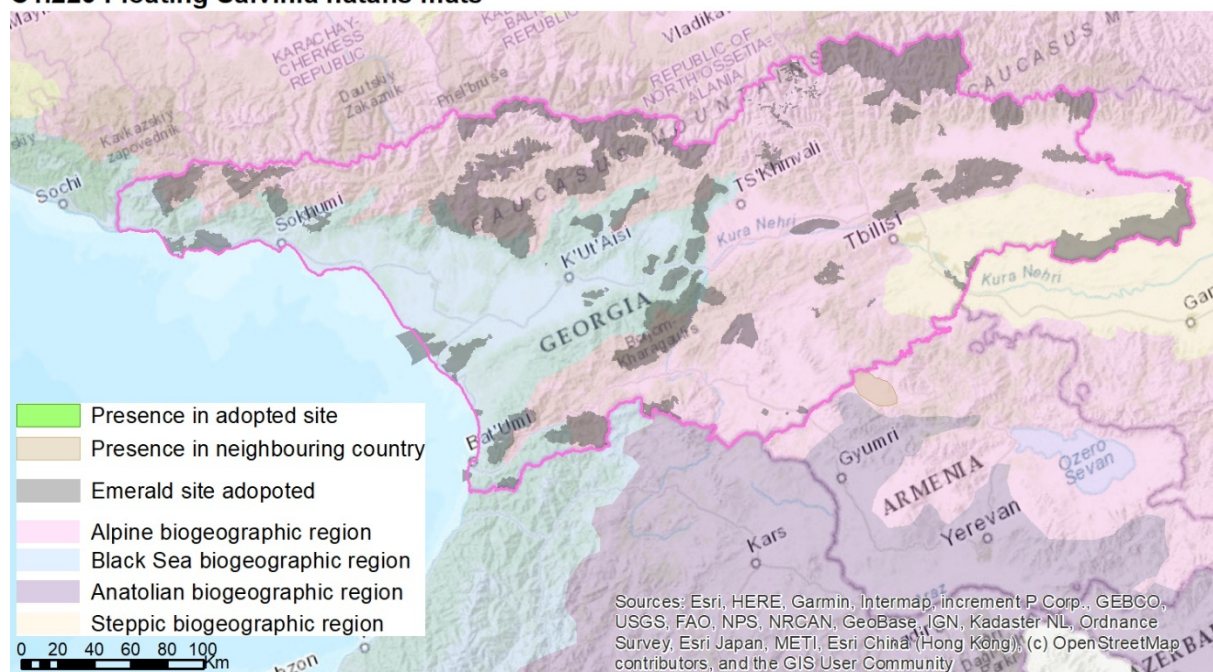
BGR	C1.224 Floating <i>Utricularia australis</i> and <i>Utricularia vulgaris</i> colonies
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check lakes in Javakheti Uplands, Lakes Bebe-Syr and Anishkhara (Abkhazeti). Further research is needed.
	Comments from external experts: No sites. The rare community of <i>Utricularia vulgaris</i> and <i>Aldrovanda vesiculosa</i> are to be found in the lakes Bebe-Syr and Anishkhara (Abkhazeti) (Nakhutsrishvili 2013) and in Javakheti Uplands (Dzelkva Ltd. 2009; Tedoradze et al. 2023).
	Comments from local experts: Occurrence in Javakheti.
	References: Nakhutsrishvili 2013; Dzelkva Ltd. 2009; Tedoradze et al. 2023
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: No information; further research is needed.
	Comments from external experts: No sites
	Comments from local experts: No information
	References: n/a

C1.224 Floating [*Utricularia australis*] and [*Utricularia vulgaris*] colonies



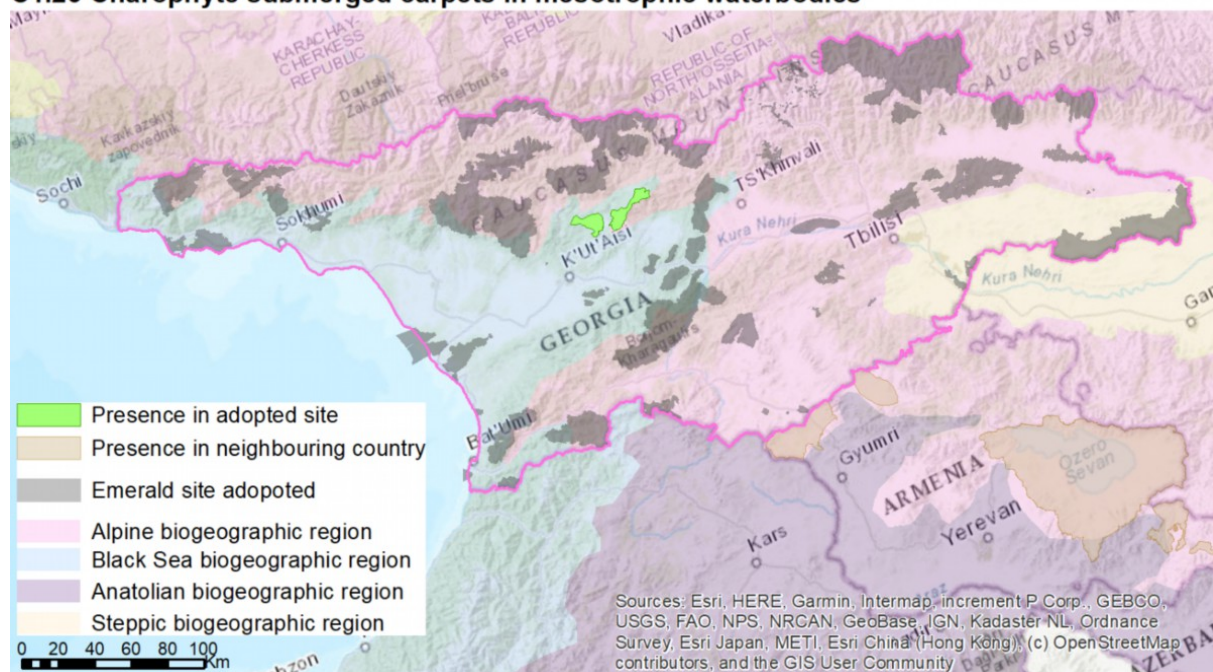
BGR	C1.225 Floating <i>Salvinia natans</i> mats
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Check Shida Kartli Lowland and Alazani Valley.
	Comments from external experts: No sites. Shida Kartli Lowland and Alazani Valley (Tedoradze et al. 2023).
	Comments from local experts: No information
	Reference: Tedoradze et al. 2023
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD Kolkheti
	Recommendation 2025: Survey to be focused on Colchic Lowland and knowledge of local experts to be used. Check habitat occurrence in site GE0000060 Kobuleti.
	Comments from external experts: No sites. Stagnant waters, ditches, and pools of Colchic Lowland (Nakhutsrishvili 2013; Tedoradze et al. 2023).
	Comments from local experts: Kobuleti site (GE0000060). More information could be provided by local experts from Batumi.
	References: Nakhutsrishvili 2013; Tedoradze et al. 2023

C1.225 Floating *Salvinia natans* mats



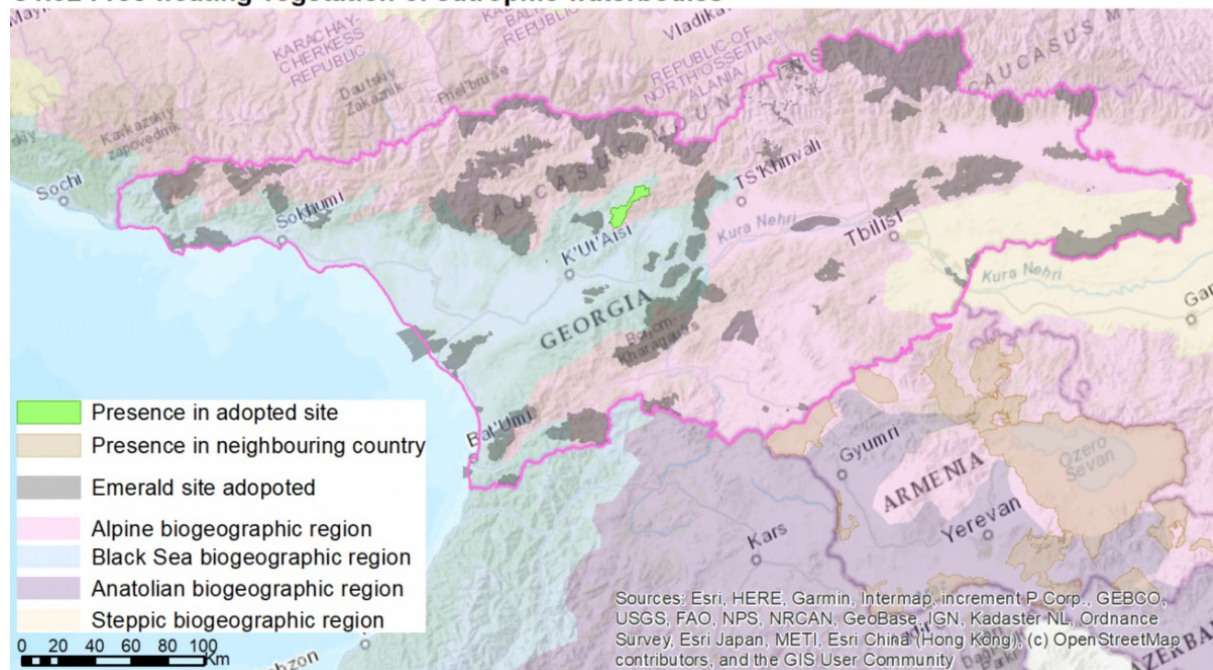
BGR	C1.25 Charophyte submerged carpets in mesotrophic waterbodies
ALP	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check literature for known sites. Further research is needed.
	Comments from external experts: 1C site. Romanov et al. (2023) report 18 species from Georgia. <i>Tolypella nidifica</i> —one recent record from inland Georgia by V.S. Vishnyakov—White Lake (Didi Tba; Romanov et al. 2023).
	Comments from local experts: The habitat should be common.
	Reference: Romanov et al. 2023.
BLS	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check literature for known sites and area south of sites GE0000041 Ratcha 3 and GE0000042 Ratcha 4.
	Comments from external experts: 1C site. Romanov et al. (2023) reported 18 species from Georgia.
	Comments from local experts: Habitat could occur south of existing sites (GE0000041 and GE0000042).
	Reference: Romanov et al. 2023

C1.25 Charophyte submerged carpets in mesotrophic waterbodies



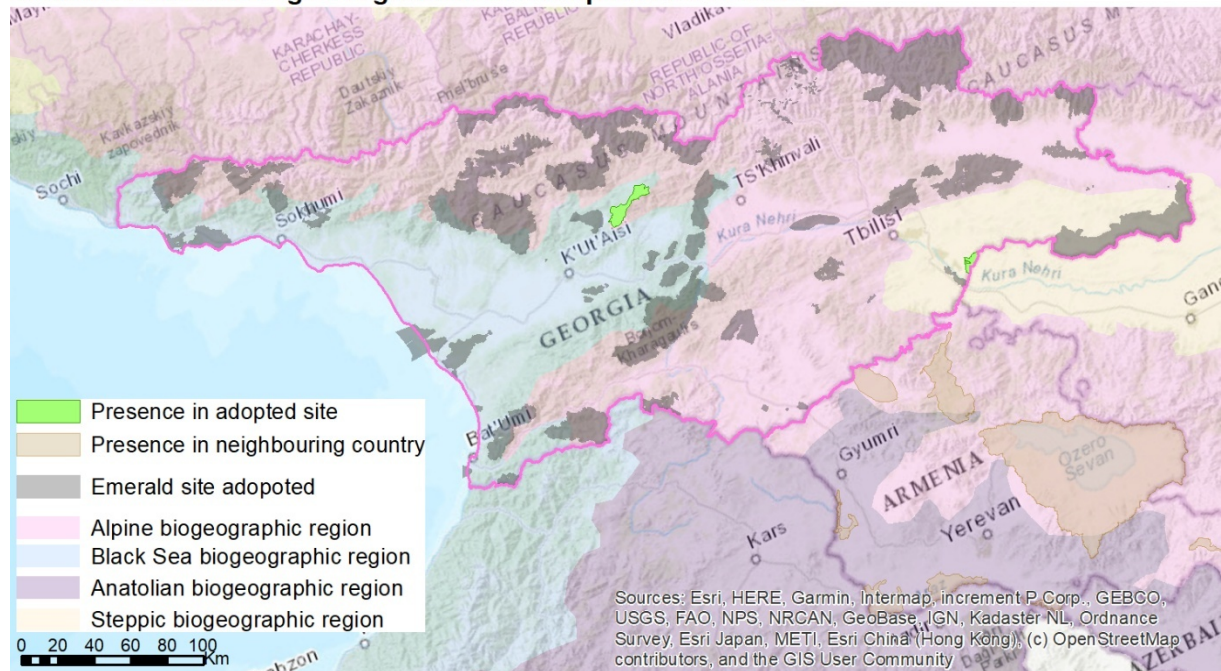
BGR	C1.32 Free-floating vegetation of eutrophic waterbodies
ALP	Num. of sites: 1 (B:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Further research is needed. Check sites in Javakheti Uplands, for example, Paravani Lake, Mtiani Adjara, Upper Imereti, Shemkheti, Khanchali, and Madatafa Lakes.
	Comments from external experts: 1B site. In Javakheti Uplands, including Paravani Lake (Dzelkva Ltd. 2009). Javakheti, Mtiani Adjara, Upper Imereti (Tedoradze et al. 2023) and Shemkheti, Khanchali, and Madatafa Lakes (Akhalkatsi 2019).
	Comments from local experts: Paravani Lake is not eutrophic. Further research is needed, mostly in Javakheti.
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check suitable sites in Colchic Lowland, including GE0000006 Kolkheti, Chorokhi Delta, Grigoleti, Tskaltsminda, Narionali, Grogoleti, Anaklia, Imnati.
	Comments from external experts: No sites. Stagnant waters, ditches, and pools of Colchic Lowland (Nakhutsrishvili 2013) and Kolkheti Lowland (Tedoradze et al. 2023). Freshwater habitats with dominant species <i>Trapa colchica</i> , <i>Trapa maleevi</i> , <i>Trapa hyrcana</i> : Chorokhi Delta, Grigoleti, Tskaltsminda, Narionali; Narionali, Grogoleti, Anaklia, Imnati, Chorokhi (Matchutadze et al. 2015); <i>Trapa colchica</i> , <i>Trapa maleevi</i> , <i>Nymphaea colchica</i> (Varshanidze et al. 2020).
	Comments from local experts: Kolkheti site to be checked.
	References: Dzelkva Ltd. 2009; Tedoradze et al. 2023; Akhalkatsi 2019; Nakhutsrishvili 2013; Matchutadze et al. 2015

C1.32 Free-floating vegetation of eutrophic waterbodies



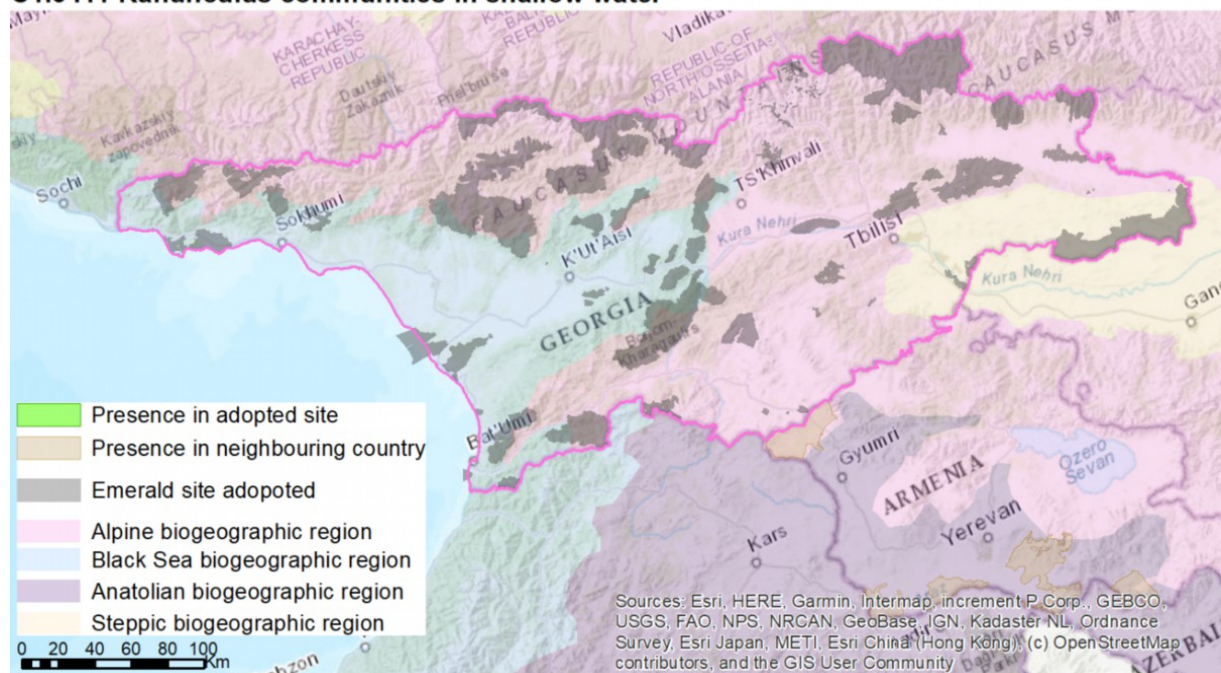
BGR	C1.33 Rooted submerged vegetation of eutrophic waterbodies
ALP	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: New sites especially in Javakheti Uplands
	Comments from external experts: 1C site. In Javakheti Uplands, including Bezhan-Baraleti (Agandirchali Lake), Madathapa Lake, and Paravani Lake (Dzelkva Ltd. 2009). <i>Potamogeton crispus</i> , <i>P. natans</i> in Javakheti (Tedoradze et al. 2023).
	Comments from local experts: Javakheti
BLS	Num. of sites: 1 (B:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: New sites, especially in the Kolkheti Lowland.
	Comments from external experts: No sites. <i>Potamogeton crispus</i> , <i>P. natans</i> in Kolkheti Lowland (Tedoradze et al. 2023).
	Comments from local experts: All eutrophic lowland lakes
STE	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Further research needed.
	Comments from external experts: 1C site. No information
	Comments from local experts: No information
	References: Dzelkva Ltd. 2009; Tedoradze et al. 2023

C1.33 Rooted submerged vegetation of eutrophic waterbodies



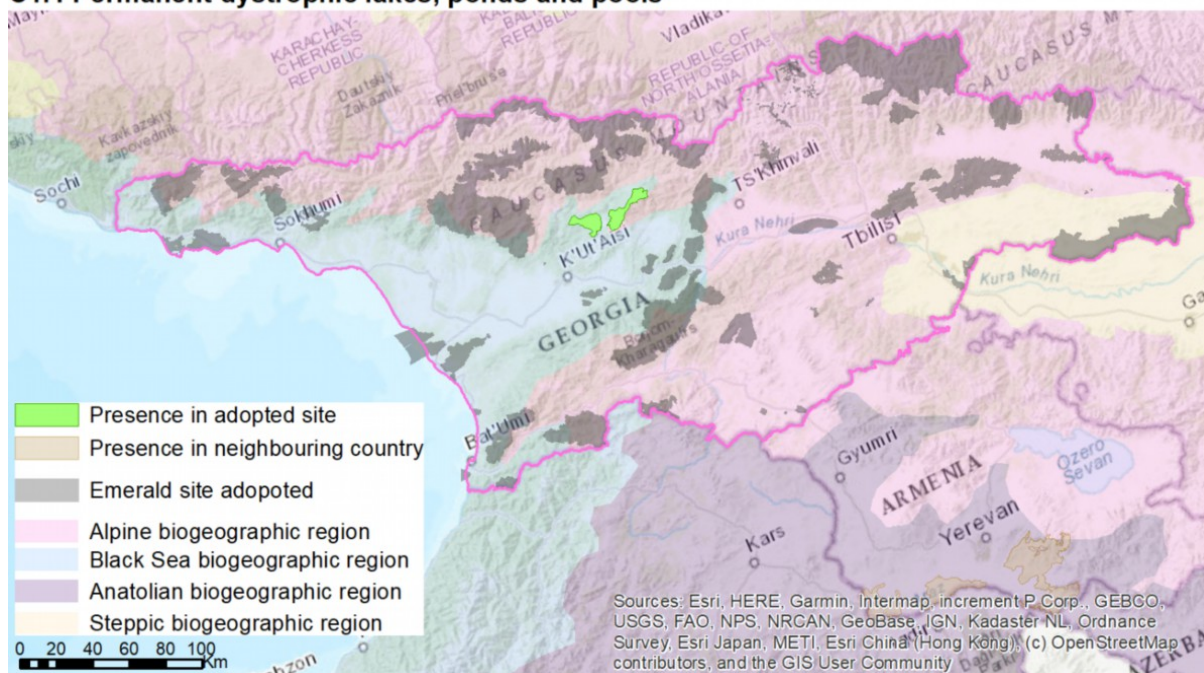
BGR	C1.3411 <i>Ranunculus</i> communities in shallow water
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Further research needed.
	Comments from external experts: No sites. No information.
	Comments from local experts: <i>Ranunculus rionii</i> is extinct in the region. Further research is needed.
	References: n/a

C1.3411 *Ranunculus* communities in shallow water



BGR	C1.4 Permanent dystrophic lakes, ponds, and pools
ALP	Num. of sites: 1 (B:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Lakes in high altitudes; Ramsar site Madatapa Lake; Khanchali Lake, Udzo and Lisi Lakes. Lakes in Javakheti Uplands, including Agrikari-Emlikli and Avchala Gyol.
	Comments from external experts: 1B site. Ramsar site Madatapa Lake; Khanchali Lake, Udzo and Lisi Lakes (Akhalkatsi and Tarkhnishvili 2012). In Javakheti Uplands, including Agrikari-Emlikli and Avchala Gyol (Dzelkva Ltd. 2009). <i>Nymphaea alba</i> , <i>Sparganium minimum</i> in Javakheti (Tedoradze et al. 2023).
	Comments from local experts: n/a
BLS	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check the distribution in Kolkheti Lowland.
	Comments from external experts: 1C site. BLS: <i>Utricularia minor</i> , <i>Nuphar lutea</i> , <i>Nymphaea alba</i> , <i>Rhynchospora alba</i> in Kolkheti Lowland (Tedoradze et al. 2023). <i>Nymphea colchica</i> (Varshanidze et al. 2020).
	Comments from local experts: No information
	References: Akhalkatsi and Tarkhnishvili 2012; Dzelkva Ltd. 2009
	References: Tedoradze et al. 2023; Varshanidze et al. 2020

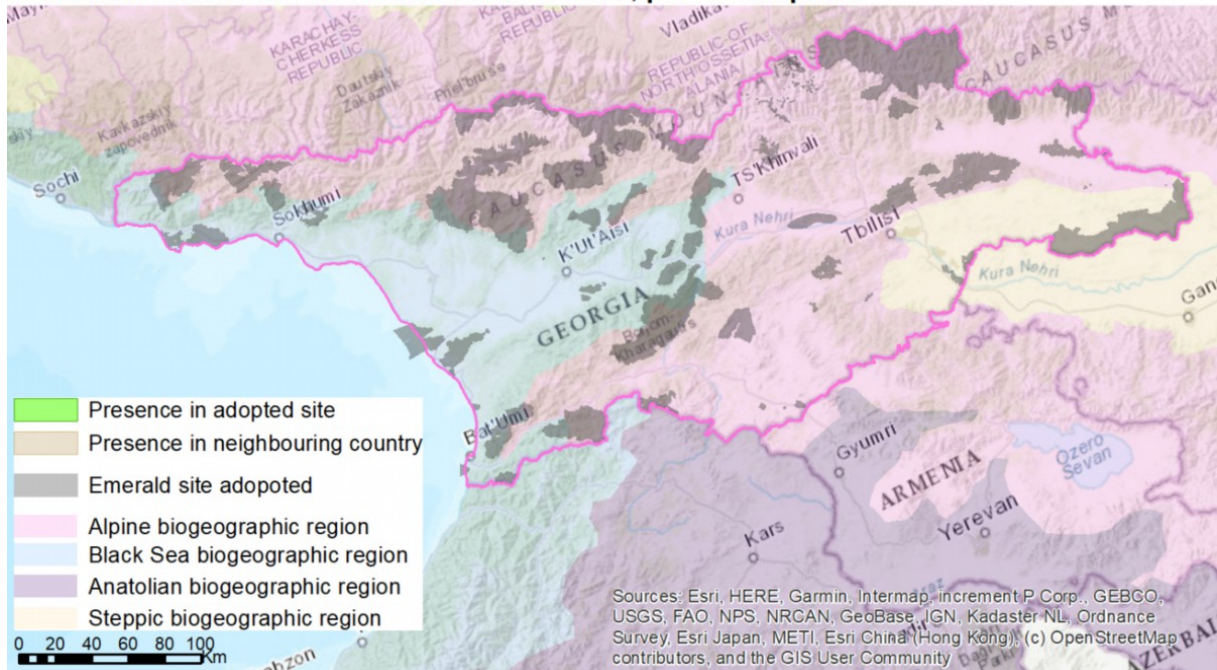
C1.4 Permanent dystrophic lakes, ponds and pools



BGR	C1.5 Permanent inland saline and brackish lakes, ponds, and pools
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Check BLS coastal area.
	Comments from external experts: No sites
	Comments from local experts: No information; further research is needed.
	References: n/a
STE	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Check Kapatadze Lake, Kochebi Lake, Kumisi Lake, and other suitable sites.
	Comments from external experts: No sites. Possible site: Kapatadze Lake and Kochebi Lake.
	Comments from local experts: No information

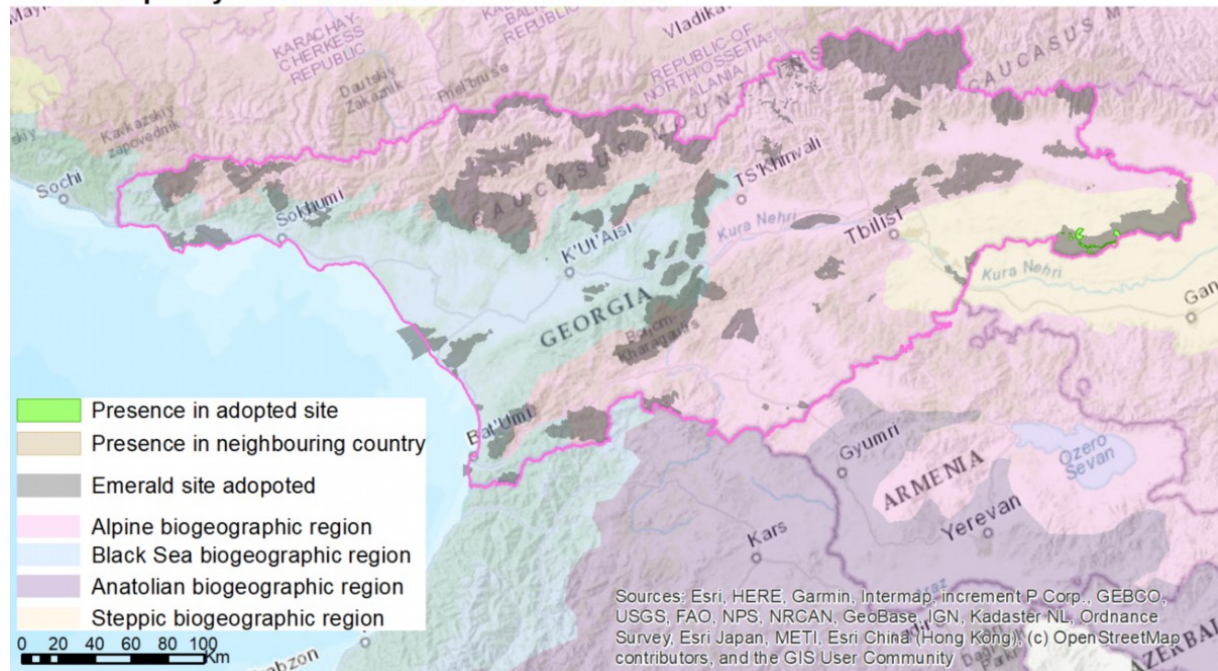
References: n/a

C1.5 Permanent inland saline and brackish lakes, ponds and pools



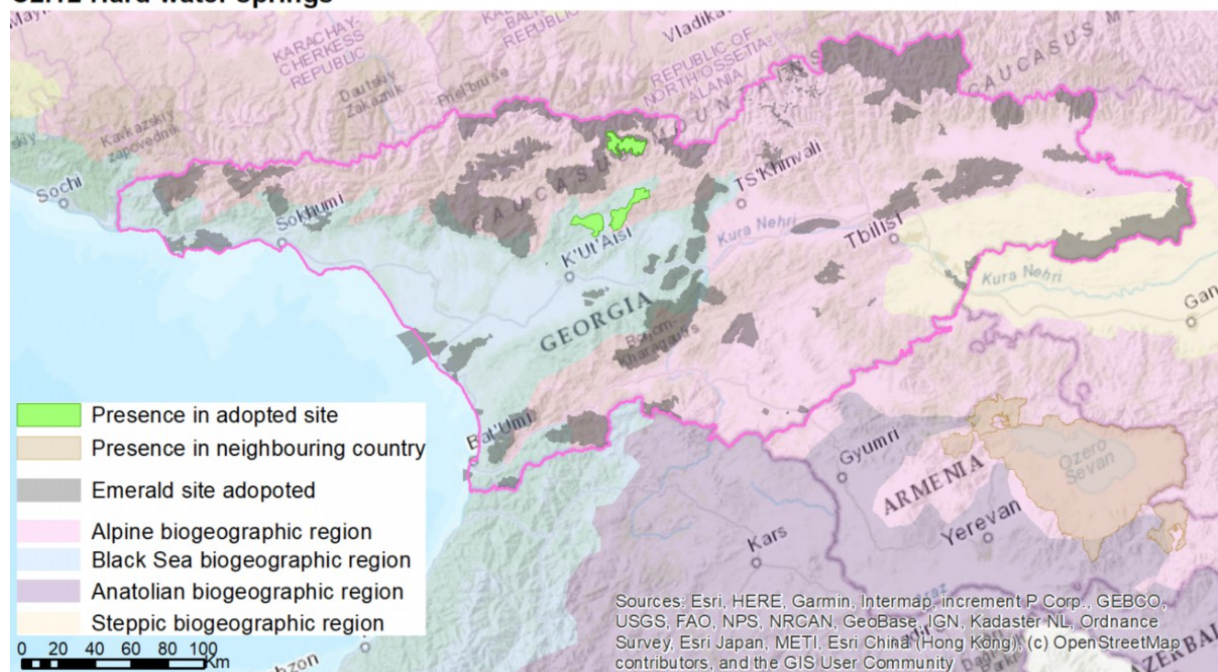
BGR	C1.66 Temporary inland saline and brackish waters
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD Chorokhi Delta
	Recommendation 2025: Further research is needed. Check BLS coastal area and river estuaries, especially Rioni, Chobi, and Enguri.
	Comments from external experts: No sites.
	Comments from local experts: Chorokhi is probably not correct. Could occur in the Rioni, Khobi, and Enguri River Delta.
	References: n/a
STE	Num. of sites: 1 (B:1)
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed. Check Vashlovani NP, Kochebi Lake, and other sites.
	Comments from external experts: 1B site
	Comments from local experts: Vashlovani NP, Kochebi Lake to be checked.
	References: n/a

C1.66 Temporary inland saline and brackish waters



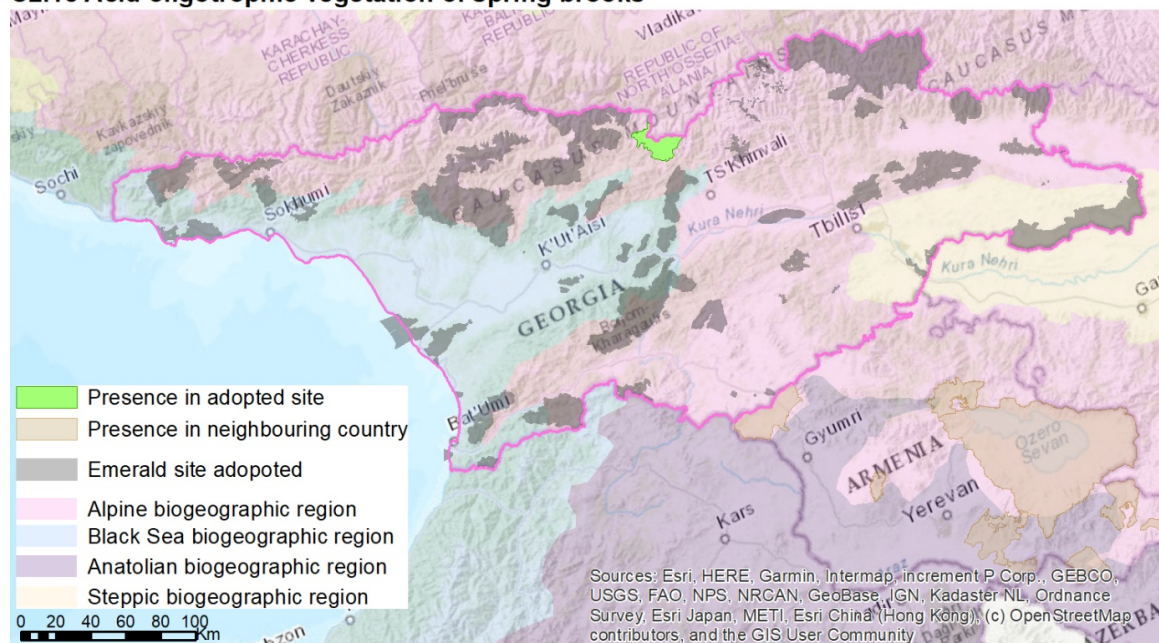
BGR	C2.12 Hard water springs
ALP	Num. of sites: 2 (C:2)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Select the best sites. Check Borjomi Valley. Kazbegi region—travertine springs in Truso Valley, Katerisi. Regions known for mineral water.
	Comments from external experts: 2C sites
	Comments from local experts: Abundant habitat, very common in limestone areas.
	References: n/a

C2.12 Hard water springs



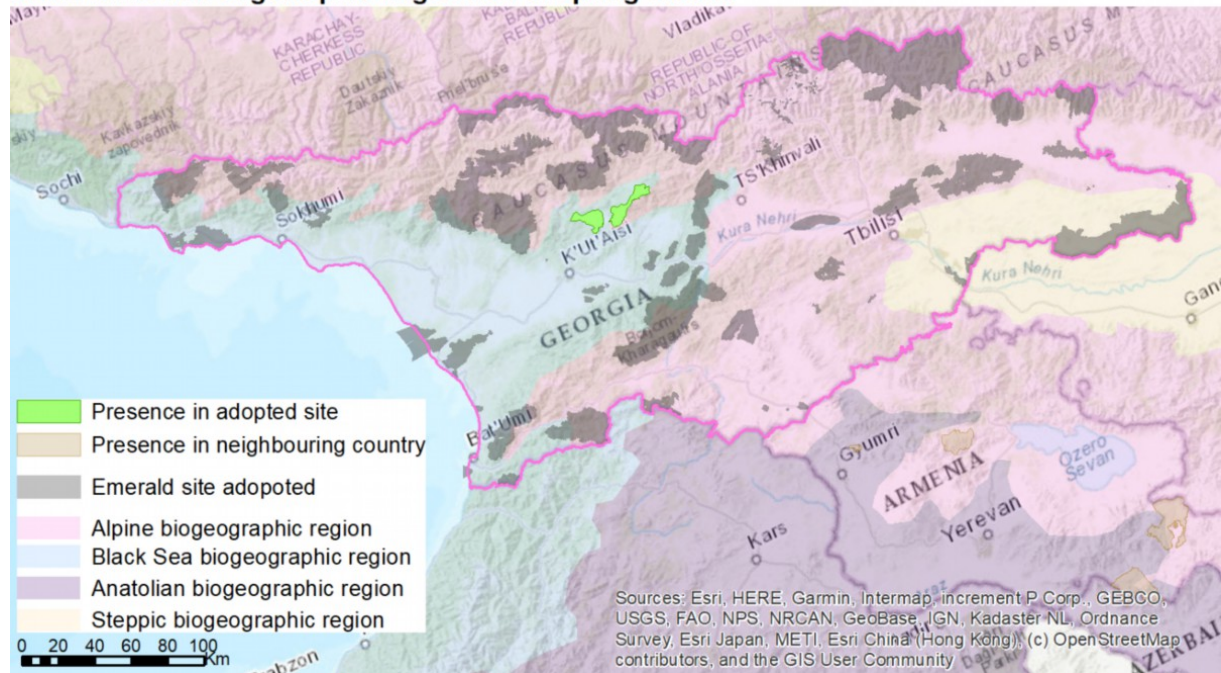
BGR	C2.18 Acid oligotrophic vegetation of spring brooks
ALP	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Further survey is needed. Also check Tabatskuri.
	Comments from external experts: 1C site.
	Comments from local experts: Habitat should be fairly common except at other sites, possibly in the Tabatskuri area.
	References: n/a
BLS	Note. The conclusion from the last seminar was 'EXCL REF LIST'. Georgian experts informed during the Tbilisi workshop that habitat occurs in Ajameti (GE0000018). The occurrence at that site should be checked, and, if confirmed, the habitat should be added to both the site and the reference list.

C2.18 Acid oligotrophic vegetation of spring brooks



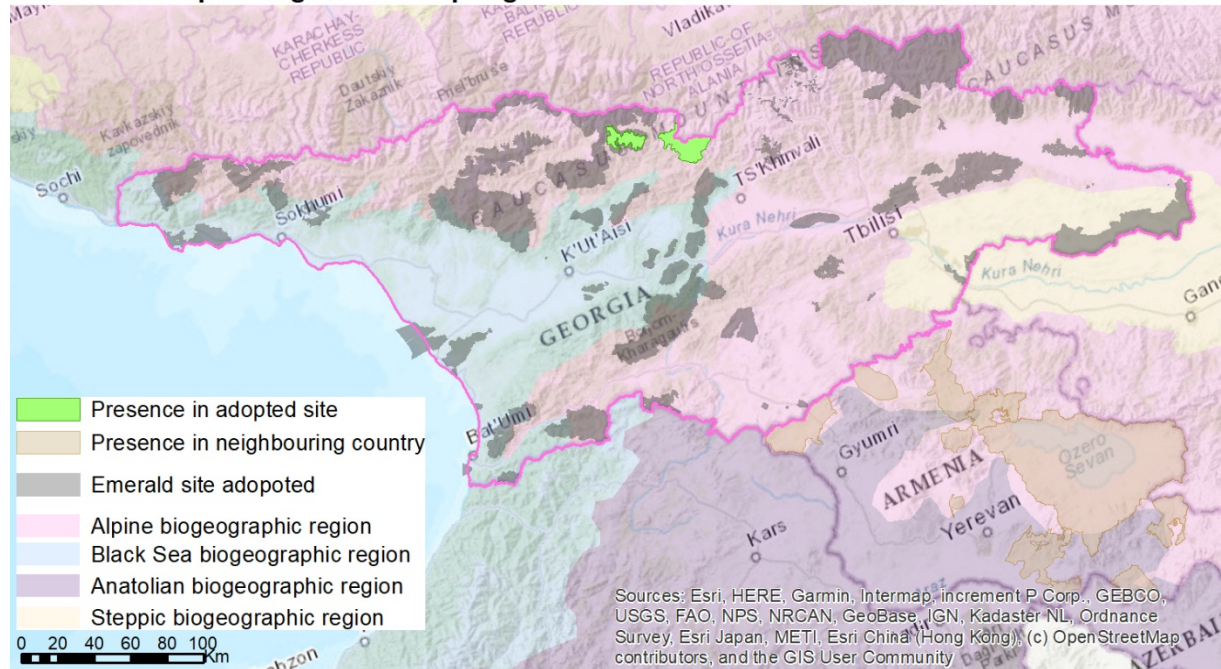
BGR	C2.19 Lime-rich oligotrophic vegetation of spring brooks
ALP	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check Borjomi Valley, Kazbegi region—Truso Valley, Katerisi, and Abkhazia.
	Comments from external experts: 1C site. Borjomi Valley, Kazbegi region—Truso Valley, Katerisi.
	Comments from local experts: Possibly in Abkhazia
	References: n/a
BLS	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check the Kolkheti Lowland and the Kutaisi region.
	Comments from external experts: 1C site
	Comments from local experts: The region around Kutaisi should be checked with local experts.
	References: n/a

C2.19 Lime-rich oligotrophic vegetation of spring brooks



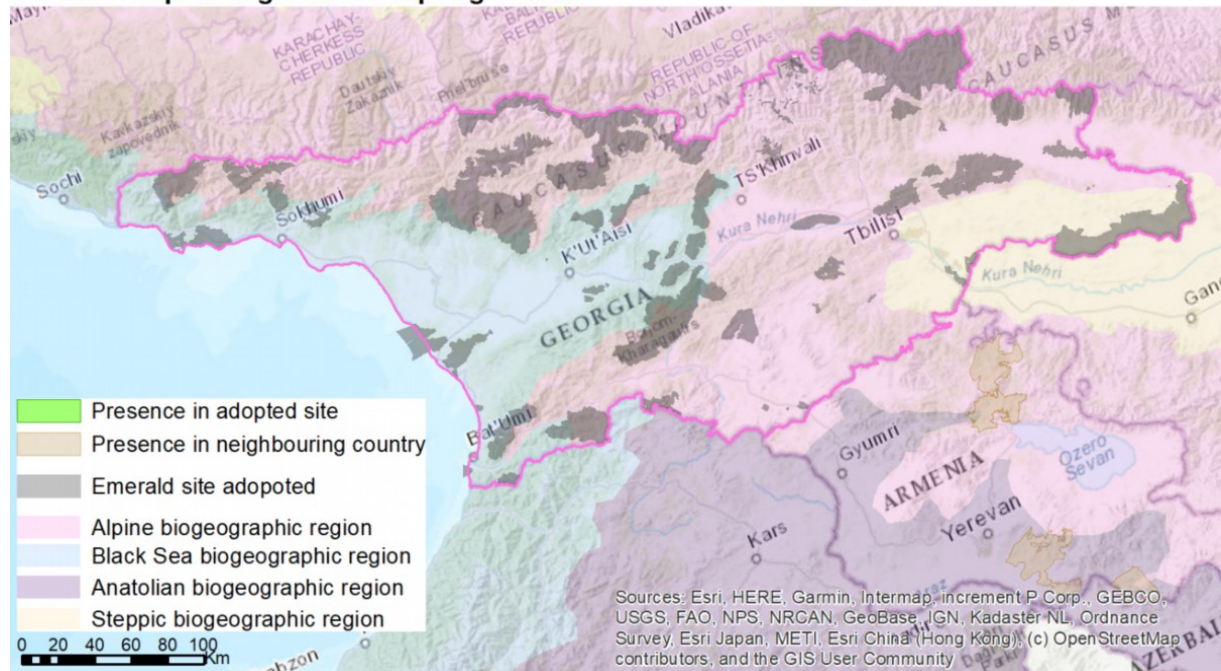
BGR	C2.1A Mesotrophic vegetation of spring brooks
ALP	Num. of sites: 2 (C:2)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Further research and mapping is needed.
	Comments from external experts: 2C sites. Javakheti, Shida Kartli Lowland and Alazani Valley, Iori River gorge (Tedoradze et al. 2023).
	Comments from local experts: To involve G. Tedoradze
	Reference: Tedoradze et al. 2023
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed. Check the Kolkheti Lowland.
	Comments from external experts: No sites. Kolkheti Lowland (Tedoradze et al. 2023).
	Comments from local experts: No information
	Reference: Tedoradze et al. 2023

C2.1A Mesotrophic vegetation of spring brooks



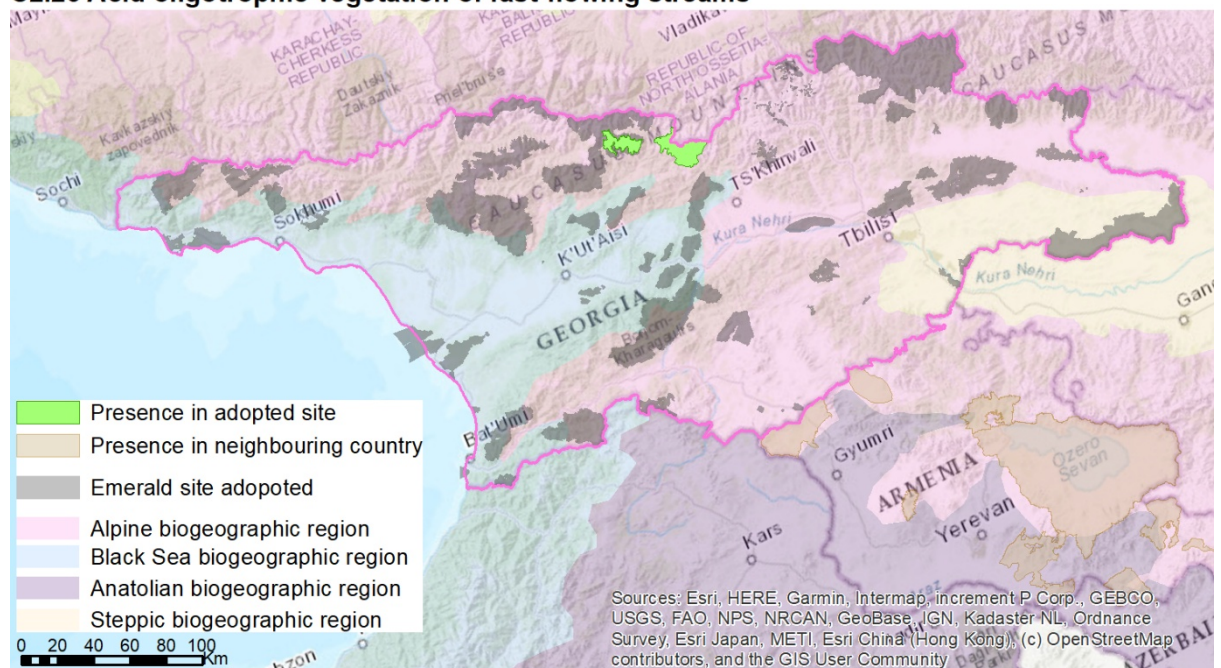
BGR	C2.1B Eutrophic vegetation of spring brooks
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Check Javakheti, Mtiani Adjara, Upper Imereti, Shida Kartli Lowland, and the Alazani Valley.
	Comments from external experts: No sites. <i>Sparganium emersum</i> in Javakheti, Mtiani Adjara, Upper Imereti, Shida Kartli Lowland and Alazani Valley (Tedoradze et al. 2023).
	Comments from local experts: No information
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Check the Kolkheti Lowland.
	Comments from external experts: No sites. <i>Sparganium emersum</i> in Kolkheti Lowland (Tedoradze et al. 2023).
	Comments from local experts: No information
	Reference: Tedoradze et al. 2023

C2.1B Eutrophic vegetation of spring brooks



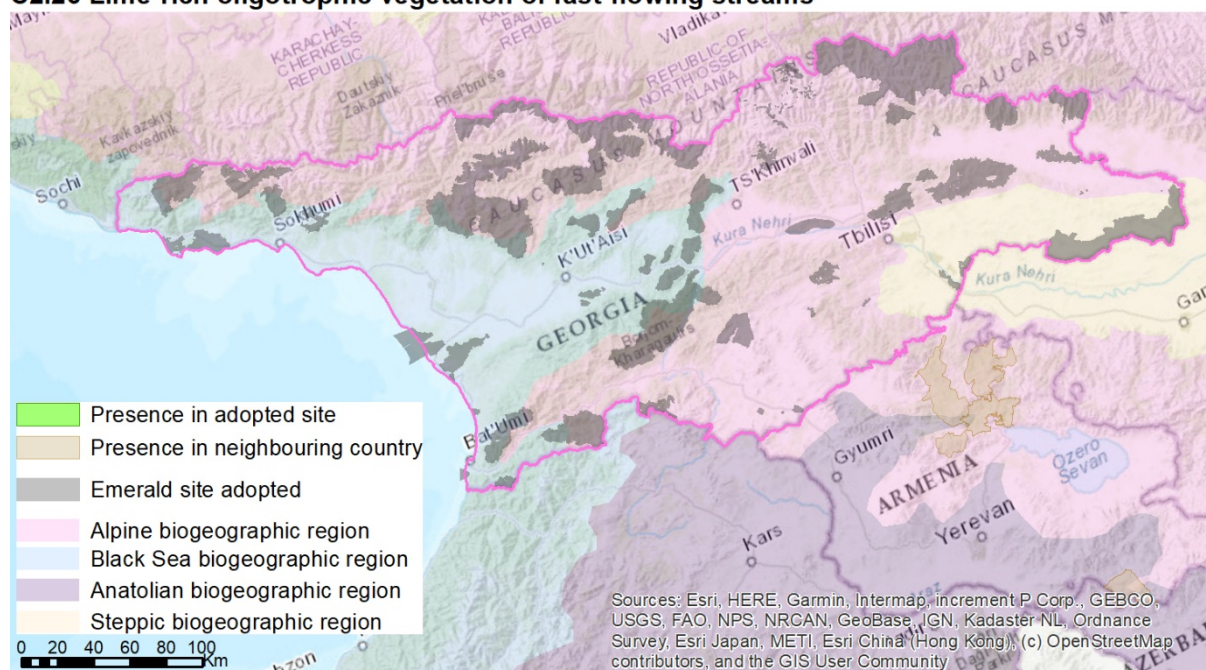
BGR	C2.25 Acid oligotrophic vegetation of fast-flowing streams
ALP	Num. of sites: 2 (C:2)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: No data; further research and mapping are needed.
	Comments from external experts: 2C sites
	Comments from local experts: Maybe this habitat is not present in Georgia at all.
	References: n/a

C2.25 Acid oligotrophic vegetation of fast-flowing streams



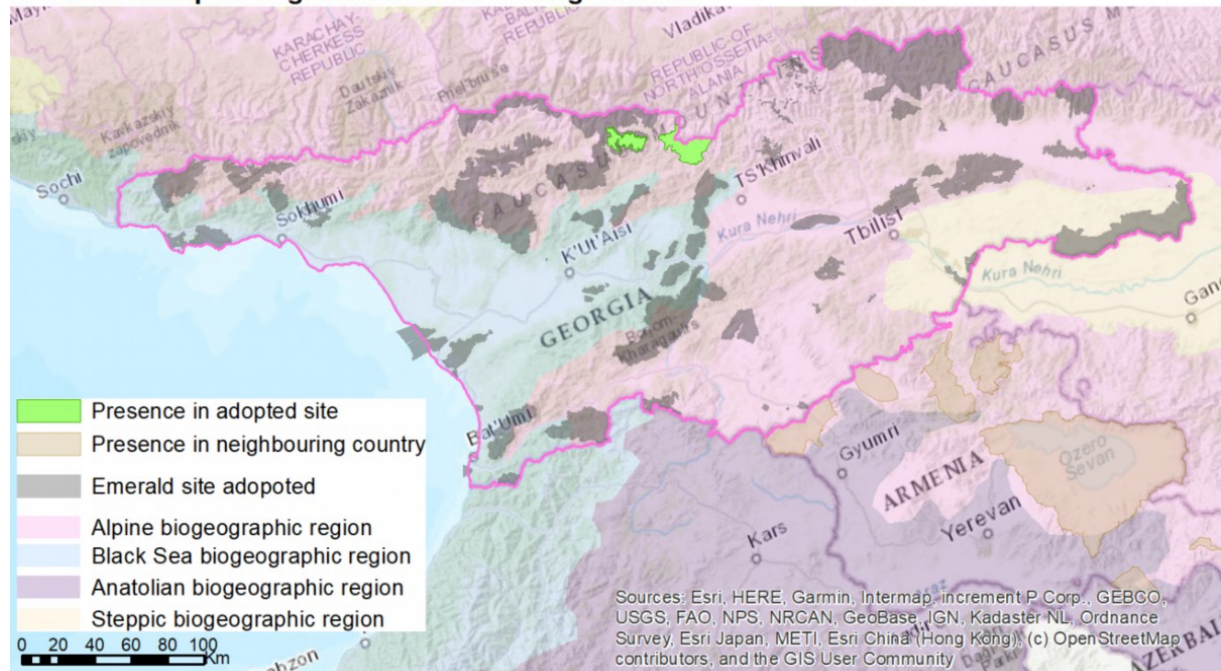
BGR	C2.26 Lime-rich oligotrophic vegetation of fast-flowing streams
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Check the Northwest Caucasus. Ratcha, Samegrelo, Imereti, Abkhazia, and Javakheti.
	Comments from external experts: No sites; Javakheti (Tedoradze et al. 2023).
	Comments from local experts: Northwest Caucasus. Ratcha, Samegrelo, Imereti, Abkhazia. In Javakheti, probably only a small area.
	Reference: Tedoradze et al. 2023
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: No data, further research and mapping are needed. Check the area around Surami and Abkhazia.
	Comments from external experts: No sites.
	Comments from local experts: Possibly Surami and Abkhazia.
	References: n/a

C2.26 Lime-rich oligotrophic vegetation of fast-flowing streams



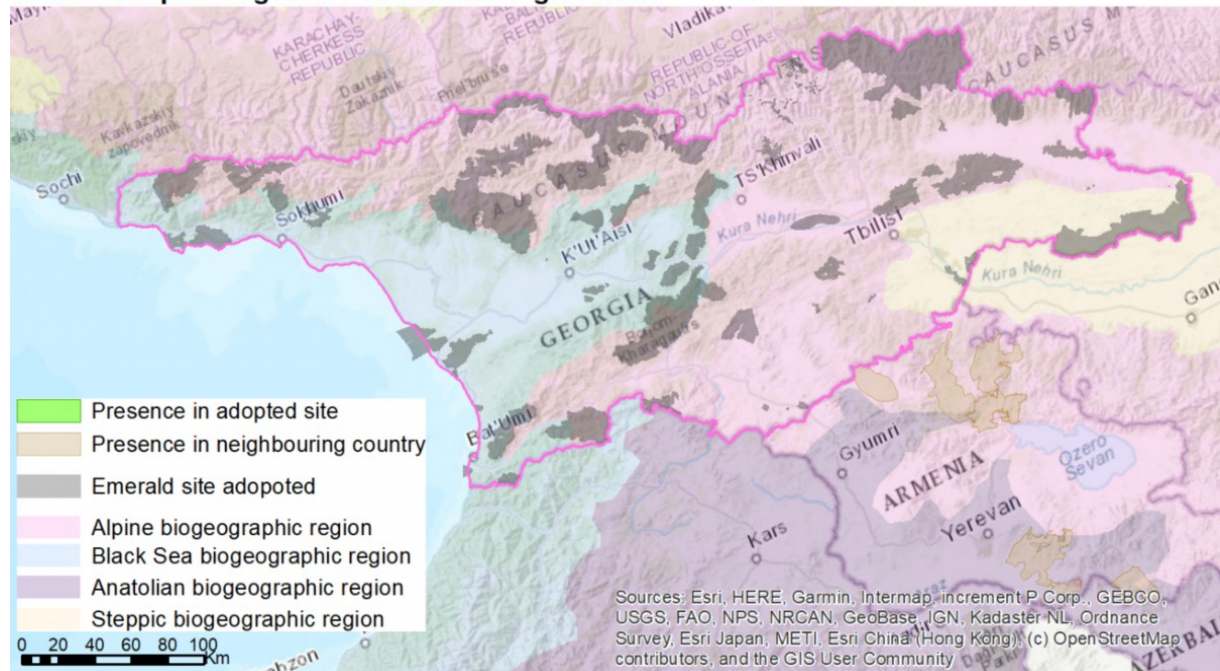
BGR	C2.27 Mesotrophic vegetation of fast-flowing streams
ALP	Num. of sites: 2 (C:2)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Further research is needed. Check Javakheti and the Shida Kartli Lowland and the Alazani Valley.
	Comments from external experts: 2C sites. Javakheti and Shida Kartli Lowland and Alazani Valley (Tedoradze et al. 2023).
	Comments from local experts: n/a
	Reference: Tedoradze et al. 2023

C2.27 Mesotrophic vegetation of fast-flowing streams



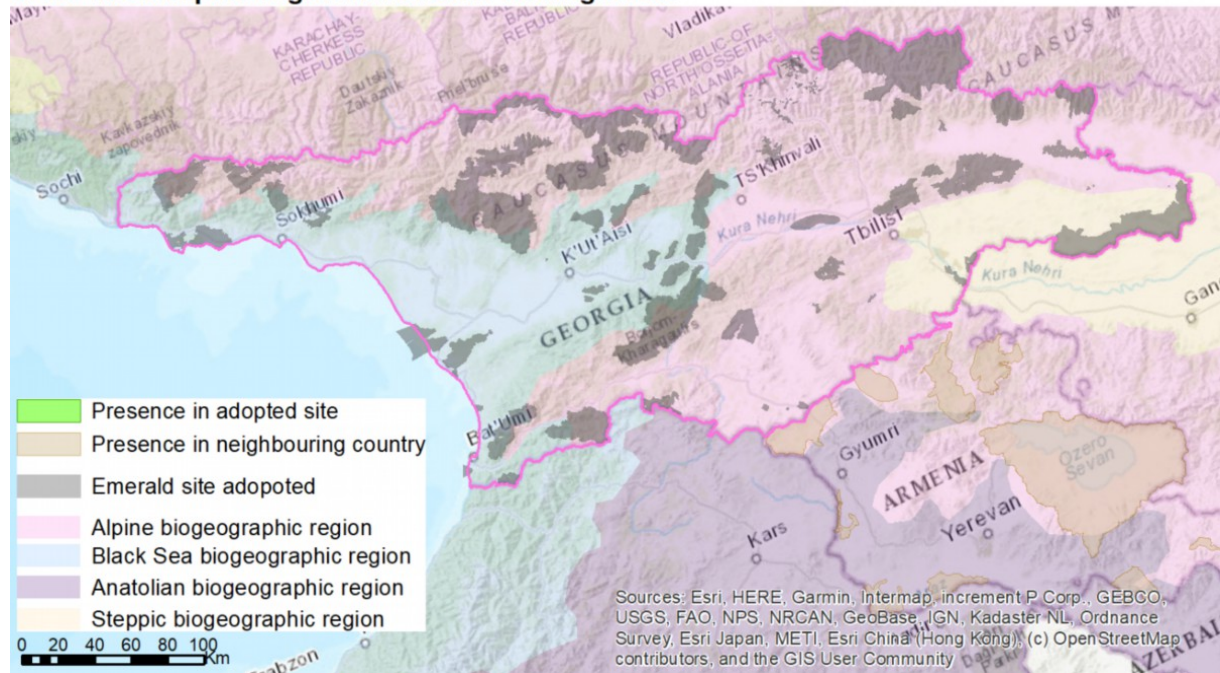
BGR	C2.28 Eutrophic vegetation of fast-flowing streams
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Check for occurrence, especially Javakheti, Mtiani Adjara, Upper Imereti, and Shida Kartli Lowland and Alazani Valley.
	Comments from external experts: No sites. <i>Sagittaria sagittifolia</i> , <i>Zannichellia palustris</i> in Javakheti (Tedoradze et al. 2023), <i>Sparganium emersum</i> in Javakheti, Mtiani Adjara, Upper Imereti, and Shida Kartli Lowland and Alazani Valley (Tedoradze et al. 2023).
	Comments from local experts: Habitat possibly does not exist in Georgia.
	Reference: Tedoradze et al. 2023
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed. Check the Kolkheti Lowland.
	Comments from external experts: No sites
	Comments from local experts: No information
	Reference: Tedoradze et al. 2023

C2.28 Eutrophic vegetation of fast-flowing streams



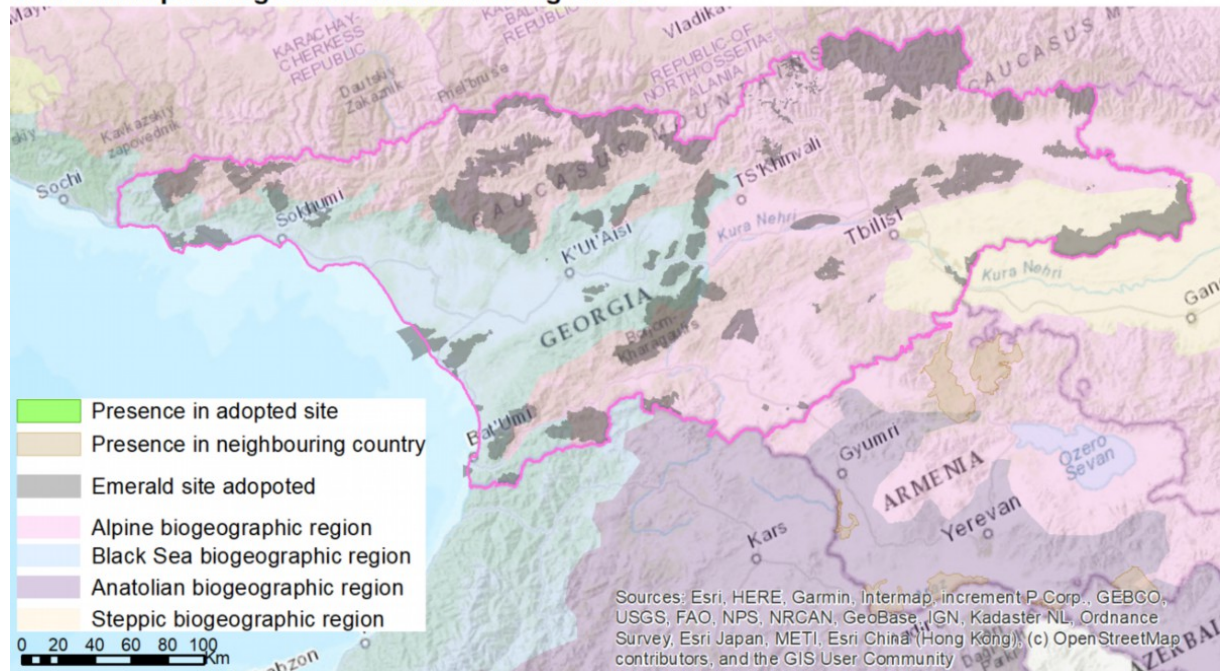
BGR	C2.33 Mesotrophic vegetation of slow-flowing rivers
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Check Javakheti.
	Comments from external experts: No sites. <i>Nymphaea alba</i> , <i>Potamogeton crispus</i> , <i>P. natans</i> in Javakheti (Tedoradze et al. 2023).
	Comments from local experts: Javakheti
	Reference: Tedoradze et al. 2023
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Survey in the Kolkheti Lowland; check Abkhazia.
	Comments from external experts: No sites. <i>Potamogeton crispus</i> , <i>P. natans</i> in Kolkheti Lowland (Tedoradze et al. 2023).
	Comments from local experts: Maybe in Abkhazia
	Reference: Tedoradze et al. 2023

C2.33 Mesotrophic vegetation of slow-flowing rivers



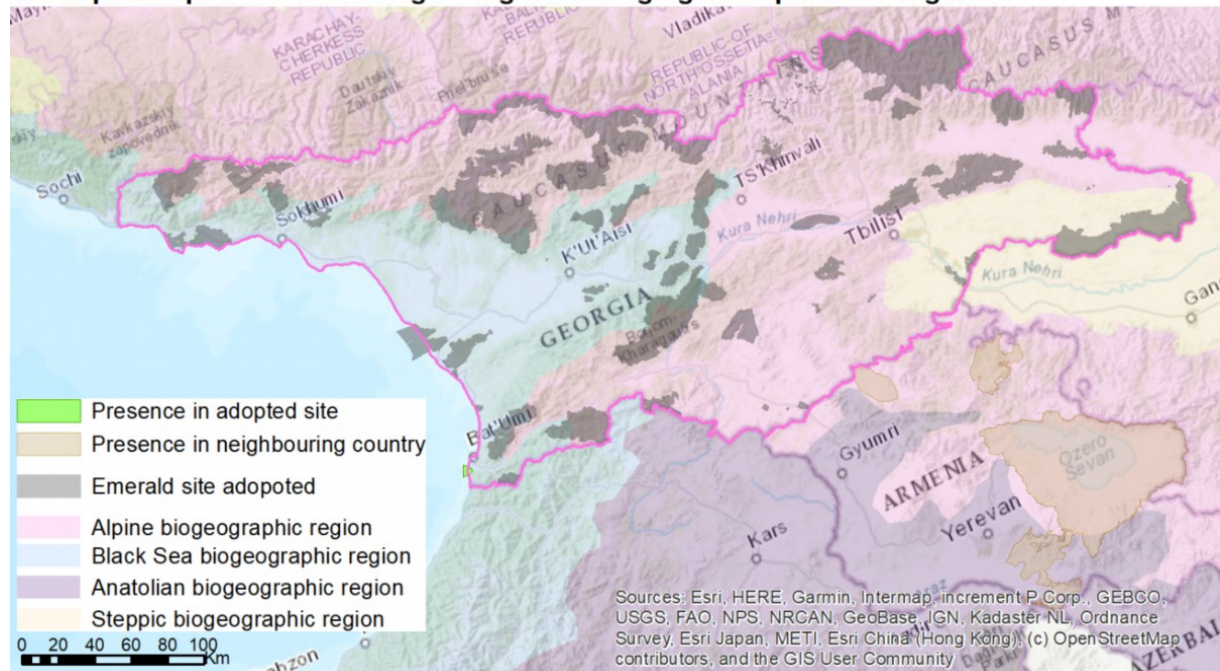
BGR	C2.34 Eutrophic vegetation of slow-flowing rivers
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Check Javakheti.
	Comments from external experts: No sites. <i>Nymphaea alba</i> , <i>Potamogeton crispus</i> , <i>P. natans</i> , <i>Zannichellia palustris</i> in Javakheti (Tedoradze et al. 2023).
	Comments from local experts: Many small sites with <i>Sagittaria-Borjomi</i>
	Reference: Tedoradze et al. 2023
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Check the Kolkheti Lowland.
	Comments from external experts: One site. <i>Sagittaria sagittifolia</i> in Kolkheti Lowland (Tedoradze et al. 2023).
	Comments from local experts: n/a
	Reference: Tedoradze et al. 2023

C2.34 Eutrophic vegetation of slow-flowing rivers



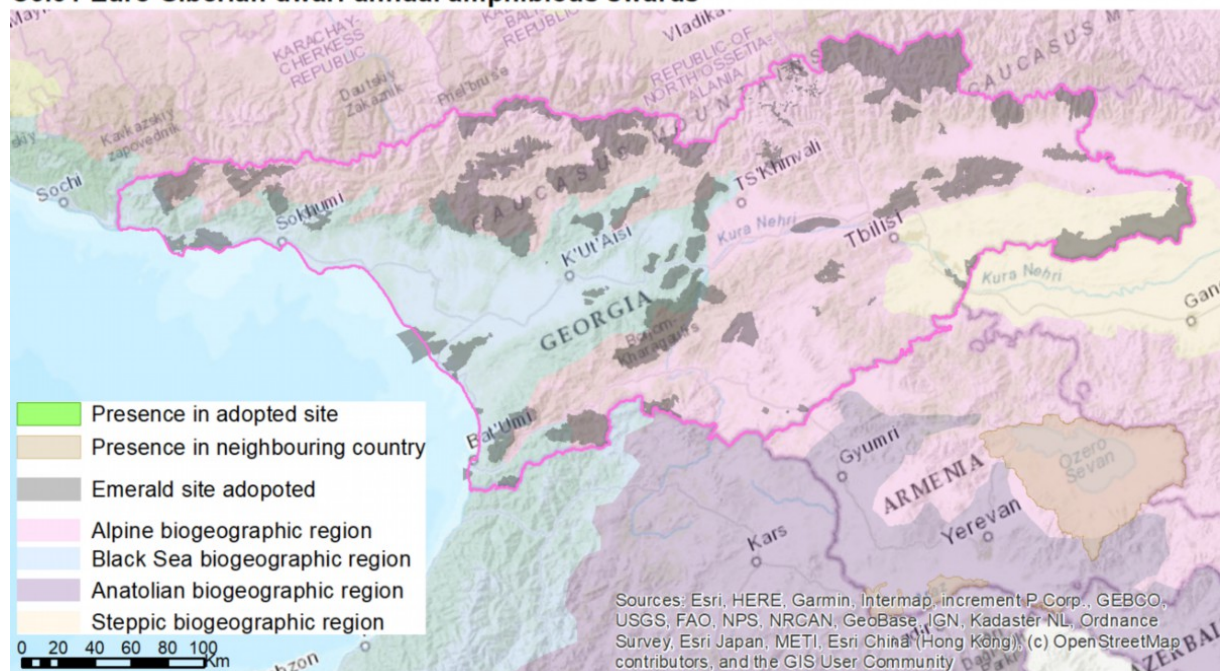
BGR	C3.4 Species-poor beds of low-growing waterfringing or amphibious vegetation
BLS	<p>Num. of sites: 1 (No data: 1)</p> <p>BGR seminar 2021 conclusion: IN MOD/CD IN MOD Enlarge Kolkheti; Correct data (CD): habitat assessment</p> <p>Recommendation 2025: Consider inclusion of the Rioni River Delta in the site GE000006 Kolkheti. Lack of information; further research is needed.</p> <p>Comments from external experts: No sites.</p> <p>Comments from local experts: Rioni Delta to be included in the site Kolkheti.</p> <p>References: n/a</p>
STE	<p>Num. of sites: 0</p> <p>BGR seminar 2021 conclusion: SR</p> <p>Recommendation 2025: Lack of information; further research is needed.</p> <p>Comments from external experts: No sites</p> <p>Comments from local experts: No information. Doubts exist about whether the habitat occurs in Georgia/STE.</p> <p>References: n/a</p>

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



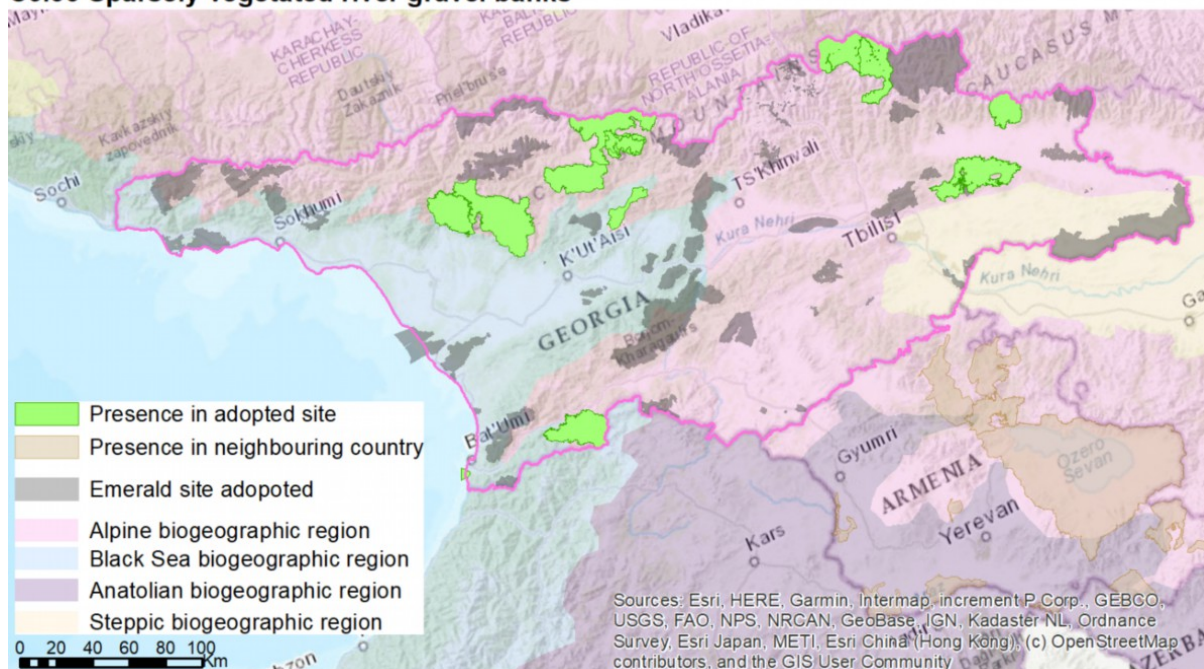
BGR	C3.51 Euro-Siberian dwarf annual amphibious swards
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Check suitable sites in the north of the country and in Javakheti Uplands, including Levan Gjol and Paravani Lakes.
	Comments from external experts: No sites. In Javakheti Uplands, including Levan Gjol and Paravani Lakes (Dzelkva Ltd. 2009).
	Comments from local experts: Common habitat—in the North, it should be everywhere.
	Reference: Dzelkva Ltd. 2009

C3.51 Euro-Siberian dwarf annual amphibious swards



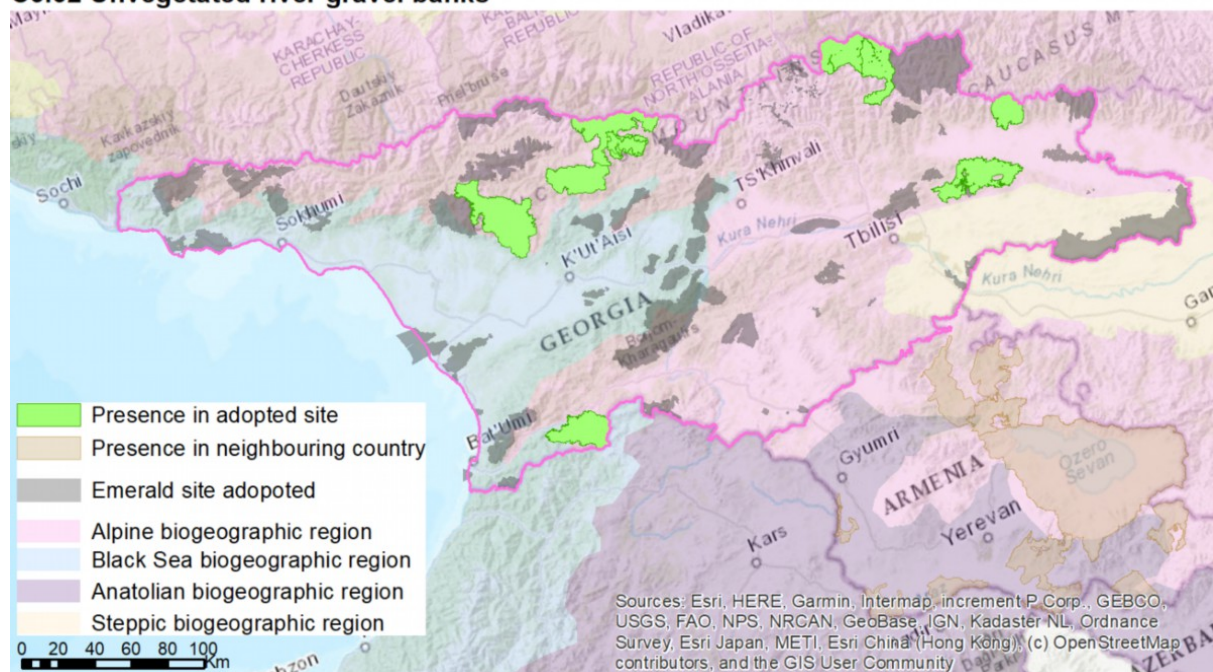
BGR	C3.55 Sparsely vegetated river gravel banks
ALP	Num. of sites: 11 (B:11)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check Greater Caucasus (Upper Svaneti, Racha, Khveri, Tusheti, Kakheti) and Lower Caucasus (Adjara, Samtskhe). Use knowledge from mapping for site selection.
	Comments from external experts: 11 B sites. Greater Caucasus (Upper Svaneti, Racha, Khveri, Tusheti, Kakheti) and Lower Caucasus (Adjara, Samtskhe).
	Comments from local experts: Extensive mapping has recently been completed, and the habitat has been properly mapped. Gravel parts are often excluded from sites.
	References: n/a
BLS	Num. of sites: 4 (B:4)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check Adjara. Use mapping knowledge for site selection.
	Comments from external experts: 4 B sites. Adjara
	Comments from local experts: Same situation as in ALP
	Reference: Kalníková et al. 2020

C3.55 Sparsely vegetated river gravel banks



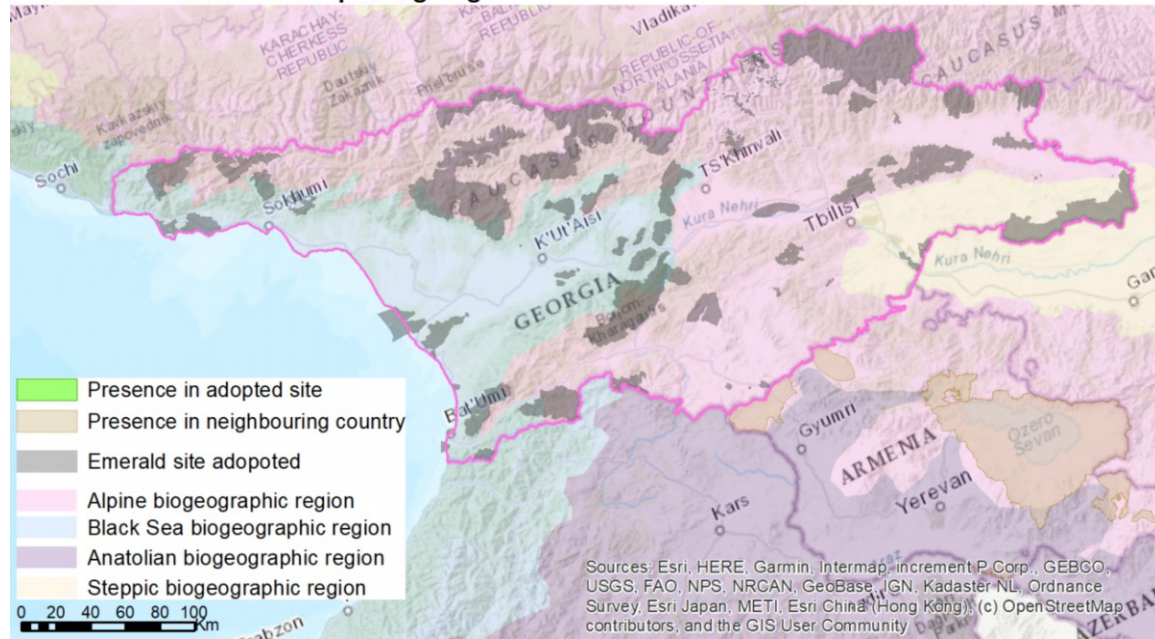
BGR	C3.62 Unvegetated river gravel banks
ALP	Num. of sites: 9 (No data: 1, B:8)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check Greater Caucasus (Upper Svaneti, Racha, Khveri, Tusheti, Kakheti) and Lower Caucasus (Adjara, Samtskhe). Use mapping knowledge for site selection.
	Comments from external experts: Nine sites (8B1?).
	Comments from local experts: Habitat well studied; also using remote sensing
	References: n/a
BLS	Num. of sites: 2 (No data: 1, B:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check Adjara. Use knowledge from mapping for site selection.
	Comments from external experts: Two sites (1B1?).
	Comments from local experts: Same as for ALP
	References: n/a

C3.62 Unvegetated river gravel banks



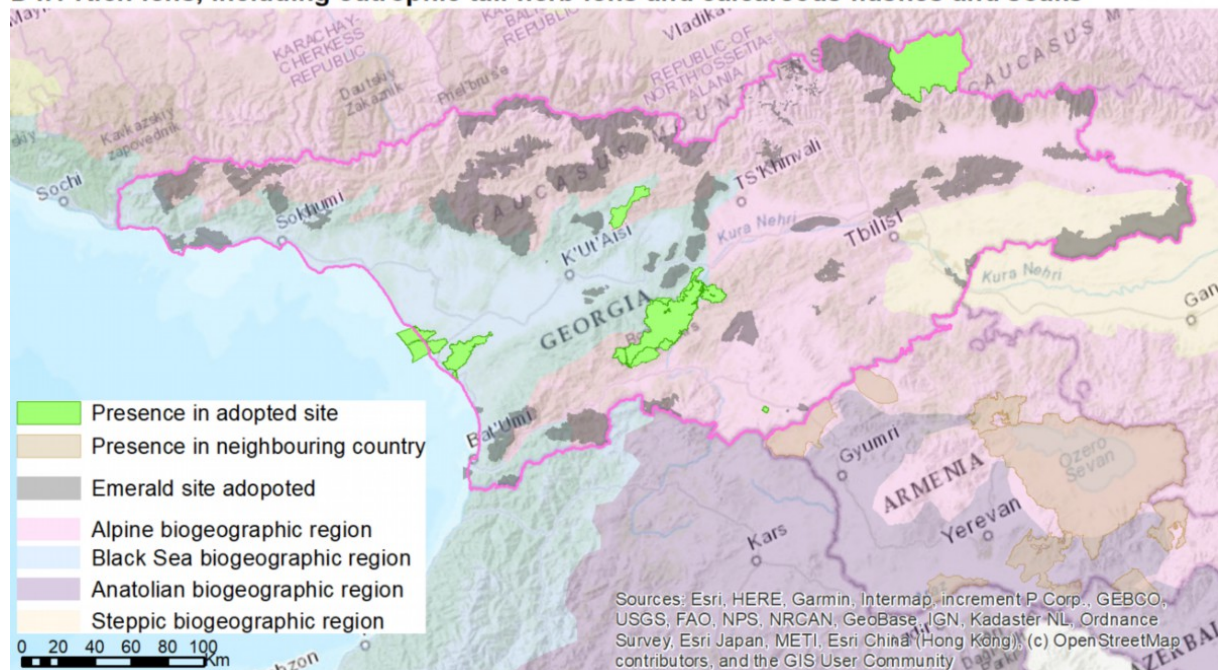
BGR	D2.3 Transition mires and quaking bogs
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: No sites. Further research is needed.
	Comments from external experts: No sites. Oligotrophic peaty marshes are found on the rocky places of the subalpine zone. Sphagnum bogs are rare in the ALP belt, especially in Eastern Georgia, where, due to aridity, this habitat is found only above 2,000 m. Wetlands in the ALP level correspond to <i>Cariceta daciae</i> and <i>Cariceta kotschyana</i> , which are typical of the ALP zone, but they are very localized. SR is to be maintained until a proper low-scale mapping of ALP vegetation is done. Sites can be found on the other side of the border (AM0000004, AM0000007): it is interesting that all Caucasian countries follow a similar approach.
	Comments from local experts: Rare habitat in ALP; occurrence to be checked
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed. SR can be solved if the country clarifies the approach to the definition of this habitat type. To be decided whether to follow a floristic approach (as is the case with MED boglands in high altitudes of Spain) or a more structural geological approach (as the British do). For the latter, the presence of this habitat type in the BLS region is dubious.
	Comments from external experts: No sites designated for this habitat type. In the BLS region, mezo-oligotrophic peaty marshes or (eutrophic) bogs are found on the peaty marsh of Kobuleti and the Churia River (not far from its estuary): <i>Shagnum imbricatum</i> and <i>Sphagnum palustre</i> mainly create sphagnum bogs, where the floristic composition is very close to boglands (<i>Sphagnum auriculatum</i> or <i>Erica tetralix-Sphagnum papillosum</i>). <i>Molinieta litoralis</i> can be found in the peaty mass of Maltakva (potential presence in GE0000006?). Denk et al. (2001) cite this species from Lake Paleostomi (GE0000006).
	Comments from local experts: To check Kolkheti, Kobuleti, and Abchazia
References: Akhalkatsi and Tarkhnishvili 2012; Denk et al. 2001; Nakhutsrishvili 1999	

D2.3 Transition mires and quaking bogs



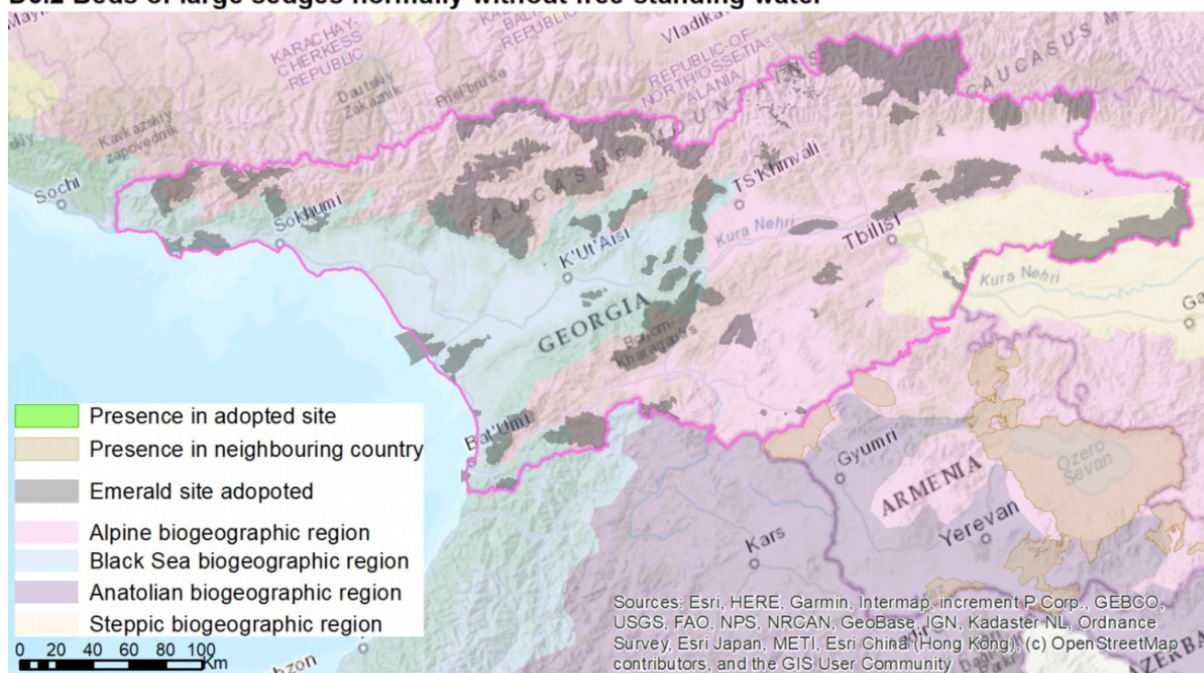
BGR	D4.1 Rich fens, including eutrophic tall-herb fens and calcareous flushes and soaks
ALP	Num. of sites: 5 (C:5)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check Racha, Samagrello, Imereti, Abkhazia, Javakheti Highland, and Adjara mountains.
	Comments from external experts: Five sites with C relative surface, two of them between ALP/BLS regions.
	Comments from local experts: Common habitat in ALP, everywhere except Javakheti. To be checked: Racha, Samagrello, Imereti, and Abkhazia.
	Reference: Akhalkatsi and Tarkhnishvili 2012

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: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: No sites. Clarify the appropriateness of including <i>Cariceta wilnicae</i> in D5.2 (Kolkheti Uplands?).
	Comments from external experts: No sites. <i>Cariceta wilnicae</i> is located in the Kolkheti Uplands and the Southern Volcanic Upland.
	Comments from local experts: Widespread habitat. All Emerald sites to be checked.
	Reference: Nakhutsrishvili 1999
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed. Presence in GE0000006 Kolkheti and at Lake Paleostomi to be checked as well.
	Comments from external experts: No sites. Presence in GE0000006 Kolkheti to be checked, Denk et al. (2001) cite this species at Lake Paleostomi.
	Comments from local experts: Common habitat; further research is needed.
	References: Nakhutsrishvili 1999; Denk et al. 2001

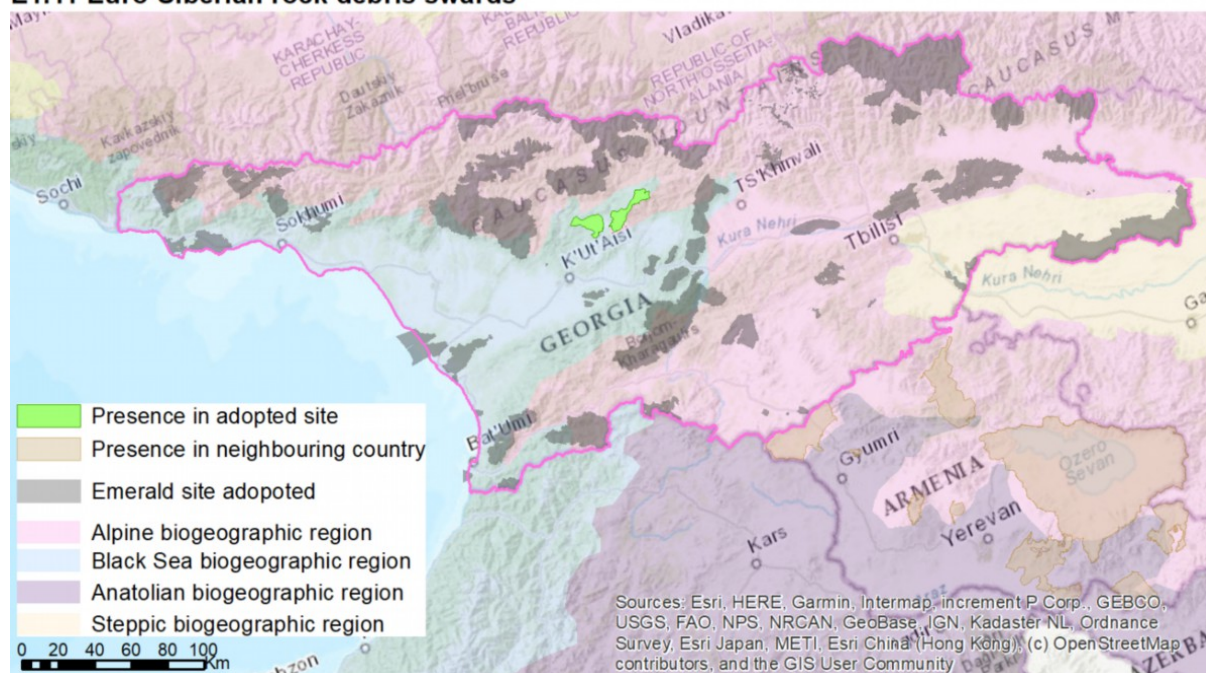
D5.2 Beds of large sedges normally without free-standing water



BGR	E1.11 Euro-Siberian rock debris swards
ALP	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: To survey the massifs in Western, Central, and Eastern Caucasus (Racha, Bzyb, Arabika, Tsulishi, Kvira) and sites specified by local experts.
	Comments from external experts: 1C site designated for this habitat type: Racha 4 at Racha range. No specific references found for this habitat type. However, this habitat can occur in a mosaic with alpine limestone pavements (H3.511) and with calcareous and ultrabasic screes of warm exposures (H2.6).
	Comments from local experts: Occurrence is possible in all mountain sites. To be checked: Tusheti, Kazbegi, Tabatskuri, Borjomi, Kakheti, Kintrishi, all four Racha sites, Svaneti, Samegrelo, all Abkhazia sites, Goderzi, Mtirala.
	References: n/a
BLS	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN

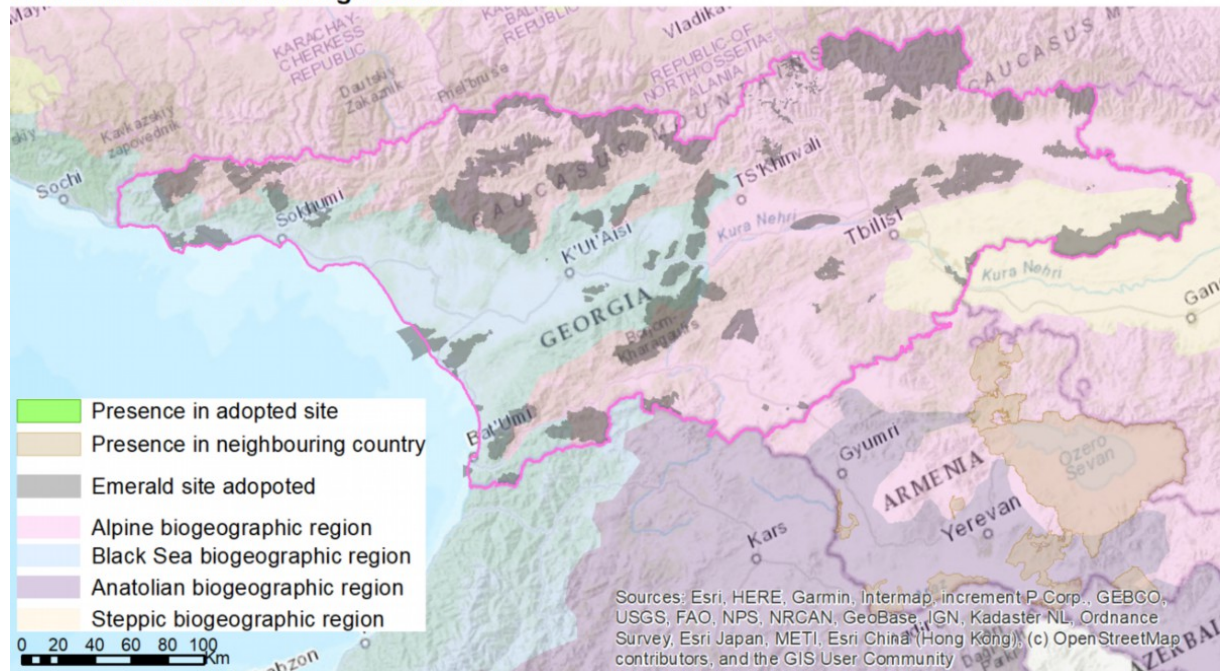
Recommendation 2025: To survey the following areas: Borjomi, Machakhela, Okhachkue massif, gorges of Gumista and Kelasuri Rivers, Abasha canyon, and Makhaturi landslide.
Comments from external experts: 1C site designated for this habitat type: Racha 3 at Racha range. No specific references found for this habitat type. However, this habitat can occur in mosaic with alpine limestone pavements (H3.511).
Comments from local experts: Parts of Borjomi, Machakhela.
References: n/a

E1.11 Euro-Siberian rock debris swards



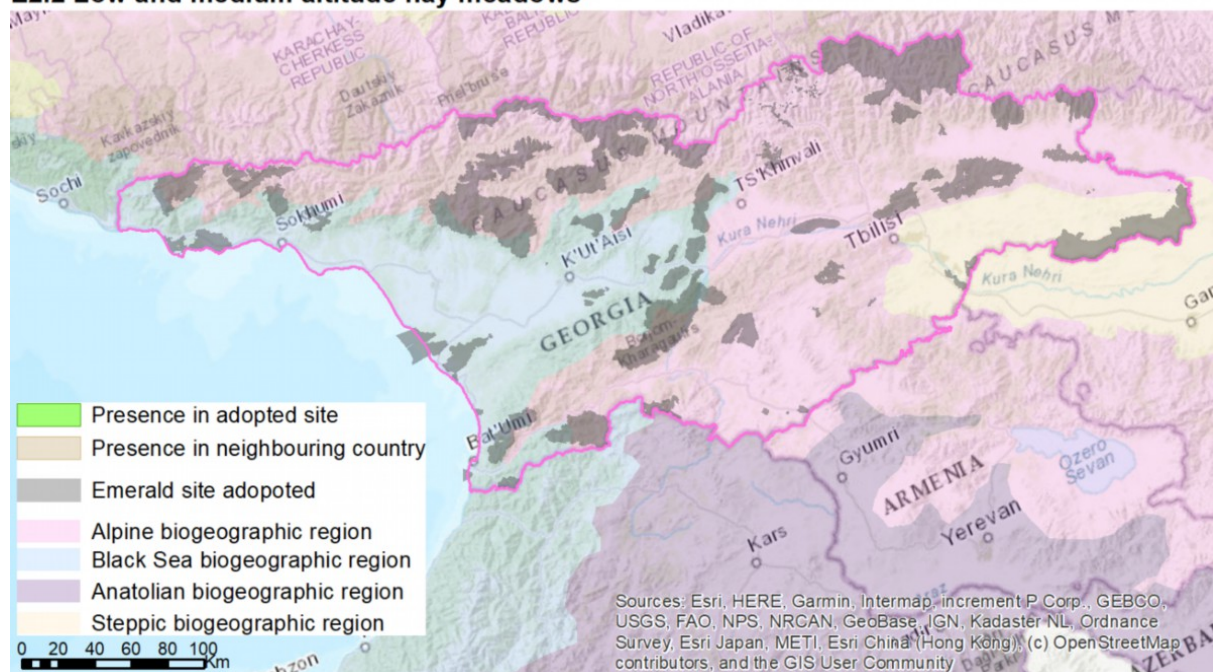
BGR	E1.3 Mediterranean xeric grassland
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: The interpretation of this habitat type should be discussed, including the interpretation of Armenia for this habitat type (for instance, in AM0000005).
	Comments from external experts: No sites. To check the site GE0000046 Kvernaki. According to Akhalkatsi, the habitat occurring in the ALP region is 'Mountain steppe', which is different from the Mediterranean xeric grasslands, which corresponds to grasses of the Thero-Brahypodetea.
	Comments from local experts: To check site GE0000046 Kvernaki
	Reference: Akhalkatsi and Tarkhnishvili 2012

E1.3 Mediterranean xeric grassland



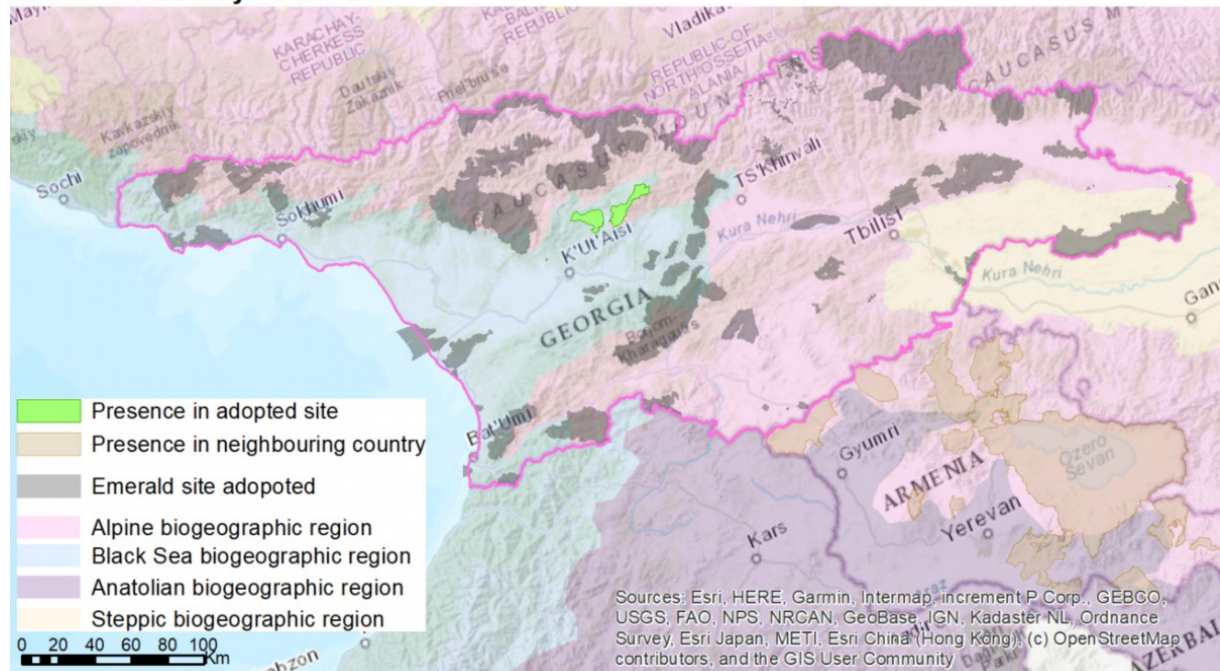
BGR	E2.2 Low and medium altitude hay meadows
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Further research is needed.
	Comments from external experts: No sites (AM has no sites either)
	Comments from local experts: No information
	References: Akhalkatsi and Tarkhnishvili 2012; Nakhutsrishvili et al. 2017; Nakhutsrishvili 1999
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Further research is needed.
	Comments from external experts: No sites (AM has no sites either)
	Comments from local experts: No information
	References: Akhalkatsi and Tarkhnishvili 2012; Nakhutsrishvili 1999

E2.2 Low and medium altitude hay meadows



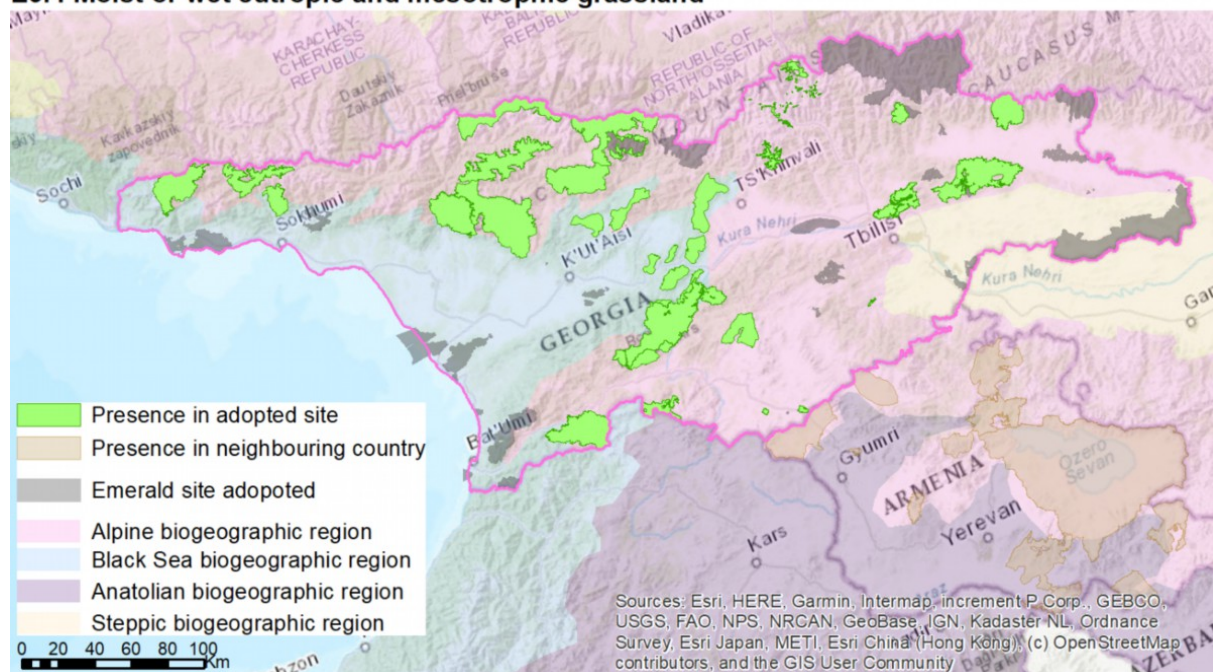
BGR	E2.3 Mountain hay meadows
ALP	Num. of sites: 1 (B:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check the subalpine belt of the ALP region and propose new sites capturing the habitat variability.
	Comments from external experts: Only one B site is designated for this habitat in the South of Racha-Lechkhumi and Kvemo Svaneti. This habitat is very common in the subalpine belt of the ALP region; in Central, Western, and Eastern Caucasus; and also in Southern Georgia (bordering sites designated by Armenia). There is a large variety of mountain meadows depending on the floristic composition. In the Western Caucasus, the limestone meadows of Colchis are particularly interesting. IN MIN- It must be present in many existing sites.
	Comments from local experts: The habitat could occur in every site, including Javakheti.
BLS	Num. of sites: 1 (B:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check for suitable sites, including Borjomi, Highland Abkhazia, Svaneti, Samegrelo, Goderdzi, and Kvernaki (GE0000046).
	Comments from external experts: Only one B site is designated for this habitat in the South of Racha-Lechkhumi and Kvemo Svaneti. IN MIN - It must be present in some existing sites.
	Comments from local experts: Borjomi, Highland Abkhazia, Svaneti, Samegrelo, Goderdzi, Kvernaki (GE0000046)
References: Akhalkatsi and Tarkhnishvili 2012; Nakhutsrishvili 1999; Nakhutsrishvili et al. 2017	

E2.3 Mountain hay meadows



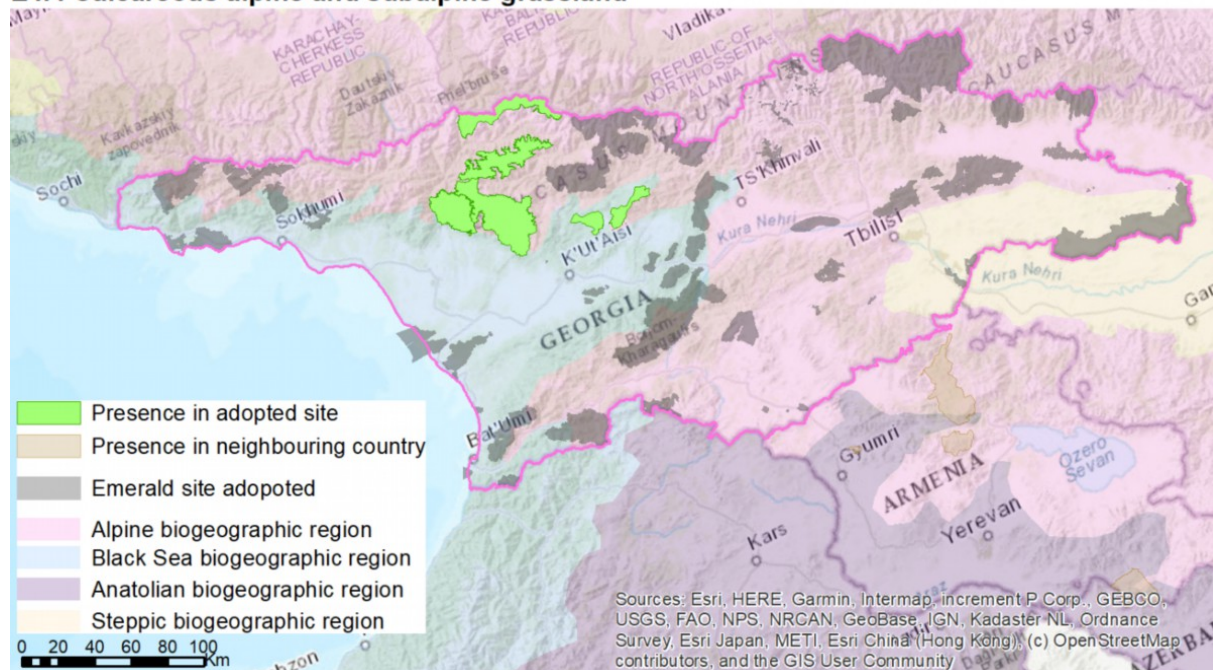
BGR	E3.4 Moist or wet eutropic and mesotrophic grassland
ALP	Num. of sites: 27 (No data: 5, B:11, C:11)
	BGR seminar 2021 conclusion: IN MOD Kazbegi, Javakheti
	Recommendation 2025: Check occurrence, including Javakheti in Southern Georgia and Kazbegi in Central Greater Caucasus. Consider the extension of the site GE000009 Kazbegi. CD - relative surface for five sites.
	Comments from external experts: 27 sites: 11B, 11C, 5? A good number of sites are designated for this habitat type, covering the ALP region well, except for Javakheti in Southern Georgia and Kazbegi in the Central Greater Caucasus. This habitat will be nearly sufficient after the designation of sites in the proposed areas.
	Comments from local experts: Extension of site GE000009 Kazbegi, Javakheti
	Reference: Nakhutsrishvili et al. 2017

E3.4 Moist or wet eutropic and mesotrophic grassland



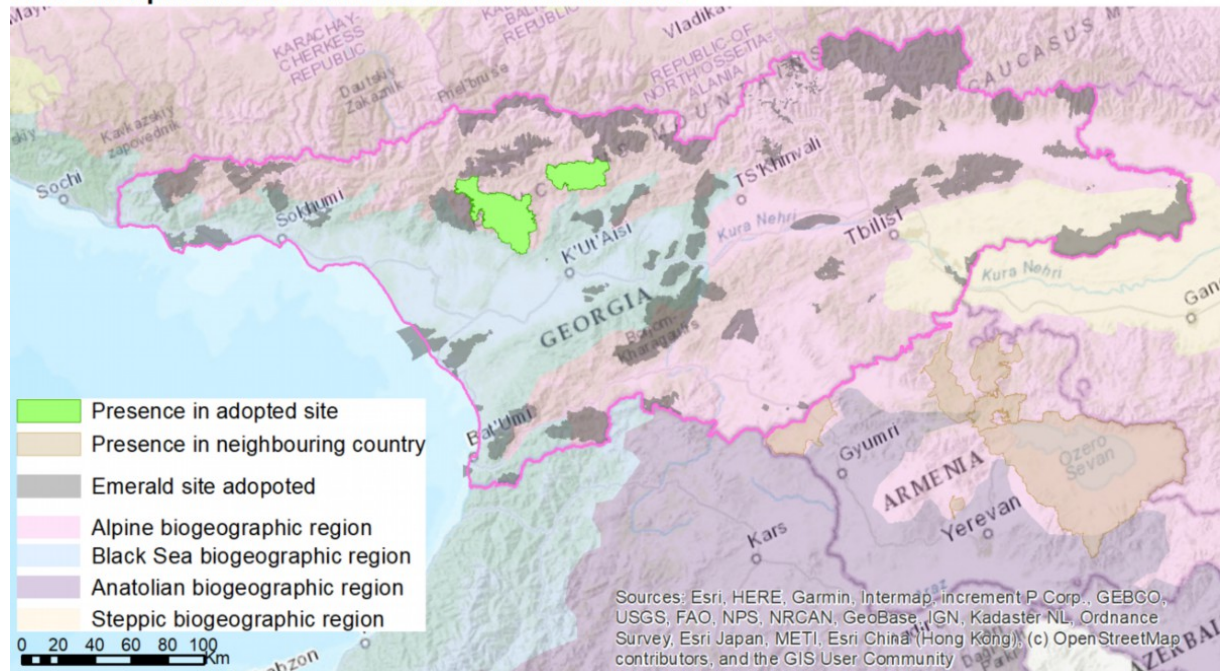
BGR	E4.4 Calcareous alpine and subalpine grassland
ALP	Num. of sites: 5 (No data: 1, A:1, B:1, C:2)
	BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MIN east
	Recommendation 2025: Check especially the ALP part of Abkhazia. CD: revise occurrence in site GE000012 Svaneti 1.
	Comments from external experts: Five sites designated (1A, 1B, 2C, 1?), all of them in the Central Caucasus. According to Akhalkatsi and Tarkhnishvili (2012), this habitat type is mainly distributed in the Western Caucasus, on limestone mountain tracts. Therefore, site designation should address the ALP region of Abkhazia.
	Comments from local experts: Habitat to be excluded from site GE000012 Svaneti 1 as the area is acid, not calcareous.
	References: Akhalkatsi and Tarkhnishvili 2012; Nakhutsrishvili et al. 2017.
BLS	Num. of sites: 3 (No data: 1, B:1, C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check sites in Kolkheti and Abkhazia.
	Comments: Three sites: 1B, 1C, 1? Two sites designated for this habitat type. Two sites are on the border with the ALP region in the Central Caucasus. Akhalkatsi and Tarkhnishvili (2012) cite this habitat (<i>Geranium gymnocaulon</i> , <i>Woronowia speciosa</i> , <i>Inula magnifica</i>) as an extremely specific community consisting of only these species in Kolkheti.
	Comments from local experts: Habitat occurs in Abkhazia.
	Reference: Akhalkatsi and Tarkhnishvili 2012

E4.4 Calcareous alpine and subalpine grassland



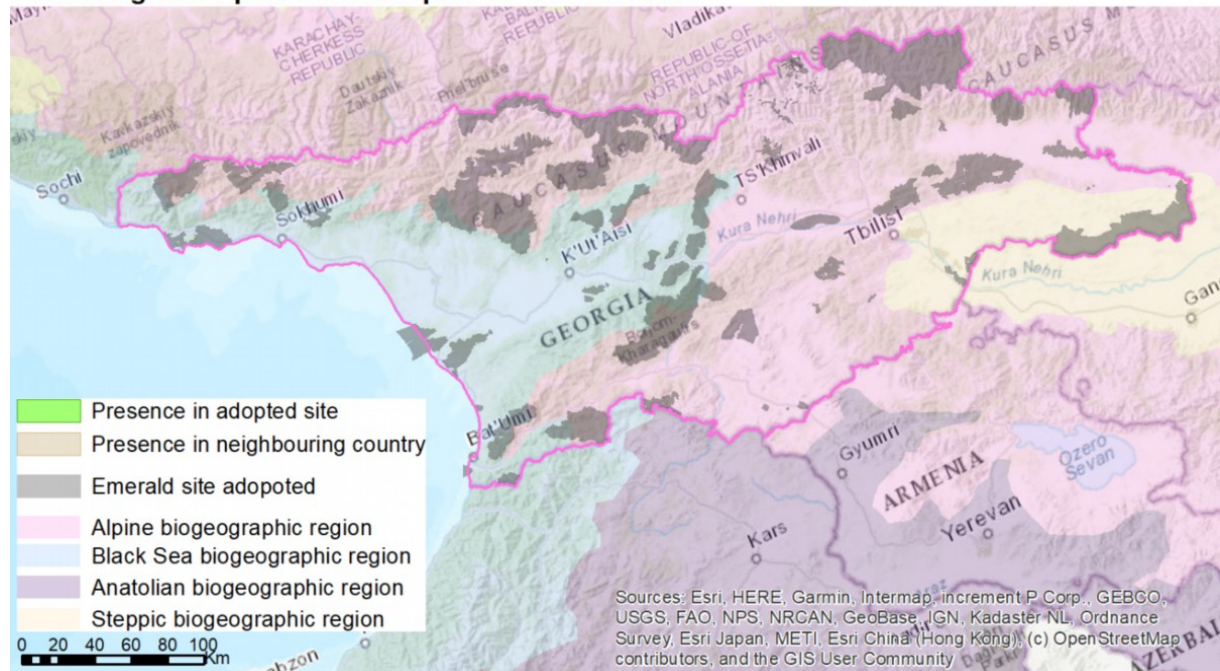
BGR	E5.5 Subalpine moist or wet tall-herb and fern stands
ALP	<p>Num. of sites: 2 (No data: 2)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN/CD, CD habitat assessment</p> <p>Recommendation 2025: Check the regions and sites mentioned below. CD - fill in the habitat's relative surface and coverage.</p> <p>Comments from external experts: Two sites for this habitat are located in the Central Greater Caucasus. Nakhutsrishvili (2017) cited a good example of this habitat type in the Devdoraki gorge (Central Caucasus). From Nakhutsrishvili (1999): Subalpine vegetation is well developed in the Caucasus, except in treeless areas of South Georgia Upland, where mountain steppes compete with alpine meadows. However, there is an Armenian site on the border with ALP Southern Georgia: AM0000004. Could this habitat also be present in Southern Georgia? It is also indicated by George M. Fayvush in Noroozi (2020) for Northern Armenia. Gaps: The habitat is present in northwestern Colchis (Abkhazeti): Aconietum, Heraclietum, and so on, and in Eastern Caucasus, for instance, near Lagodekhi.</p> <p>Comments from local experts: Khesureti, Javakheti, Borjomi, Emerald sites GE0000001 Lagodekhi, GE0000002 Arkhoti, GE0000008 Tusheti, GE0000009 Kazbegi, GE0000011 Ratcha 1, GE0000012 Svaneti 1, GE0000021 Samegrelo, GE0000026 Goderdzi, GE0000038 Ktsia-Tabatskuri, GE0000040 Ratcha 2, GE0000042 Ratcha 4, GE0000045 Svaneti 2, GE0000056 Borjomi-Kharagauli 2, GE0000057 Samegrelo 2, GE0000058 Racha-Lechkhumi, GE0000059 Svaneti-Racha. Also, Abkhazia sites GE0000023 Amtkeli, GE0000028 Gumista, GE0000032 Pskhu, GE0000033 Ritsa. Possibly also other sites.</p> <p>References: Nakhutsrishvili 2013; Nakhutsrishvili et al. 2017; Noroozi 2020</p>

E5.5 Subalpine moist or wet tall-herb and fern stands



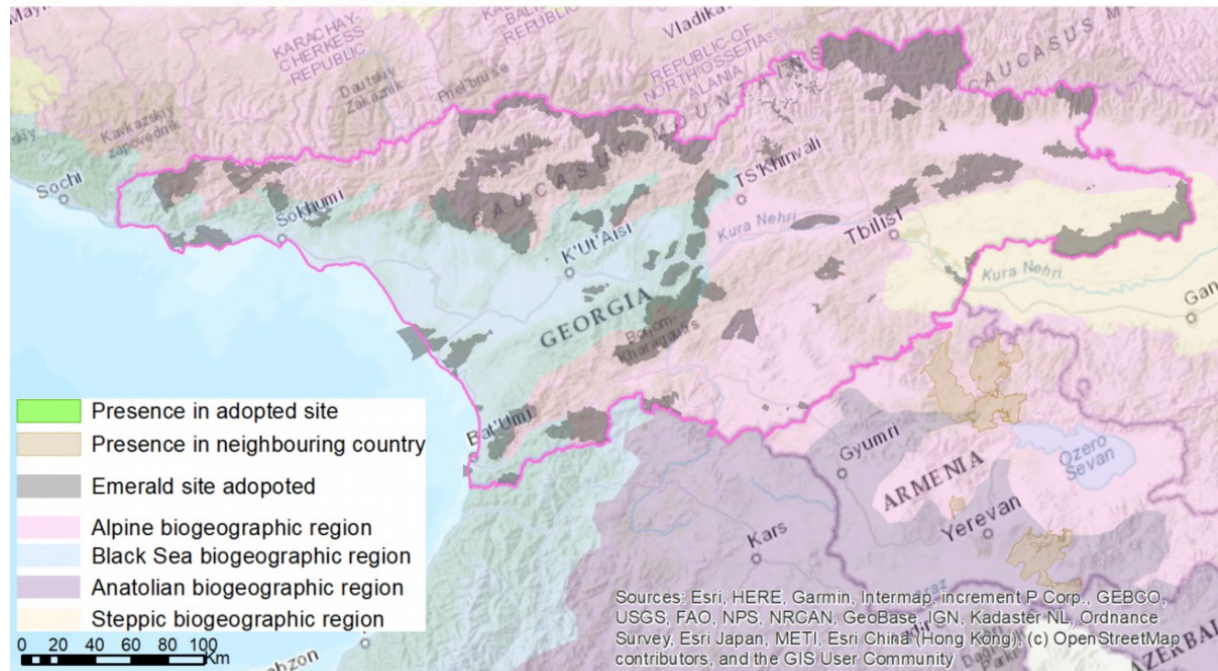
BGR	F2.2 Evergreen alpine and subalpine heath and scrub
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR/CD, CD Correct habitat code
	Recommendation 2025: Use a broader habitat definition as mentioned below. Check Western Caucasus, Abkhazia, Southern Western Georgia, on the border with Türkiye. CD: habitat code to be corrected; it is not F2.22 but F2.2.
	Comments from external experts: 1B site BLS/ALP. F2.2 should not be reduced to F2.22 Alpine acidocline <i>Rhododendron</i> heaths, especially for BLS, which allows enlarging the definition and includes <i>Juniperus</i> dwarf scrubs or other types of scrub.
	Comments from local experts: Borjomi, Adjara, Mtirala, GE0000026 Goderdzi. The occurrence in Abkhazia is questionable.
	Reference: Kavgacı et al. 2023

F2.2 Evergreen alpine and subalpine heath and scrub



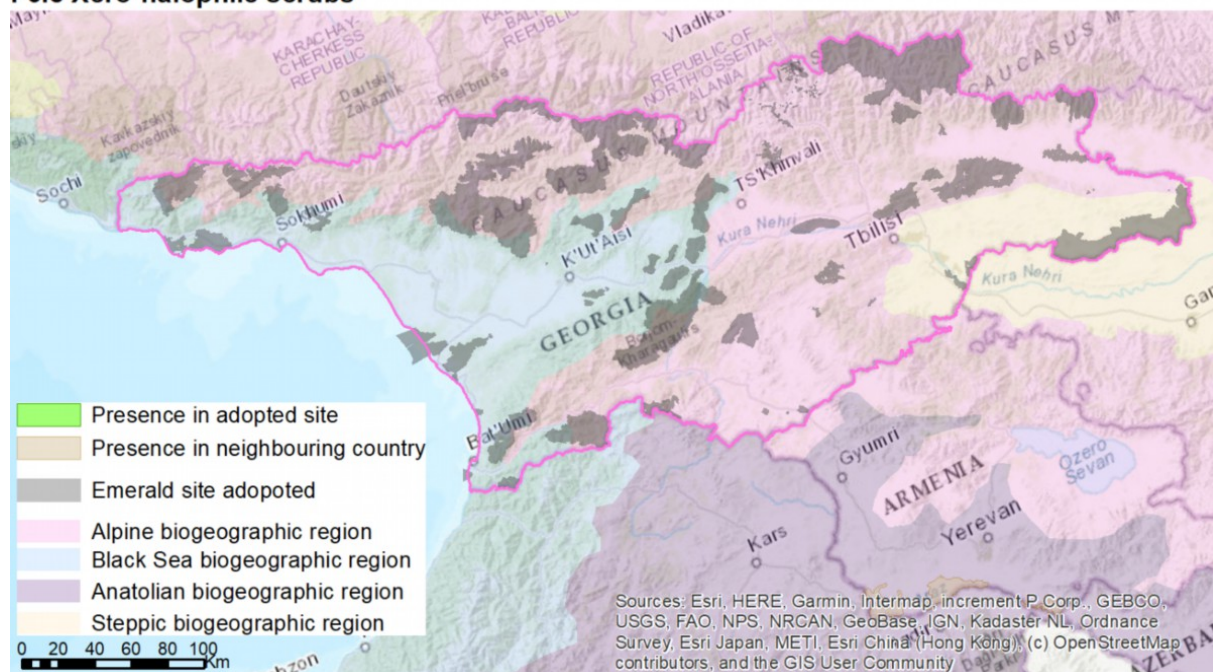
BGR	F3.245 Eastern Mediterranean deciduous thickets
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MAJ
	Recommendation 2025: Check Eastern Caucasus: Mtkvari gorge, Meskheti and Tetrobi mountain plateau, and the following Emerald sites.
	Comments from external experts: No sites in the country. However, Nakhutsrishvili (2019) states that in the middle-mountain zone, mountain zerophytic communities and shibliak-live vegetation can occur (<i>Paliurus spina-christi</i> , <i>Spiraea</i> spp., <i>Crataegus</i> spp., <i>Rosa</i> spp., and so on).
	Comments from local experts: Sites GE0000027 Gombori and GE0000046 Kvernaki. Possible occurrence in sites GE0000013 Algeti, GE0000020 Mariamjvari, GE0000022 Alazani, GE0000030 Liakhvi.
	References: Akhalkatsi and Tarkhnishvili 2012; Nakhutsrishvili et al. 2017.

F3.245 Eastern Mediterranean deciduous thickets



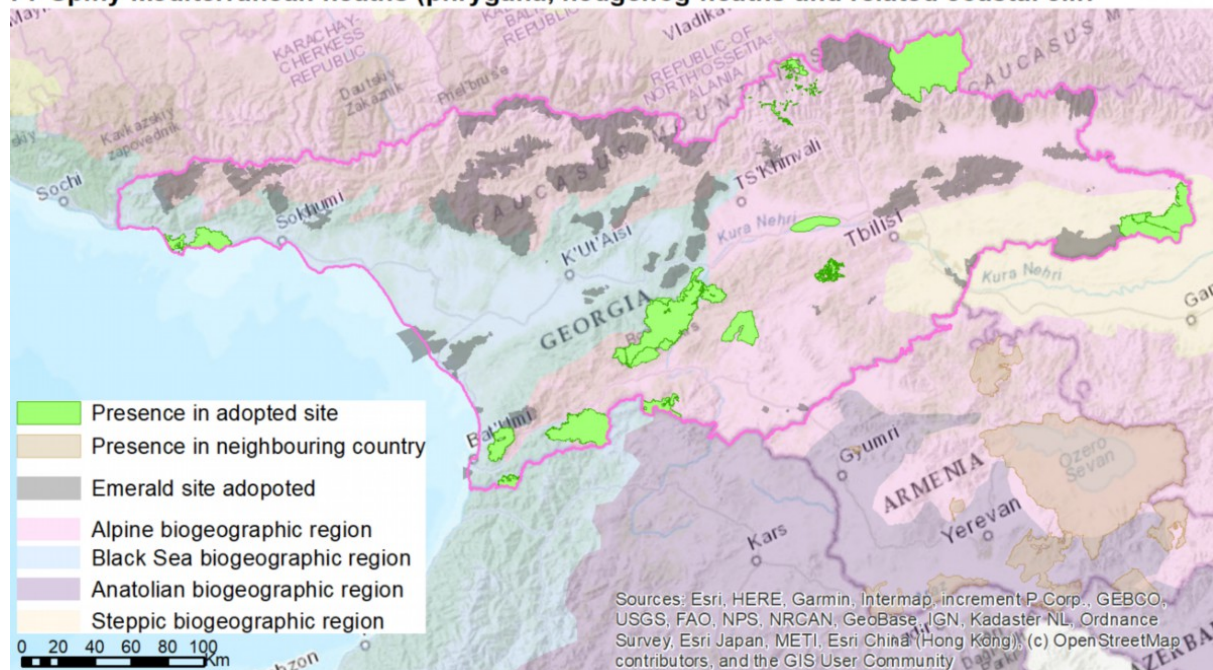
BGR	F6.8 Xero-halophile scrubs
STE	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Area of Eldari to be surveyed. Check Emerald sites GE0000003 Chachuna, GE0000007 Vashlovani, GE0000037 Davit Gareja, GE0000046 Kvernaki.
	Comments from external experts: No sites in the country for this habitat type. Area of Eldari to be surveyed; nevertheless, its existence may be SR since the halo-nitrophilous vegetation corresponds more to steppes than scrubs.
	Comments from local experts: The habitat occurs in Georgia. Emerald sites GE0000003 Chachuna, GE0000007 Vashlovani, GE0000037 Davit Gareja, GE0000046 Kvernaki.
	Reference: Nakhutsrishvili 1999

F6.8 Xero-halophile scrubs



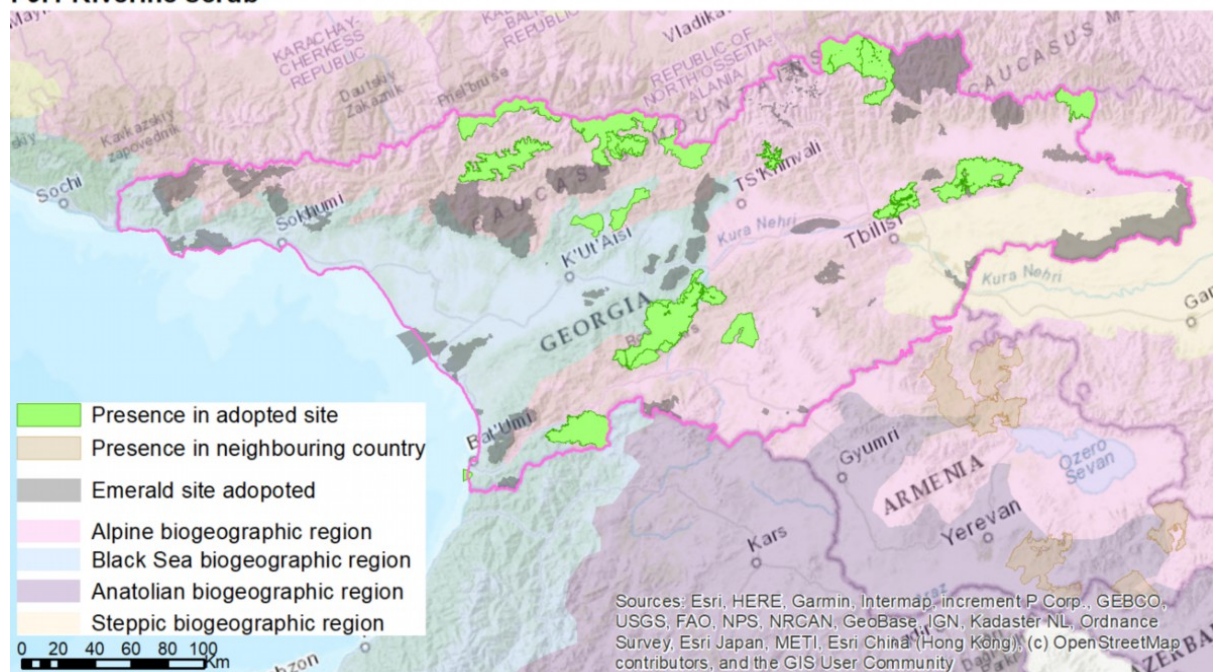
BGR	F7 Spiny Mediterranean heaths phrygana, hedgehog-heaths, and related coastal cliff
BLS	<p>Num. of sites: 7 (No data: 1, B:2, C:4)</p> <p>BGR seminar 2021 conclusion: SR; To be evaluated on short notice</p> <p>Recommendation 2025: Clarify the type of vegetation classified under F7 for the sites GE0000025 and GE0000031.</p> <p>Comments from external experts: Seven sites with relative surface 2B, 4C (four of them in ALP/BLS regions) distributed along the Colchis region. It is odd that a habitat type concluded as SR has so many sites (problems of interpretation with F3.247 Ponto-Sarmatic deciduous thickets). Occurrence of the habitat type in Georgia/BLS to be revised.</p> <p>Comments from local experts: Habitat does not occur in Georgia/BLS; to be excluded.</p>
STE	<p>Num. of sites: 2 (A:1, B:1)</p> <p>BGR seminar 2021 conclusion: SR; To be evaluated on short notice</p> <p>Recommendation 2025: Clarify if this habitat is dominated by the presence of Jerusalem thorn scrub (<i>Paliurus spina-christi</i>) or is closer to <i>Astragaleta denudati</i>. IN MOD - to be checked in Iori Valley (closer to Tbilisi). IN MIN - GE0000019, this habitat type is in the other side of the border with Azerbaijan (AZ0000016). Consider adding habitat to sites GE0000003 Chachuna, GE0000051 Kotsakhura, and enlarging site GE0000037 Davit Gareja.</p> <p>Comments from external experts: There are two sites for this habitat in STE, with A and B relative surface, on the border with Azerbaijan.</p> <p>Comments from local experts: Sites GE0000003 Chachuna, GE0000051 Kotsakhura, and site GE0000037 Davit Gareja to be enlarged.</p>
References:	
Akhalkatsi 2019; Nakhutsrishvili 1999; Kavgacı et al. 2023	

F7 Spiny Mediterranean heaths (phrygana, hedgehog-heaths and related coastal cliff



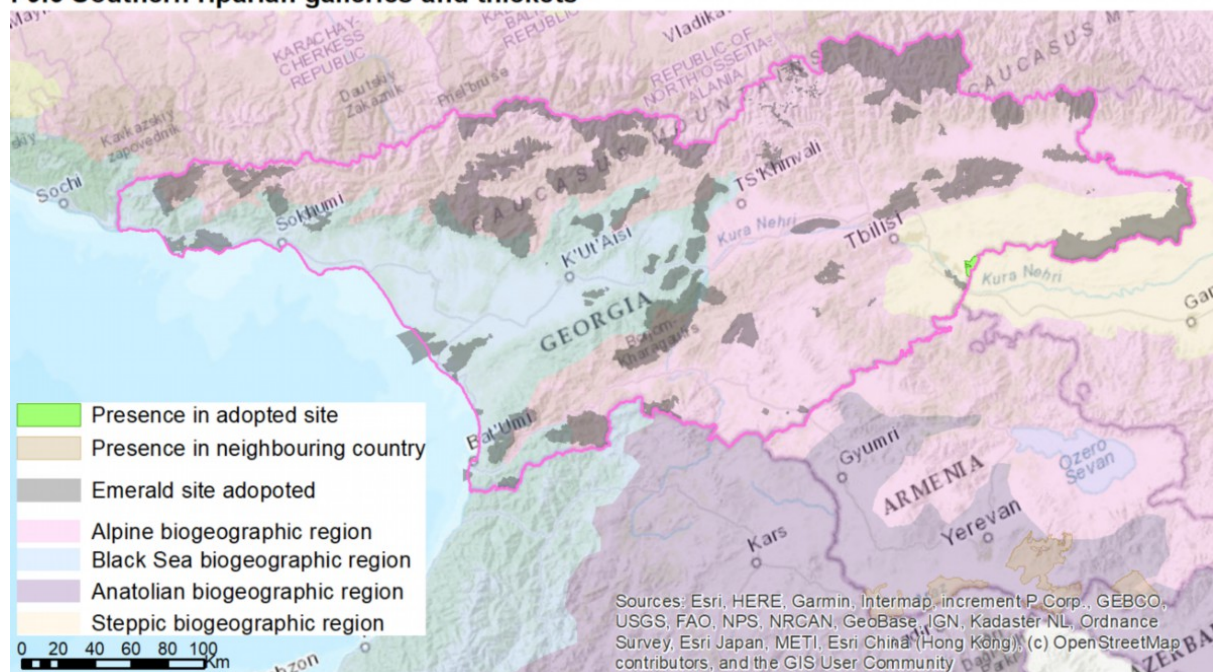
BGR	F9.1 Riverine scrub
ALP	Num. of sites: 15 (B:10, C:5)
	BGR seminar 2021 conclusion: IN MOD/CD Kazbegi, Aragvi (Khevsureti). CD habitat assessments.
	Recommendation 2025: Further research is needed, especially in regions of Central Greater Caucasus (gaps in Kazbegi and Aragvi Valleys), Eastern Caucasus, Abkhazia, and Lesser Caucasus. Consider adding the Emerald sites listed below.
	Comments from external experts: 15 sites designated (10B and 5C), distributed mainly in the Central Greater Caucasus, Eastern Caucasus, and Southern Georgia. Vegetation of river gravel bars: <i>Salici-Myricaetum</i> in Greater Caucasus and <i>Salici-Hippophaetum</i> in Lesser Caucasus. We did not find a bibliography to justify the presence of this habitat in Western Caucasus (Abkhazia), where it should be present, with gaps in the Kazbegi and Aragvi Valleys. Akhalkatsi and Tarkhnishvili (2012) do not define the habitat as such; they describe scrubbed willows with <i>Myrica germanica</i> , <i>Salix eleagnos</i> , or <i>Hippophae rhamnoides</i> . Reference taken directly from the BGR seminar notes.
	Comments from local experts: Habitat occurs in Abkhazia, to be added to Khevsureti, Emerald sites GE0000002 Arkhoti, GE0000009 Kazbegi, GE0000022 Alazani, GE0000046 Kvernaki.
	References: Akhalkatsi and Tarkhnishvili 2012; Nakhutsrishvili 1999; Kalniková et al. 2020

F9.1 Riverine scrub



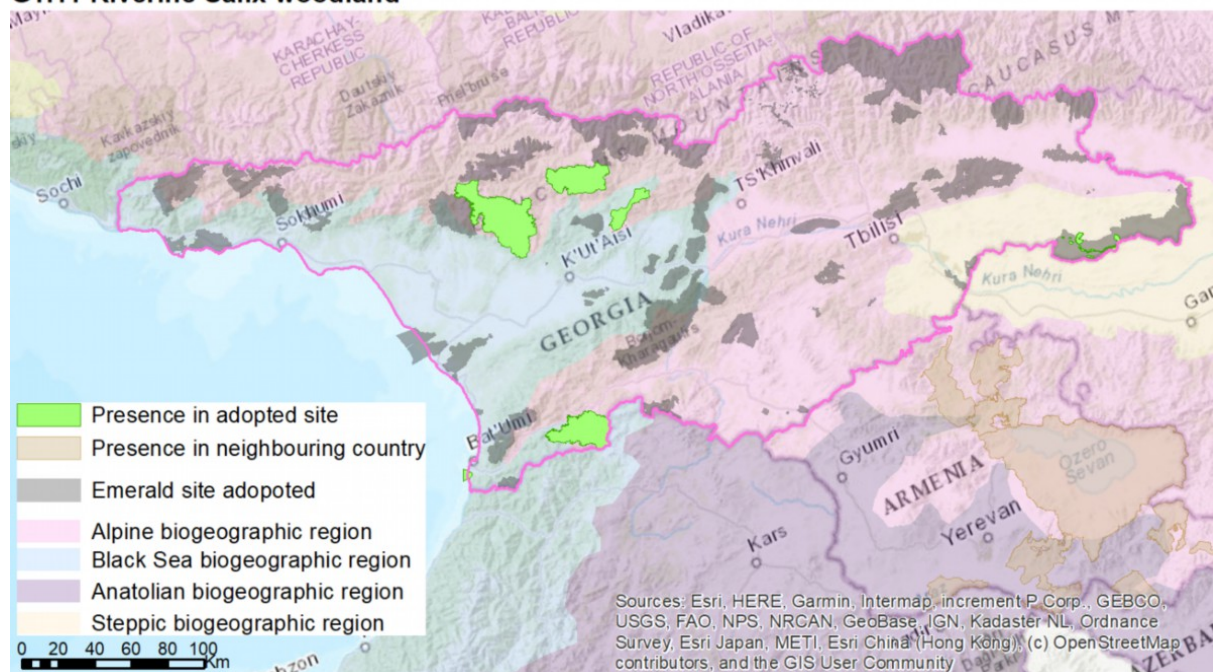
BGR	F9.3 Southern riparian galleries and thickets
ALP	<p>Num. of sites: 0</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN</p> <p>Recommendation 2025: Consider adding the site GE0000046 Kvernaki. No other concrete proposals to solve the IN MAJ after reading the bibliography.</p> <p>Comments from external experts: No sites; the BGR seminar 2021 conclusion is not right. It should be IN MAJ or SR.</p> <p>Comments from local experts: To be added to the site GE0000046 Kvernaki</p>
BLS	<p>Num. of sites: 0</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN</p> <p>Recommendation 2025: To clarify the habitat occurrence in Georgia/BLS</p> <p>Comments from external experts: No sites; the BGR seminar 2021 conclusion is not right. Kavğacı et al. (2023) cited Colchic <i>Alnus glutinosa</i> azonal riparian forest at the east of Batumi (border with Türkiye). However, it is not certain that this formation fully corresponds to F9.3 because the SDF of the site GE0000016 Mtirala (eastern Batumi) includes G1.12 Boreo-Alpine riparian galleries.</p> <p>Comments from local experts: Habitat does not occur; to be excluded</p>
STE	<p>Num. of sites: 1 (C:1)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN</p> <p>Recommendation 2025: Further research is needed. Consider addition to sites GE0000007 Vashlovani, GE0000019 Gardabani, GE0000051 Kotsakhura.</p> <p>Comments from external experts: 1C site on the border with Azerbaijan</p> <p>Comments from local experts: Habitat occurs in sites GE0000007 Vashlovani, GE0000019 Gardabani, GE0000051 Kotsakhura</p>
References:	
Akhalkatsi and Tarkhnishvili 2012; Nakhutsrishvili 1999; Nakhutsrishvili et al. 2017.	

F9.3 Southern riparian galleries and thickets



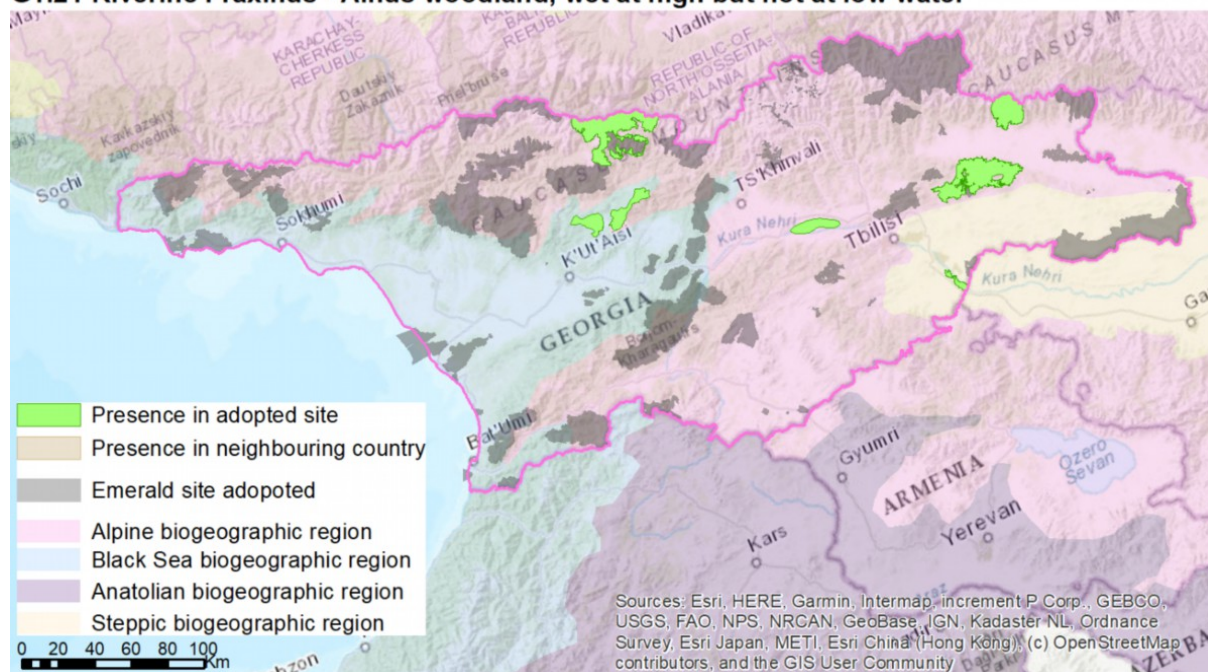
BGR	G1.11 Riverine <i>Salix</i> woodland
ALP	Num. of sites: 4 (B:3, C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation: Check in Kartli, along the Aragui River (<i>Salici-Myricarietum</i>), and the Eastern Caucasus. Along the Alazani River and the Iori River.
	Comments: Four sites (3B1C) in the Greater Central Caucasus and the Lesser Caucasus. Some gaps when checking bibliography: Kartli, along the Aragui River (<i>Salici-Myricarietum</i>) and the Eastern Caucasus. Along the Alazani River and the Iori River. Use existing knowledge for the selection of the best sites.
	Comments from local experts: Detailed knowledge of habitat distribution exists.
BLS	Num. of sites: 3 (B:3)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation: Check Western Georgia, especially Rioni's silt banks, Upper Imereti, and Khrami Rivers. Use existing knowledge to select the best sites.
	Comments: 2B sites, both bordering sites with the ALP region. In Western Georgia, this habitat occurs along rivers from lowland to 1,500–1,600 m. Rioni silt banks are covered with bushes of buckthorn (<i>Rhamnus</i>) and willow (<i>Salix alba</i> , <i>S. excelsa</i>).
	Comments from local experts: Detailed knowledge of habitat distribution exists.
References: Akhalkatsi and Tarkhnishvili 2012; EU4Environment 2024; Kalníková et al. 2020	

G1.11 Riverine Salix woodland



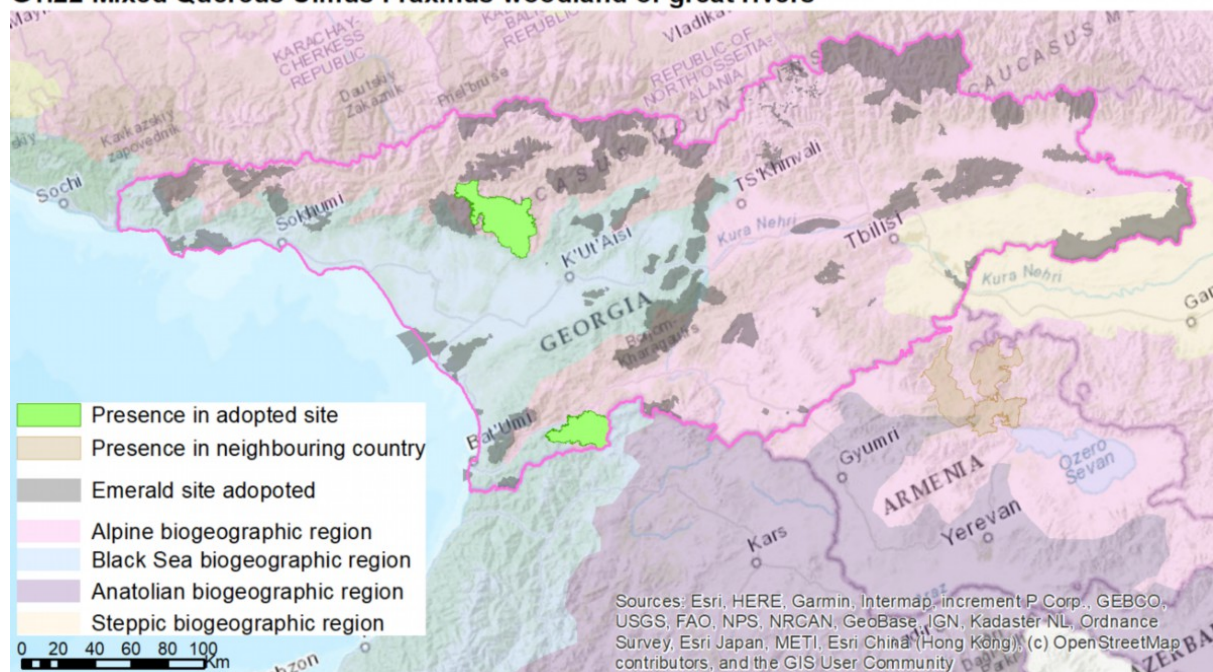
BGR	G1.21 Riverine <i>Fraxinus-Alnus</i> woodland, wet at high but not at low water
ALP	<p>Num. of sites: 5 (No data: 1, B:3, C:1)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN</p> <p>Recommendation: Check the Racha-Lechkhumi and Lower Svaneti regions. Rivers of Mtkvari, Aragvi, Iori as well as Alazani River and its tributaries. Enguri region (Central-Western Caucasus). Check also occurrence in GE0000002 Arkhoti. CD - fill in assessment for GE0000027 Gombori. Enguri region (Central-Western Caucasus) and Aragvi region (Eastern Caucasus).</p> <p>Comments: 3B, 1C, 1? This habitat type occupies higher terraces than G1.11, but they may coexist in the same zone. Five sites designated for this habitat (3B1C1?), located in the Central and Eastern Caucasus. Novák et al. (2023) localized this habitat.</p> <p>Comments from local experts: The difference between G1.12 and this habitat to be studied. Not enough information about the habitat. Habitat probably occurs in GE0000002 Arkhoti - to be checked.</p>
BLS	<p>Num. of sites: 1 (C:1)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN/CD, CD missing assessment</p> <p>Recommendation 2025: Check for occurrences in Abkhazia, Lechkhumi, the River Enguri, and the River Mtkvari.</p> <p>Comments from external experts: 1C site. This habitat type occupies higher terraces than G1.11, but they may coexist in the same zone.</p> <p>Comments from local experts: The occurrence in Abkhazia needs to be checked.</p>
References:	
Akhalkatsi and Tarkhishvili 2012; EU4Environment 2024; Novák et al. 2023	

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



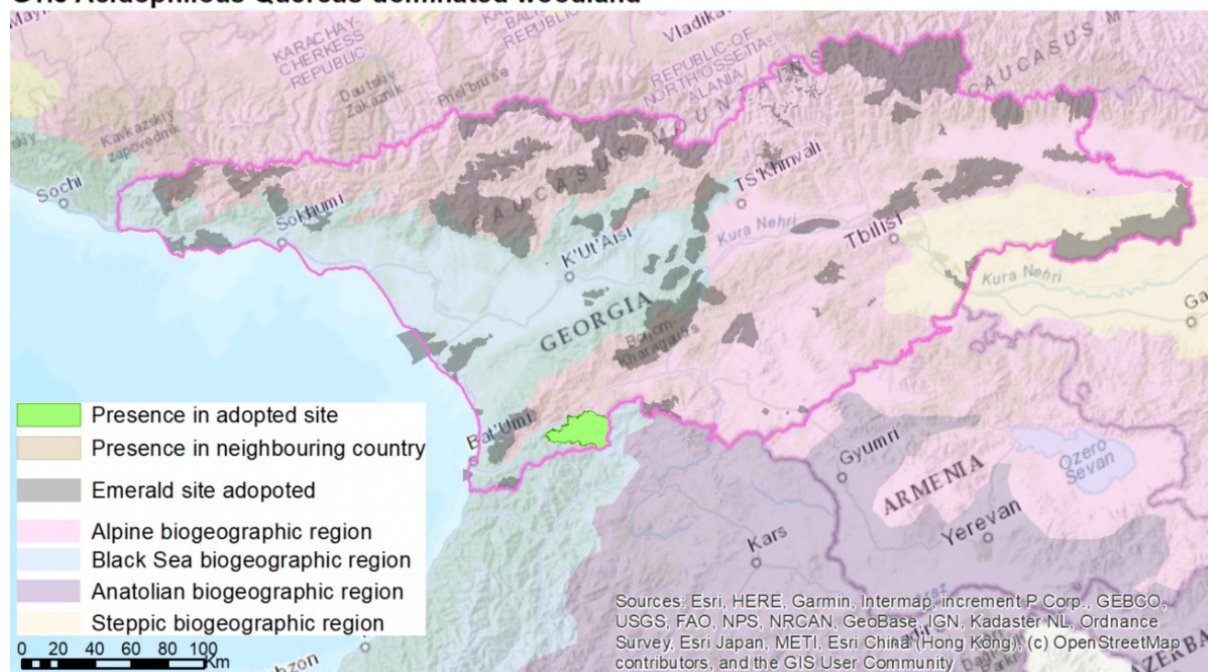
BGR	G1.22 Mixed <i>Quercus-Ulmus-Fraxinus</i> woodland of great rivers
ALP	Num. of sites: 2 (No data: 2)
	BGR seminar 2021 conclusion: IN MOD/IN MIN/CD, CD habitat assessment
	Recommendation: Check the valleys of the Rivers Mtkvari, Aragvi, Iori as well as Alazani River and its tributaries; Eastern Caucasus. Also, sites GE0000026 Goderdzi and GE0000057 Samegrelo 2. CD - fill in coverage and relative surface.
	Comments: Two sites in the ALP region: the Central Greater Caucasus and in the Lesser Caucasus. Novák et al. (2023) cite <i>Quercus-Carpinus betulis</i> in the Eastern Caucasus.
BLS	Num. of sites: 2 (No data: 2)
	BGR seminar 2021 conclusion: IN MOD/IN MIN/CD, CD habitat assessment
	Recommendation: Further research is needed. Check occurrence in sites GE0000026 Goderdzi and GE0000057 Samegrelo 2.
	Comments: We have not found references on the occurrence of this habitat type in the BLS region. This habitat type is marginal in the BLS region; it occurs mainly in the ALP. The two sites designated in the Georgia are slightly in the BLS region (bordering sites).
	Comments from local experts: Occurrence in sites GE0000026 Goderdzi and GE0000057 Samegrelo 2 to be checked.
	Note: STE - occurrence in site GE0000019 Gardabani to be checked.
	References: Akhalkatsi and Tarkhishvili 2012; EU4Environment 2024; Novák et al. 2023

G1.22 Mixed Quercus Ulmus Fraxinus woodland of great rivers



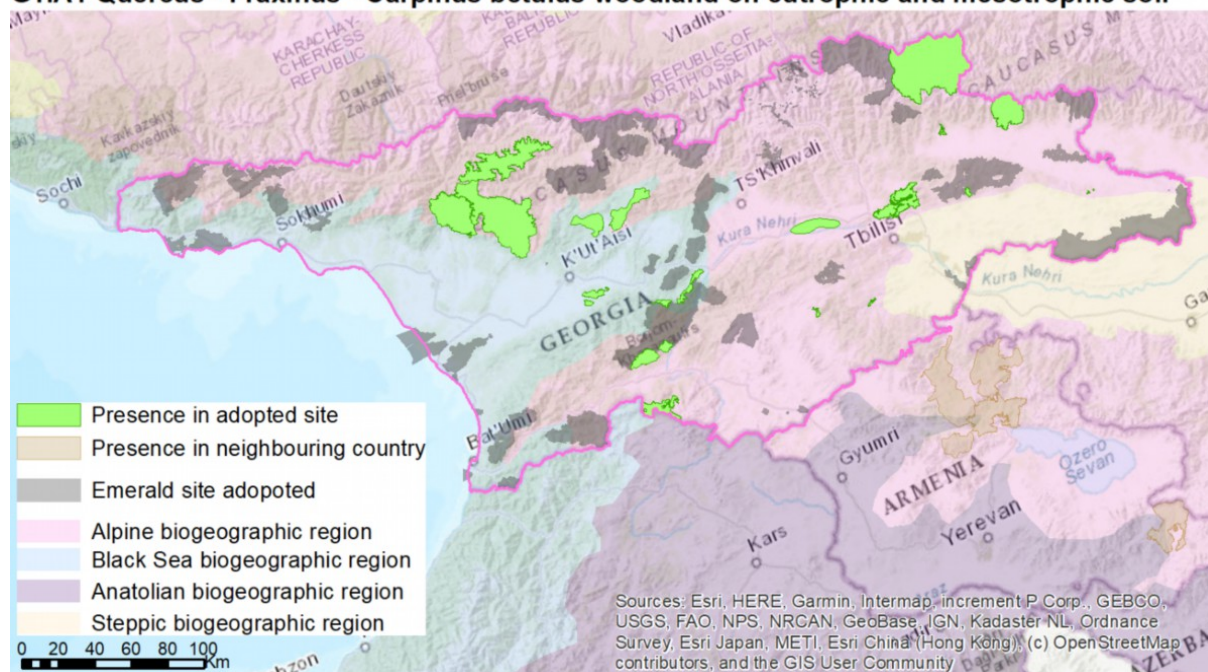
BGR	G1.8 Acidophilous Quercus-dominated woodland
ALP	<p>Num. of sites: 1 (B:1)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN</p> <p>Recommendation: Check habitat presence in the Central Caucasus. IN MIN: GE0000021, GE0000023, GE0000032, GE0000033, GE0000041, GE0000042, GE0000056.</p> <p>Comments: One (bordering) site in Georgia, mainly in the ALP region. The Georgian oak forest is widespread in almost all forest regions of Georgia. It is not found in Tusheti, northern Khevsureti, and Khevi. In Eastern Georgia, it is found from 350–500 m to 1,000–1,550 m. In Western Georgia, it is distributed at an altitude of 1,500–1,800 m.a.s.l. (Svaneti). High mountain oak (<i>Quercus macranthera</i>) is common in the eastern part of the Great Caucasus on both southern and northern micro slopes and also in the small Caucasus and Western Georgia (Svaneti). According to Nakhutsrishvili, this habitat is present in the Central Caucasus. IN MIN: GE0000021, GE0000023, GE0000032, GE0000033, GE0000041, GE0000042, GE0000056.</p> <p>Comments from local experts: Recommendations above are correct.</p>
BLS	<p>Num. of sites: 1 (B:1)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN</p> <p>Recommendation 2025: Consider addition to sites: GE0000021, GE0000041, GE0000042, GE0000056—mostly bordering sites with the ALP region.</p> <p>Comments from external experts: 1 (bordering) site, its main part lies in the ALP.</p> <p>Comments from local experts: Habitat was excluded from the site GE0000021 Samegrelo in the previous seminar. If the recommendation is based on the referenced paper, its inclusion could be correct.</p>
<p>References: Akhalkatsi and Tarkhnishvili 2012; EU4Environment 2024; Nakhutsrishvili et al. 2017</p>	

G1.8 Acidophilous Quercus-dominated woodland



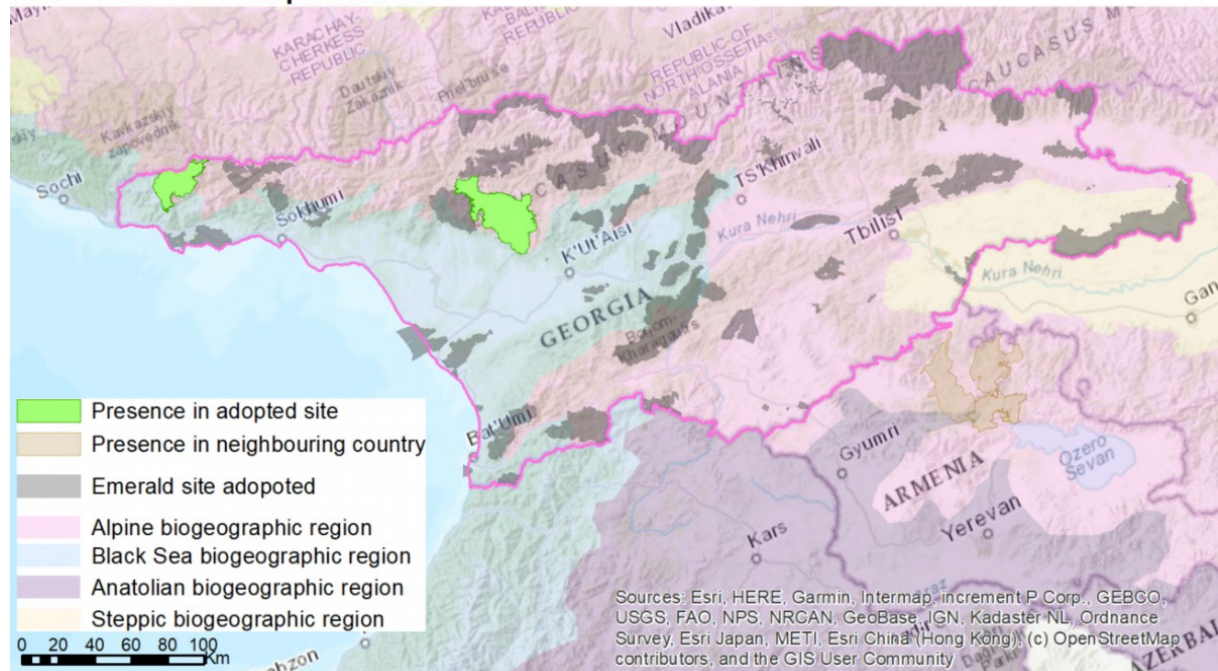
BGR	G1.A1 <i>Quercus-Fraxinus-Carpinus betulus</i> woodland on eutrophic and mesotrophic soil
BLS	Num. of sites: 5 (B:3, C:2)
	BGR seminar 2021 conclusion: IN MOD/IN MIN/CD, CD habitat assessment
	Recommendation 2025: Check regions of Abkhazia, Samegrelo, Ratcha, as well as the surroundings of Kutaisi and Tsutskhvati. Consider addition to sites GE0000010, GE0000023, GE0000025, GE0000049, check sites GE0000014 Kintrishi and GE0000026 Goderdzi.
	Comments from external experts: Five sites: 3B, 2C; three of them shared with the ALP region. Oak forests in Georgia are mainly created by two species: <i>Quercus iberica</i> and <i>Q. macranthera</i> (high mountain oak). Oak-oriental hornbeam (<i>Carpinus orientalis</i>) forest (<i>Iberica-Quercetum-Carpinion orientale</i>) in Eastern Georgia is distributed at an altitude of 600–1,000 m.a.s.l. and in the west, from 350 m to 700–800 m. It can be found in the limestone region of Abkhazia and Samegrelo and in the rocky slopes of Eastern Georgi. Novák et al. (2021) cite this habitat at Kutaisi and Tsutskhvati.
	Comments from local experts: Ratcha, sites GE0000014 Kintrishi and GE0000026 Goderdzi to be checked.
	References: Akhalkatsi and Tarkhnishvili 2012; EU4Environment 2024; Novák et al. 2020, 2021

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



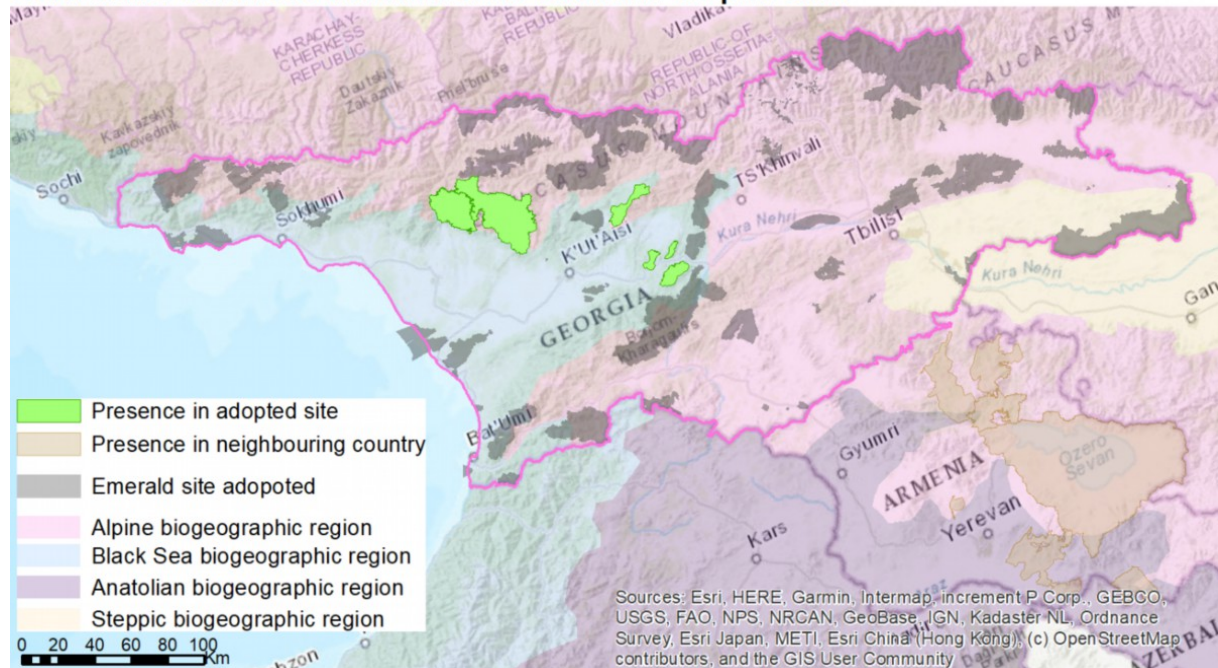
BGR	G1.A4 Ravine and slope woodland
BLS	Num. of sites: 2 (No data: 1, B:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Make more inventories and study the composition of this habitat type in the BLS. Check regions and sites specified below.
	Comments from external experts: Two neighboring sites with the ALP region. Guidelines for Managing Forest Habitats on Georgia's Emerald Sites only indicate these two sites (this habitat is not well represented in the ALP region, for instance, at Bedeni Plateau, outskirts of Manglisi, and Kaishauri Valley). The fact that beech is the dominant species is not in line with the definition of this habitat type (as included in the Interpretation Manual). At higher altitudes in Kolkheti, beech is the prevailing species mixed with lime, Caucasian elm, oak, and maple (<i>Acer velutinum</i>). The habitat also occurs on the eastern slopes of the Adjara-Imeretian mountain range and the Bzipi range, and in moist gorges of South Colchis, for instance, Abasha canyons (Martvili Canyon Nature Monument). The relief of the central Odishi Plateau is dissected by soft, hilly, and wavy watersheds with averaged inclined slopes and, sometimes, by narrow gorges and ravines.
	Comments from local experts: Habitat occurs in sites GE0000010 Borjomi-Kharagauli, GE0000021 Samegrelo, GE0000041 Ratcha 3, GE0000042 Ratcha 4. Occurrence in sites GE0000026 Goderdzi is possible.
	References: Akhalkatsi and Tarkhnishvili 2012; Nakhutsrishvili 1999; EU4Environment 2024; Novák et al. 2020; Tielidze 2018

G1.A4 Ravine and slope woodland



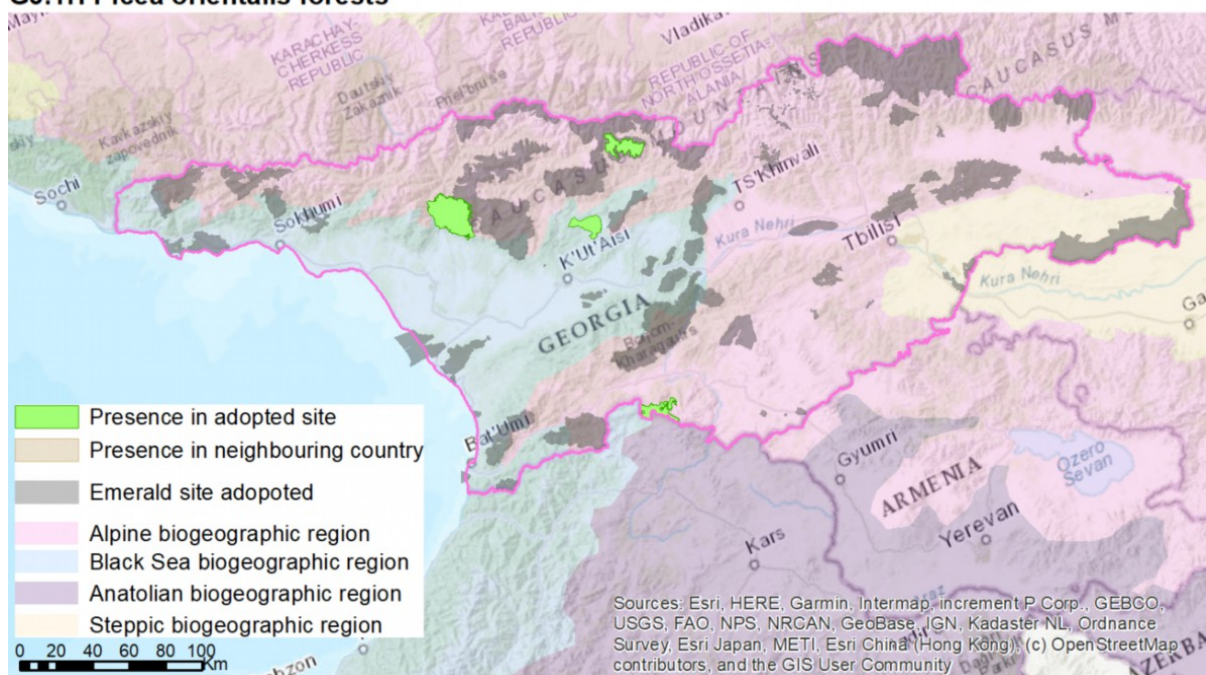
BGR	G1.A7 Mixed deciduous woodland of the Black and Caspian Seas
BLS	Num. of sites: 5 (No data: 4, C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check Lechkumi, River Enguri, River Mtkvari, and Kutaisi and Tsutskhvati.
	Comments from external experts: Six sites in Imereti and Samegrelo-Zemo Svaneti; SDF to be filled in. Novák et al. (2021) cite this habitat at Kutaisi and Tsutskhvati. Vegetation of Armenia: <i>Quercus iberica</i> , <i>Q. araciva</i> .
	Comments from local experts: No further information
	References: Akhalkatsi and Tarkhnishvili 2012; EU4Environment 2024; Novák et al. 2021

G1.A7 Mixed deciduous woodland of the Black and Caspian Seas



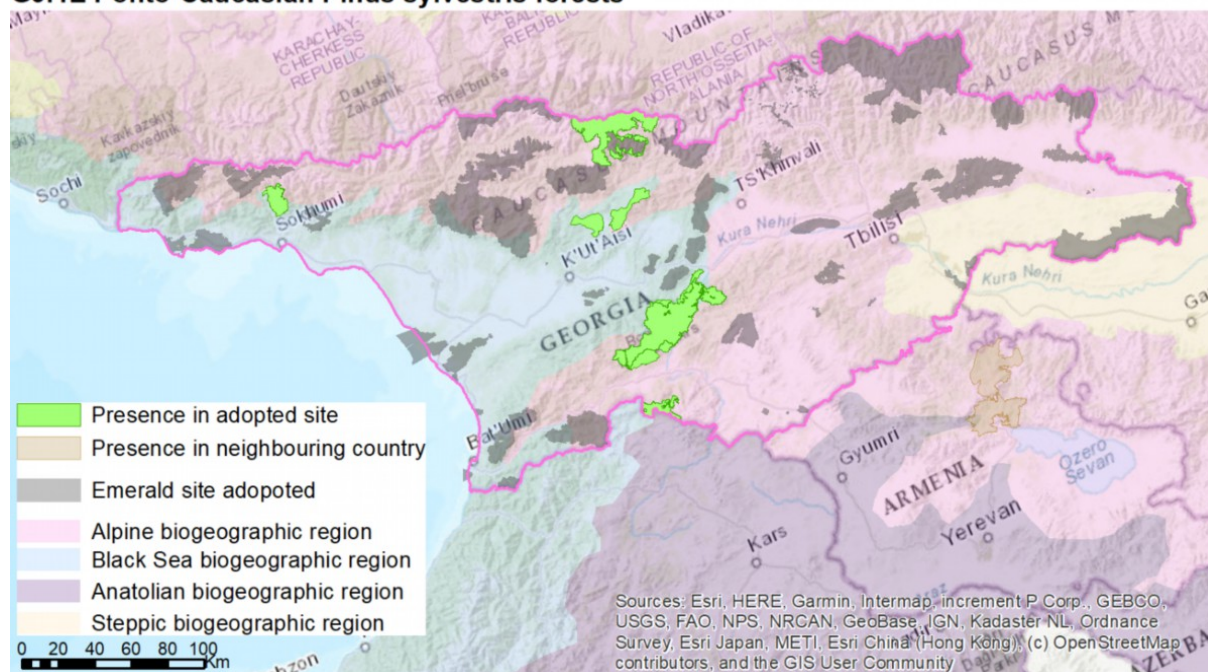
BGR	G3.1H <i>Picea orientalis</i> forests
BLS	Num. of sites: 2 (B:1, C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Habitat to be added to sites GE0000028 Gumista, GE0000033 Ritsa, and GE0000034 Surami 1. No other concrete information was found for this habitat type in the BLS region.
	Comments from external experts: Two sites in the BGR (one of them is a bordering site with ALP). This habitat type is part of the so-called 'dark coniferous forests'. Its development is connected with the defined altitudinal-climatic zone, which extends from 1,000 to 2,000 m.a.s.l.
	Comments from local experts: No further information
	References: Nakhutsrishvili 1999; EU4Environment 2024

G3.1H *Picea orientalis* forests



BGR	G3.4E Ponto-Caucasian <i>Pinus sylvestris</i> forests
BLS	Num. of sites: 4 (No data: 1, B:2, C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check the presence of habitat in the surroundings of Abkhazia, Adjara, and Gagra. Consider addition to the site GE0000026 Goderdzi.
	Comments from external experts: Four sites: 2B, 1C, 1? are very close to the ALP region. This habitat may be present in the surroundings of Abkhazia, Adjara, and Gagra. IN MIN GE0000026 (EU4Environment 2024).
	Comments from local experts: No further information
	References: Akhalkatsi and Tarkhnishvili 2012; Nakhutsrishvili 1999; EU4Environment 2024

G3.4E Ponto-Caucasian *Pinus sylvestris* forests

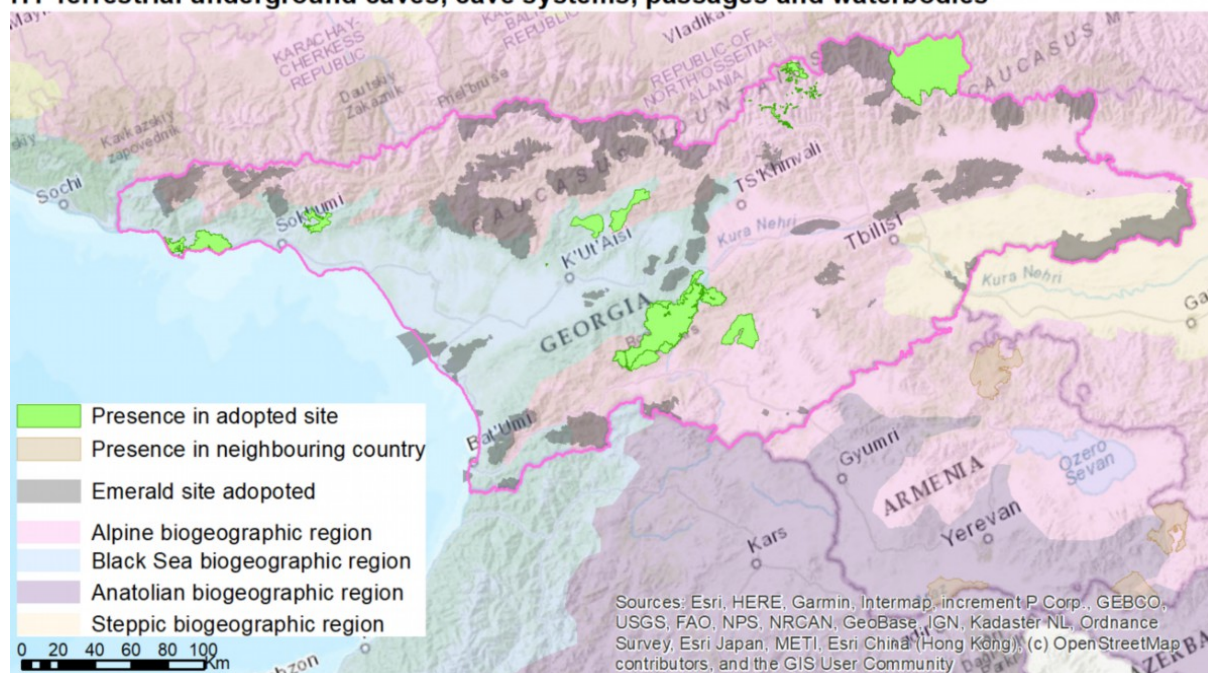


BGR	H1 Terrestrial underground caves cave systems passages and waterbodies
ALP	<p>Num. of sites: 8 (A:2, B:2, C:4)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN</p> <p>Recommendation 2025: Consider the designation of Krubera Cave, Prometheus Cave, Tsona Cave, Khorkhebi Cave, Lisi Cave, and Vejini Cave in Eastern Georgia and their addition to site GE0000021 Samegrelo. Check the Ratcha and Samegrelo regions.</p> <p>Comments from external experts: Eight sites (two bordering sites with the BLS region): 2A, 2B, 4C. Geomorphology of Georgia proposes an interesting map of the most important caves of Georgia (pg. 52). Krubera Cave is the largest cave of Georgia. Some examples of possible caves to be designated in the ALP region: Tsona Cave, Prometheus Cave, Khorkhebi Cave, Lisi Cave, and Vejini Cave in Eastern Georgia. IN MIN - GE0000021.</p> <p>Comments from local experts: The habitat distribution in regions Ratcha and Samegrelo to be studied.</p>
BLS	<p>Num. of sites: 6 (A:1, B:3, C:2)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN Zugdidi region, Samegrelo region</p> <p>Recommendation 2025: Consider caves in the Arabika massif, Akhali Atoni in the Bzifi range, Ghliana Cave, Sataplia Cave and caves in the area north of Kutaisi. Check if they are covered by Emerald sites. Consider addition to sites GE0000021 Samegrelo and GE0000057 Samegrelo 2.</p> <p>Comments from external experts: Six sites (two bordering sites with the ALP region): 1A, 3B, 2C. Geomorphology of Georgia proposes an interesting map of the most important caves of Georgia (pg. 52). Karst landscapes are particularly well developed in Western Georgia, where a huge complex of caves is located in the Arabika massif. Other examples are Akhali Atoni in the Bzifi range or the Sataplia Cave in the Kutasi region. Geomorphology of Georgia also identifies a large karst area north of Kutaisi with caves such as Tsutskhavati, Muradi, Tskhravari, Chochkhati, and so on. Are all these caves covered by sites GE0000039, GE0000043, GE0000041, GE0000042? IN MIN - GE0000021?</p> <p>Comments from local experts: Ghliana Cave. GE0000057 Samegrelo 2</p>
STE	<p>Num. of sites: 1 (B:1)</p> <p>BGR seminar 2021 conclusion: IN MOD Davit Gareja enlargement</p> <p>Recommendation 2025: Remove habitat from site GE0000037 Davit Gareja. The habitat occurrence in the STE should be checked, and if not confirmed, the habitat should be excluded from the reference list.</p> <p>Comments from external experts: 1B site. It is not certain that the David Gareja caves complex corresponds to terrestrial underground caves. No information about caves in the STE region was found in the literature (not limestone or karst in this BGR region). SR?</p> <p>Comments from local experts: Cave in site GE0000037 Davit Gareja is not underground cave; the habitat to be removed from STE region.</p>

References:

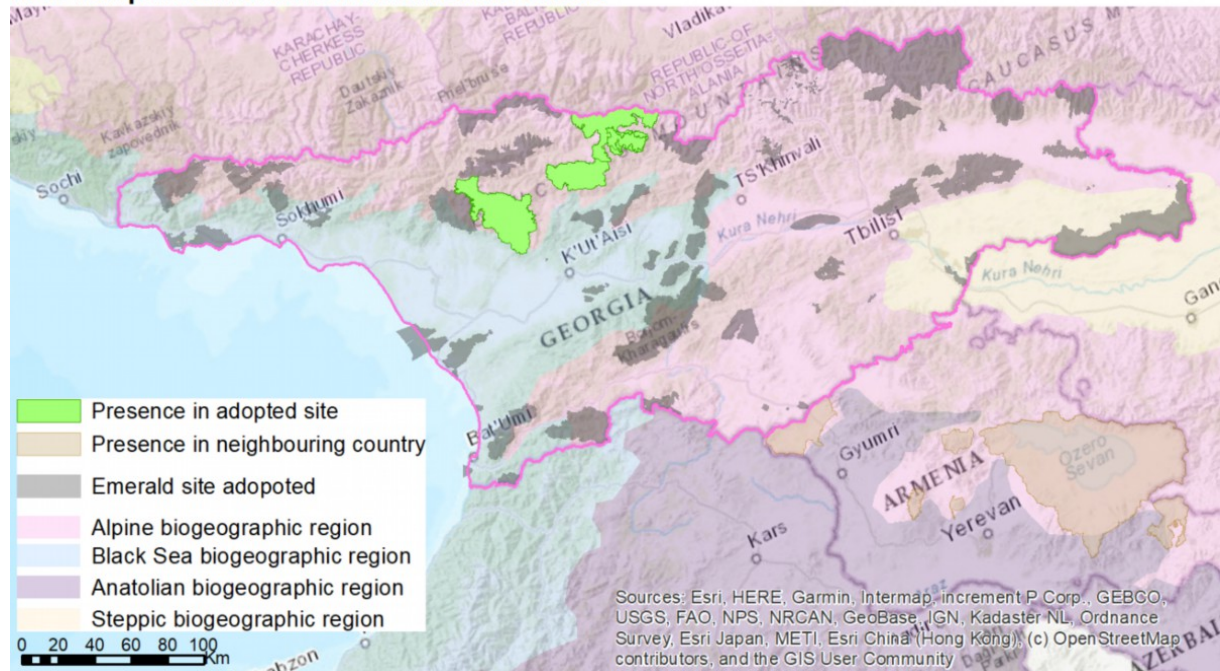
Akhalkatsi and Tarkhnishvili 2012; Chertoprud et al. 2020; Tielidze 2018; Georgian Journal 2025

H1 Terrestrial underground caves, cave systems, passages and waterbodies



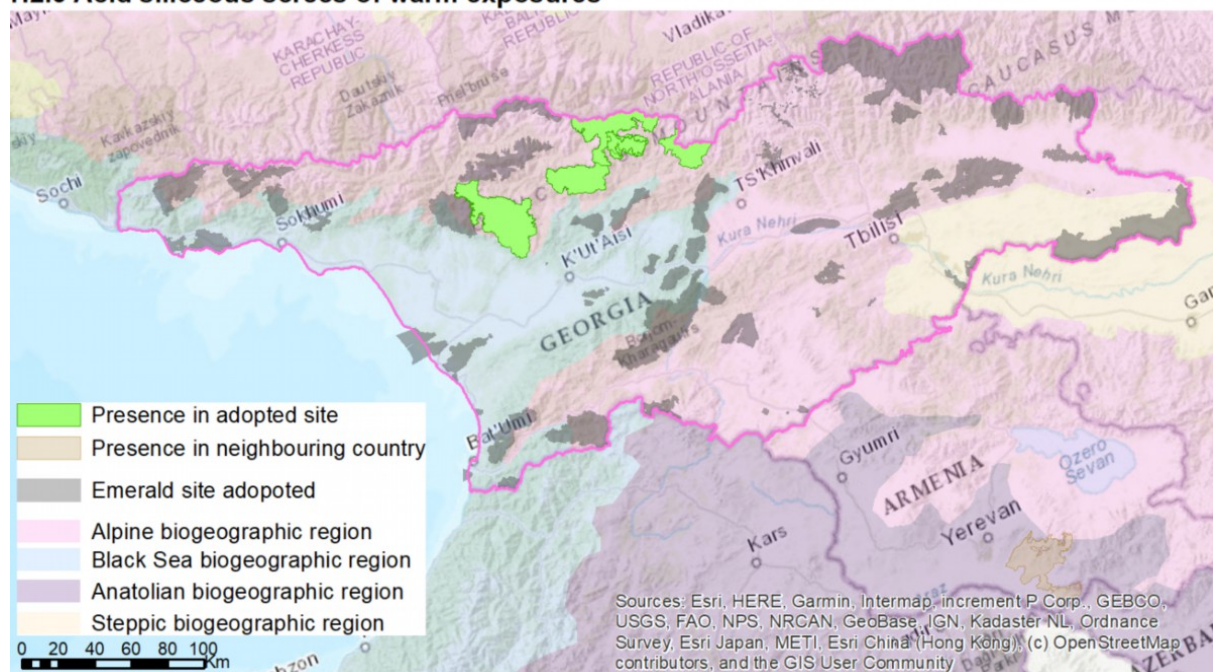
BGR	H2.3 Temperate-montane acid siliceous screes
ALP	<p>Num. of sites: 4 (No data: 3, B:1)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN</p> <p>Recommendation 2025: Check the Kazbegi region, Khrami-Loki area, Dariali gorge, Nenskra Valley, Kviriketi massif, and the presence in Abkhazia (sites GE0000032 Pskhu and GE0000033 Ritsa). Consider addition to sites GE0000001 Lagodekhi, GE0000002 Arkhoti, GE0000008 Tusheti, GE0000009 Kazbegi, GE0000012 Svaneti 1, GE0000021 Samegrelo, and GE0000045 Svaneti 2. CD - complete habitat assessments.</p> <p>Comments from external experts: Four sites. All designated sites are located in the Central Greater Caucasus region. Other areas included in Central Greater Caucasus but not covered by the designated sites are the Dariali gorge and Nenskra Valley (not sure if the boulders of granite and gneisses of Nenskra Valley, 1,000 m.a.s.l., match the description of this habitat). The Rioni and Tskhenistskali upper basins are partially covered by the site GE0000057. In the Western Caucasus, the Kviriketi massif, located between the Gomareti Plateau and Khrami gorge, is mainly built with Palaeozoic granitoids, with additional occurrences of Jurassic granitoids and crystalline slates (see Tielidze 2019, fig.1.2). On the other side of the border, in the Teberda Biosphere Reserve, the siliceous rocks predominate (nevertheless, not certain that these areas correspond to temperate-montane). Nakhutsrishvili et al. (2017) cite these communities in the Eastern Central Caucasus: the Kazbegi region. In Southern Georgia: the Khrami-Loki area to be checked (gneisses, schists, and quartz diorites). Designation of sites should cover the diversity of this habitat type, but also the geographical distribution within the ALP region.</p> <p>Comments from local experts: The habitat occurs in sites GE0000001 Lagodekhi, GE0000002 Arkhoti, GE0000008 Tusheti, GE0000009 Kazbegi, GE0000012 Svaneti 1, GE0000021 Samegrelo, and GE0000045 Svaneti 2. Check the presence in Abkhazia (sites GE0000032 Pskhu and GE0000033 Ritsa).</p> <p>References: Tielidze 2018; Noroozi 2020; Nakhutsrishvili et al. 2017</p>

H2.3 Temperate-montane acid siliceous screes



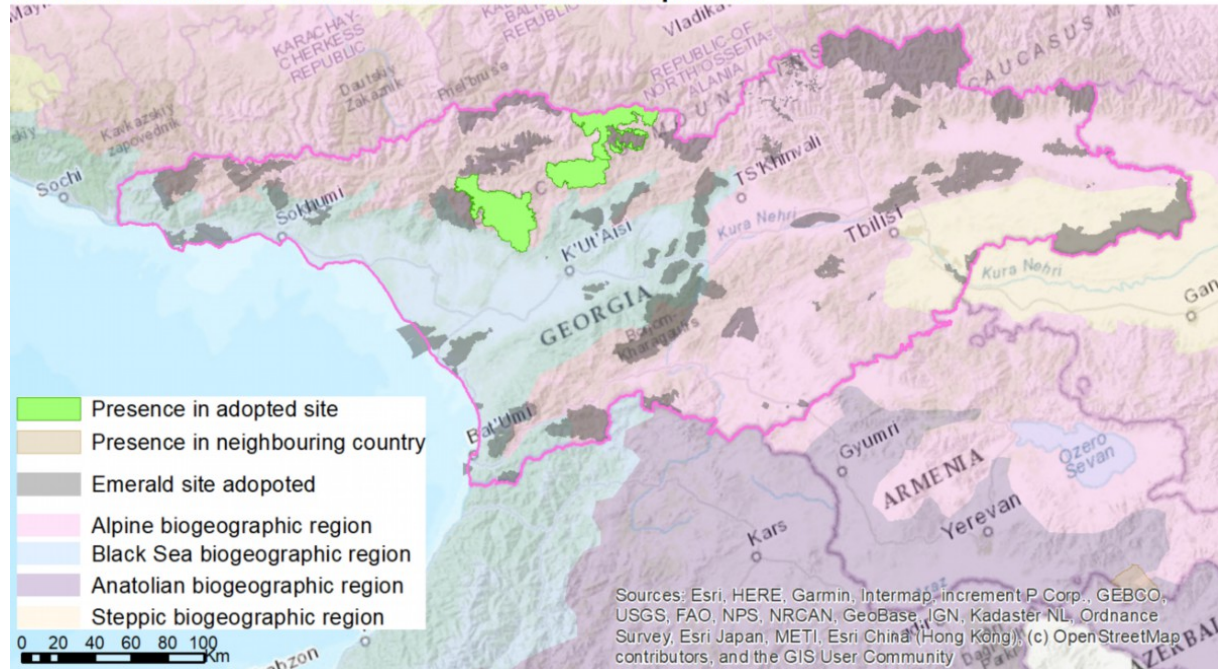
BGR	H2.5 Acid siliceous screes of warm exposures
BLS	Num. of sites: 1 (No data: 1)
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed.
	Comments from external experts: One site (shared with the ALP region). No information in the bibliography consulted.
	Comments from local experts: Probably not occurring; could be only in the periphery of the region.
STE	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed.
	Comments from external experts: No sites. No information in the bibliography consulted.
	Comments from local experts: Probably not occurring; could be only in the periphery of the region.
	Reference: Tielidze 2018
	Reference: Tielidze 2018

H2.5 Acid siliceous screes of warm exposures



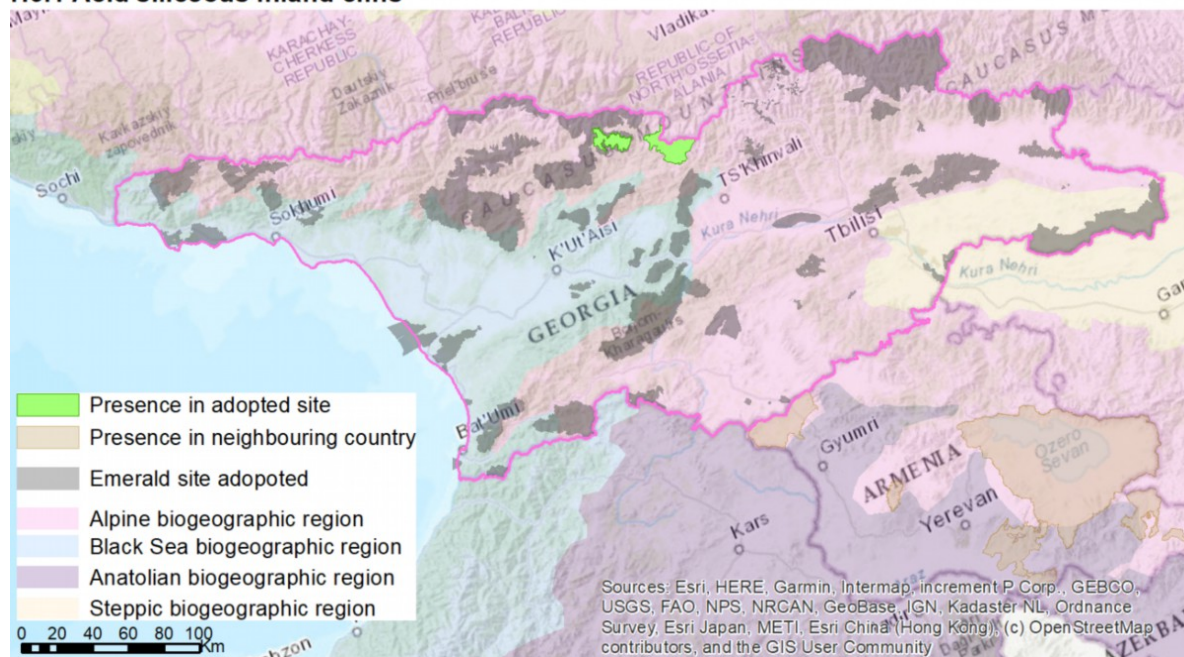
BGR	H2.6 Calcareous and ultrabasic screes of warm exposures
ALP	Num. of sites: 3 (No data: 3)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check whether in sites GE0000057 Samegrelo 2, GE0000058 Racha-Lechkhumi, and GE0000059 Svaneti-Racha, both H2.5 and H2.6 occur. Consider the addition of habitat to sites GE0000021 Samegrelo and GE0000040 Ratcha 2. Check occurrence in Abkhazia—sites GE0000028 Gumista, GE0000032 Pskhu, and GE0000033 Ritsa.
	Comments from external experts: Three sites (the same as for habitat H2.5). According to Akhalkatsi (2012), the habitat present in the ALP regions corresponds to (8120) calcareous and calcshist screes of the montane to alpine levels. Not found in literature are alpine calcareous screes of warm exposures, but limestone pavements or basic inland screes are mentioned.
	Comments from local experts: To be added to sites GE0000021 Samegrelo and GE0000040 Ratcha 2. Possible occurrence in Abkhazia—sites GE0000028 Gumista, GE0000032 Pskhu, and GE0000033 Ritsa.
BLS	Num. of sites: 1 (No data: 1)
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed. Consider addition to site GE0000021 Samegrelo.
	Comments from external experts: One site (shared with the ALP region). No literature was found on this habitat type in the BLS region.
	Comments from local experts: Habitat occurs in site GE0000021 Samegrelo.
STE	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed. Check the surroundings of the site GE0000035 Artsivis kheoba.
	Comments from external experts: No sites; no literature on this habitat type in the STE region.
	Comments from local experts: Probably occurring around GE0000035 Artsivis kheoba
Reference: Akhalkatsi and Tarkhnishvili 2012	

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



BGR	H3.1 Acid siliceous inland cliffs
ALP	Num. of sites: 2 (B:2)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Consider the addition to sites specified by local experts, check if the Sakhiri cliffs are fully in the site GE0000009 Kazbegi.
	Comments from external experts: 2B sites. They are located at the border with Russia, in the Greater Central Caucasus. This habitat overlaps in some areas with H2.3; therefore, the sufficiency of both habitats can be addressed at the same time. Further designation is needed to properly cover this habitat type. It is not certain that the Sakhiri cliffs are completely included in GE0000009; if not, the site should be enlarged to include them, since they are a good representation of this habitat in the ALP region. Near this area are the cliffs of Stepantsminda.
	Comments from local experts: Habitat should occur in sites GE0000001 Lagodekhi, GE0000002 Arkhoti, GE0000008 Tusheti, GE0000009 Kazbegi, GE0000010 Borjomi-Kharagauli, GE0000012 Svaneti 1, GE0000026 Goderdzi, GE0000029 Kvareli-Shilda, GE0000056 Borjomi-Kharagauli 2, and GE0000059 Svaneti-Racha.
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Consider habitat addition to sites GE0000010 Borjomi-Kharagauli, GE0000026 Goderdzi, and GE0000031 Machakhela.
	Comments from external experts: No sites. No information in the literature consulted.
	Comments from local experts: Habitat should occur in sites GE0000010 Borjomi-Kharagauli, GE0000026 Goderdzi, and GE0000031 Machakhela.
STE	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed.
	Comments from external experts: No sites. No information in the literature consulted.
	Comments from local experts: Habitat occurs out of existing sites.
	References: Tielidze 2018. Outdoor rock-climbing area in Georgia, (accessed February 21, 2025) https://climbing.ge .

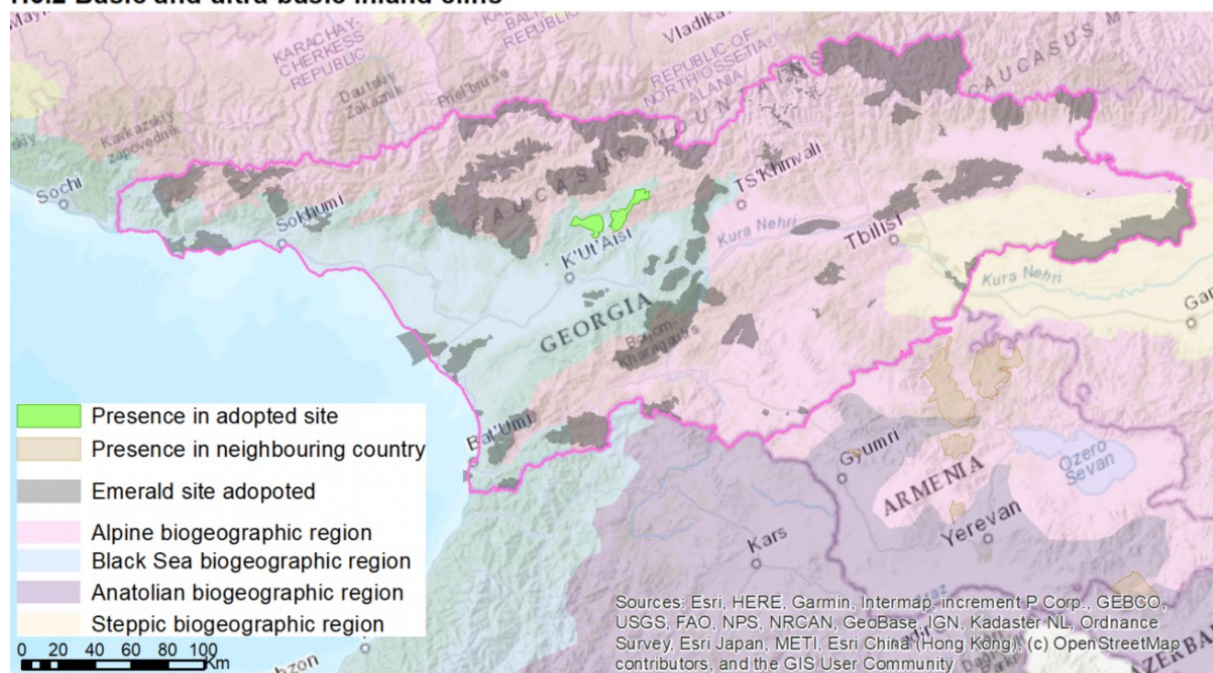
H3.1 Acid siliceous inland cliffs



BGR	H3.2 Basic and ultrabasic inland cliffs
ALP	Num. of sites: 1 (B:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Consider the addition to sites GE0000011 Ratcha 1, GE0000021 Samegrelo, GE0000040 Ratcha 2, GE0000045 Svaneti 2, GE0000057 Samegrelo 2, GE0000058 Racha-Lechkhumi, and GE0000059 Svaneti-Racha. Check the distribution in Abkhazia and in areas specified by external experts.
	Comments from external experts: 1B site. Limestone rocks occupy a significant area (more than 10 percent) of Georgia, and the only designated site does not cover the habitat's distribution. This habitat can be found at Racha massif, in the gorge of Janoula at Askhi massif, at the plateau of Tetrobi (Chobareti mountain range), upstream of Khipsta River, Kinchkha canyon, and so on. This habitat is far from achieving sufficiency. In Southern Georgia, the area of Birtvisi Fortress is a good example, and Borjomi is another cliff spot in Southern Georgia.
	Comments from local experts: Occurrence in sites GE0000011 Ratcha 1, GE0000021 Samegrelo, GE0000040 Ratcha 2, GE0000045 Svaneti 2, GE0000057 Samegrelo 2, GE0000058 Racha-Lechkhumi, and GE0000059 Svaneti-Racha. The distribution in Abkhazia to be checked.
	References: Akhalkatsi and Tarkhnishvili 2012; Tielidze 2018
BLS	Num. of sites: 1 (B:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Consider addition to sites GE0000021 Samegrelo and GE0000033 Ritsa. Check the distribution in Abkhazia and in areas specified by external experts.
	Comments from external experts: 1B site. Limestone rocks occupy a significant area (more than 10 percent) of Georgia and the only designated site does not cover the habitat's distribution. Significant rock slopes can be found in the gorge of the River Tskhensistskali on the massifs of Askhi and Khvamlı. Natural columns are found at Sairme in the Rioni River gorge, and sharp cliffs occur on the southern slopes of the Racha range. The upper gorge of the Mtkvari River lies in the volcanic highland of southern Georgia. IN MIN - GE0000033. The region of Chiatura has significant cliffs (for instance, the emblematic Katskhi Pillar). Other isolated cliffs are located near the villages of Dzeveri and Kutsaisi.
	Comments from local experts: Habitat occurs in site GE0000021 Samegrelo and should also occur in Abkhazia.
	References: Akhalkatsi and Tarkhnishvili 2012; Tielidze 2018
STE	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Consider enlarging the site GE0000035 Artsivis kheoba.
	Comments from external experts: No sites. No literature found on this habitat type in the STE region.
	Comments from local experts: The habitat occurs around site GE0000035 Artsivis kheoba.

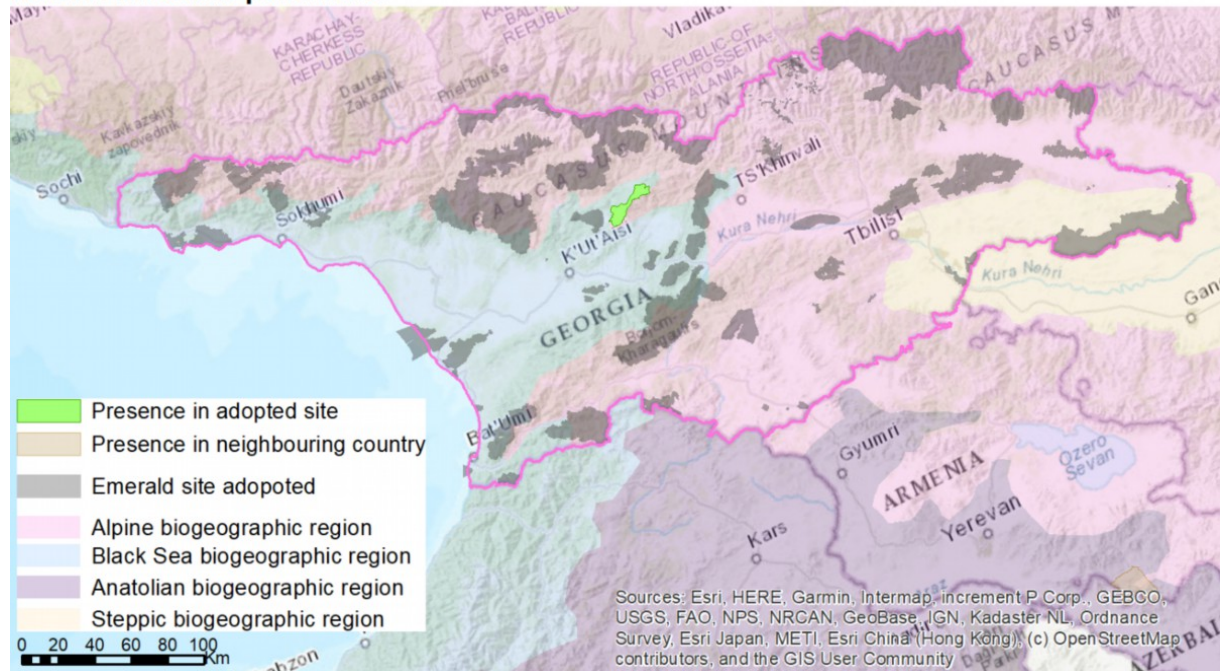
Reference:
Tielidze 2018

H3.2 Basic and ultra-basic inland cliffs



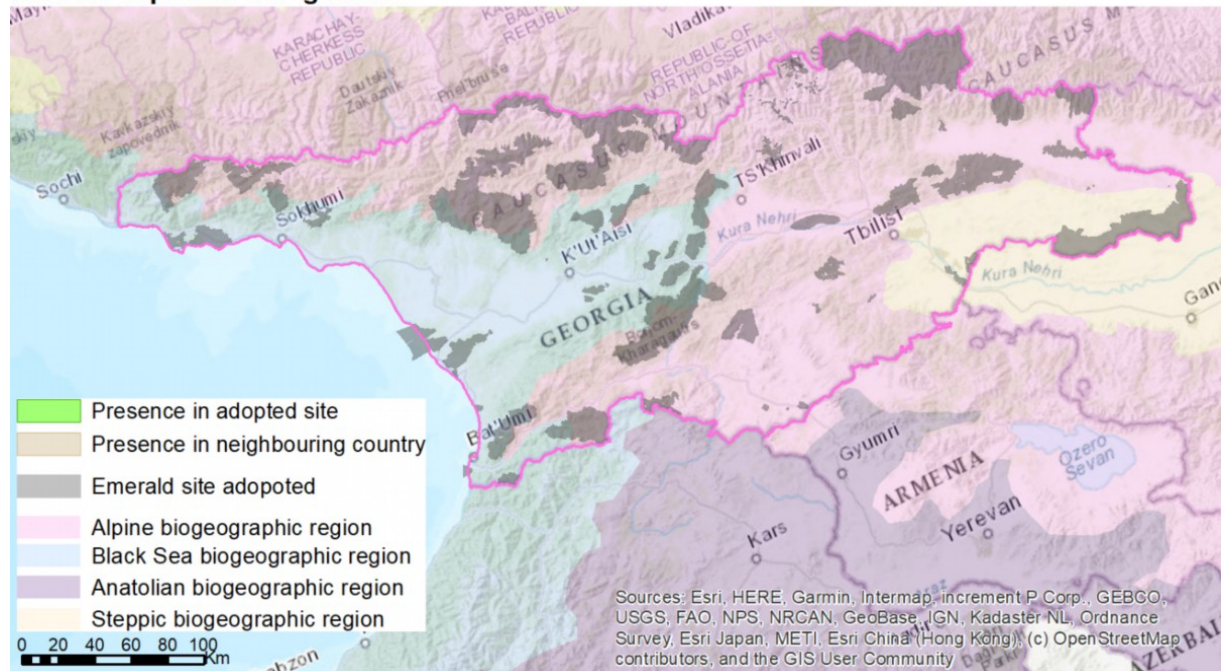
BGR	H3.511 Limestone pavements
ALP	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: To check the habitat in Racha, Bzipi, Arabika, Tsulishi, Kvira, Guachi massifs, and elsewhere. Check occurrence in sites GE0000033 Ritsa and GE0000057 Samegrelo 2.
	Comments from external experts: 1C site. Limestone rocks occupy a significant area (more than 10 percent) of Georgia. This habitat can be found in the Racha, Bzipi, Arabika, Tsulishi, Kvira, and Guachi massifs, among others. This habitat may be present at the site GE0000057 (Askhi massif) and at GE0000033. Since only one site has been designated, the inclusion of the habitat in existing sites and the designation of new sites in Western and Central Georgia are needed to reach a sufficient representation of the habitat type.
	Comments from local experts: No further information
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Check the Okhachkue massif, the gorges of the Gumista and Kelasuri Rivers, the Abasha canyon, the Makhaturi landslide, and the areas around the caves.
	Comments from external experts: No sites. Limestone rocks occupy a significant area (more than 10 percent) of Georgia. This habitat might be found in the Okhachkue massif, the gorges of the Gumista and Kelasuri Rivers, the Abasha canyon, and the Makhaturi landslide. Areas around caves should also be covered (see comments in H1 for the BLS).
	Comments from local experts: No further information
STE	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed. Contact an expert.
	Comments from external experts: No sites. Literature on this habitat type in the STE region not found.
	Comments from local experts: More information could be provided by Marinus Sabuco.
	Reference: Tielidze 2018

H3.511 Limestone pavements



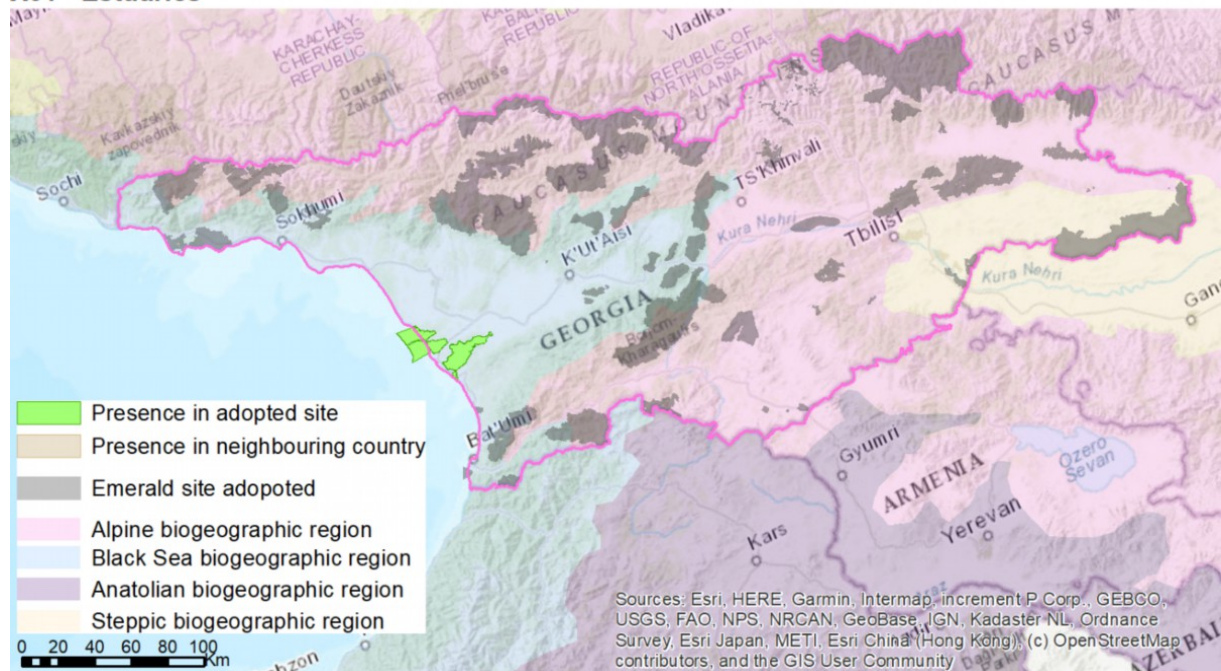
BGR	H4.2 Ice caps and true glaciers
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Consider the addition of habitat to sites GE000012 Svaneti and GE000059 Svaneti-Racha. Check suitable sites in Central and Western Caucasus. Further information could be provided by a local expert.
	Comments from external experts: No sites. The highest summits are in the Central Caucasus, although this habitat can also be found in the Western Caucasus (Bzipi mountain range, that is, Chepara, Okrila, Ghvandra, Achapara). Lednik Lekzyr is the largest glacier of Georgia, but other glaciers are Tsaneri glacier, Kirtisho glacier, and so on. Lednik Lekzyr and some of these glaciers are present in GE000012 Svaneti, so H4.2 should be included in the SDF. An extension of this site toward the south will contribute to improving the protection of glaciers. The habitat should also be added to the SDF of GE000059, and an extension of this site to the east should be considered to include glacier valleys.
	Comments from local experts: More information could be provided by Leon Tielidze.
	References: Tielidze et al. 2019, 2022; Tielidze 2018

H4.2 Ice caps and true glaciers



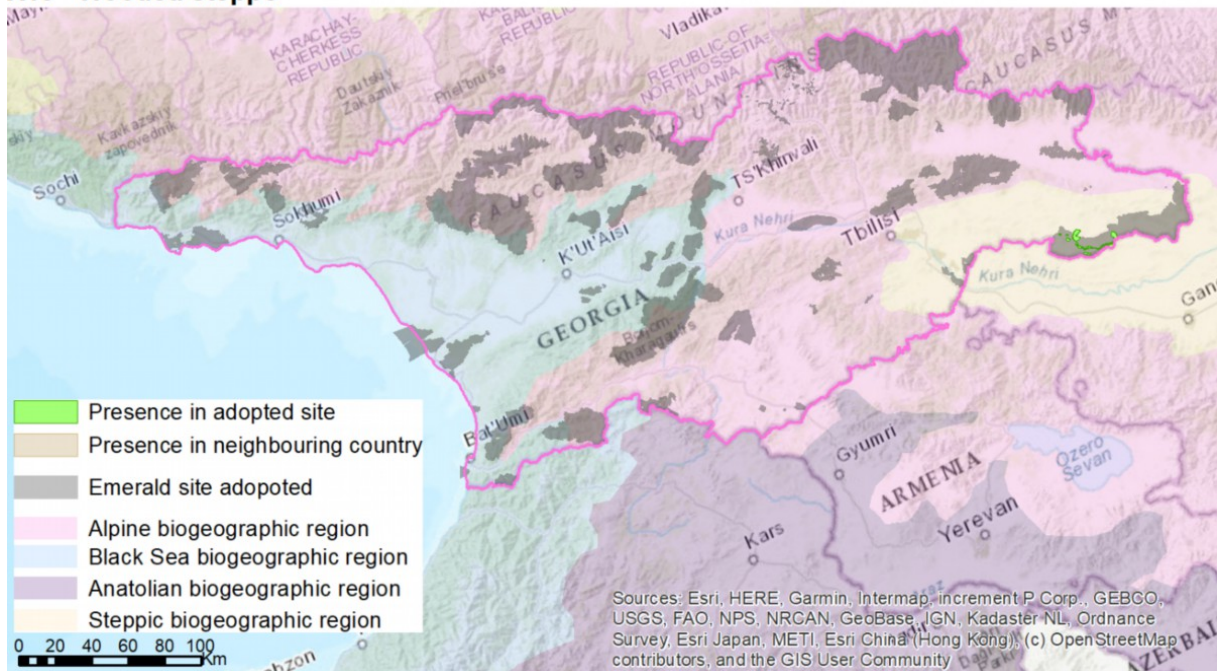
BGR	X01 Estuaries
BLS	Num. of sites: 1 (B:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Consider the estuaries of rivers in BLS, consult with a local expert.
	Comments from external experts: Only 1B site (Kolkheti). Main estuaries of the country still to be designated: Rioni River estuary, Enguri estuary, or Kodori estuary.
	Comments from local experts: Only the river with an estuary is in Kolkheti. All hydrological questions to be checked with Nika Tsetelashvili.
	References: n/a

X01 Estuaries



BGR	X18 Wooded steppe
STE	Num. of sites: 1 (B:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Consider habitat addition to sites GE0000007 Vashlovani and GE0000061 Samukhi; check territory between the Alazani and the Iori River Valleys.
	Comments from external experts: One site with relative surface B. Vegetation of the steppe is distributed in the zone at the front of the mountain (300–700 m.a.s.l.) in Eastern Georgia. Arid woodlands are well developed in the territory between the Alazani and Iori River Valleys, near the place Vashlovani, which holds an area of 5,000 ha. This area is partially covered by the designated site GE0000003 Chachuna.
	Comments from local experts: Habitat occurs in sites GE0000007 Vashlovani and GE0000061 Samukhi.
	References: Akhalkatsi and Tarkhnishvili 2012; Nakhutsrishvili 1999

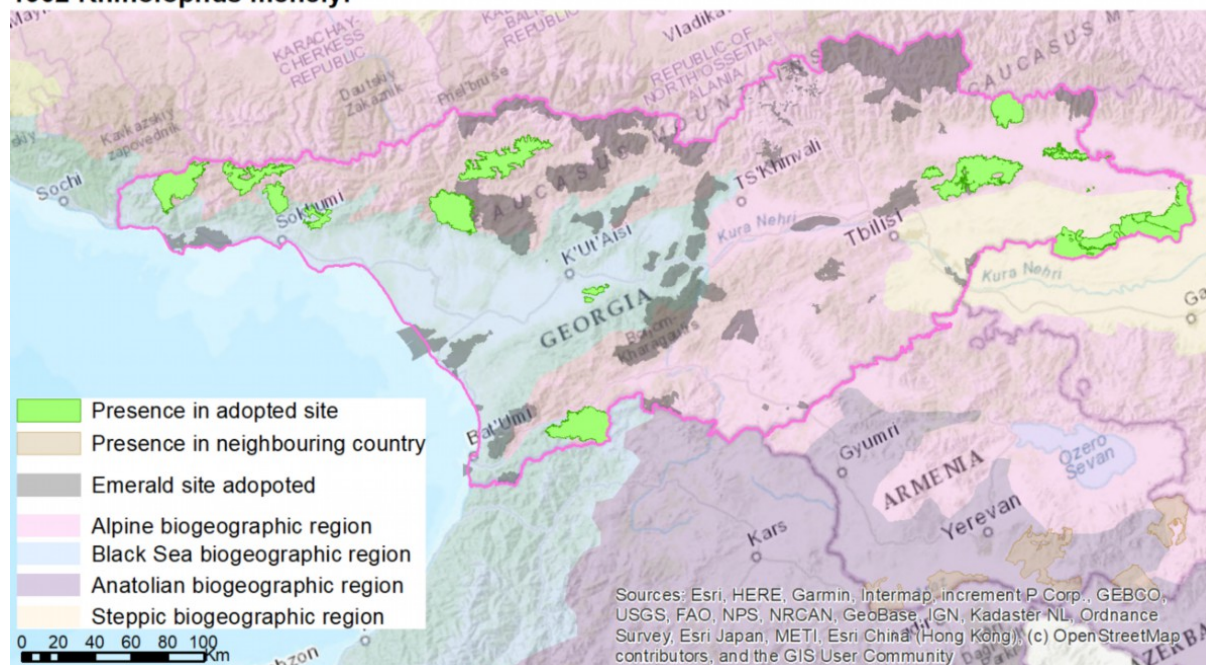
X18 Wooded steppe



Mammals

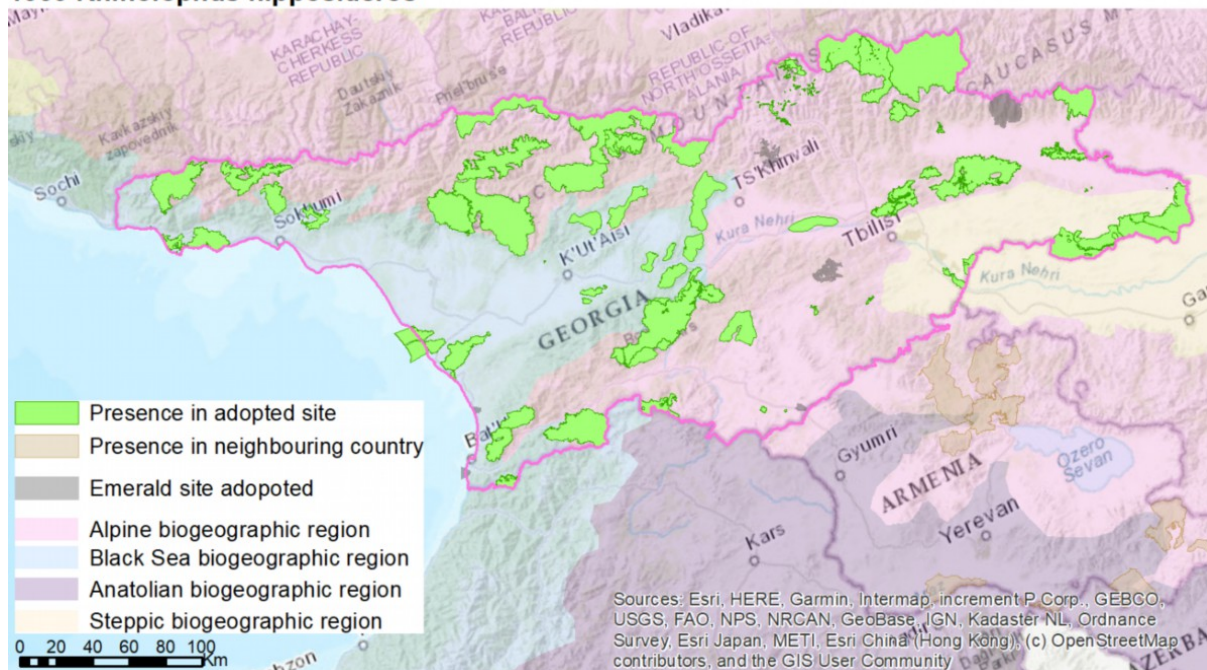
BGR	1302 <i>Rhinolophus mehelyi</i>
BLS	Num. of sites: 6 (C:6)
	BGR seminar 2021 conclusion: SR REF/CD, CD Remove from Goderdzi
	Recommendation 2025: Additional research is needed (SR on reference list). Check the presence and population assessment on sites where the species is listed. All Black Sea mountain sites need to be removed.
	Comments from external experts: Currently, the species is listed in six sites with C populations. Its occurrence in the bioregion is questionable. The presence of <i>Rhinolophus mehelyi</i> in Abkhazia remains doubtful (Benda et al. 2011). Also, according to the map of its distribution, currently, the species does not occur in Georgia (Puechmaille 2023); therefore, SR on the reference list is fine. Its presence in six Emerald sites should be confirmed by research (SR). Historically, the species was recorded in the Buknari village (Kobuleti district), on Black Sea coast (Bukhnikashvili and Kandaurov 2004) (SR). Conclusion concerning CD (remove from Goderdzi) is correct (majority of the site is in ALP).
	Comments from local experts: All Black Sea mountain sites need to be removed. Keep SR REF.
	References: Benda et al. 2011; Puechmaille 2023; Bukhnikashvili and Kandaurov 2004

1302 *Rhinolophus mehelyi*



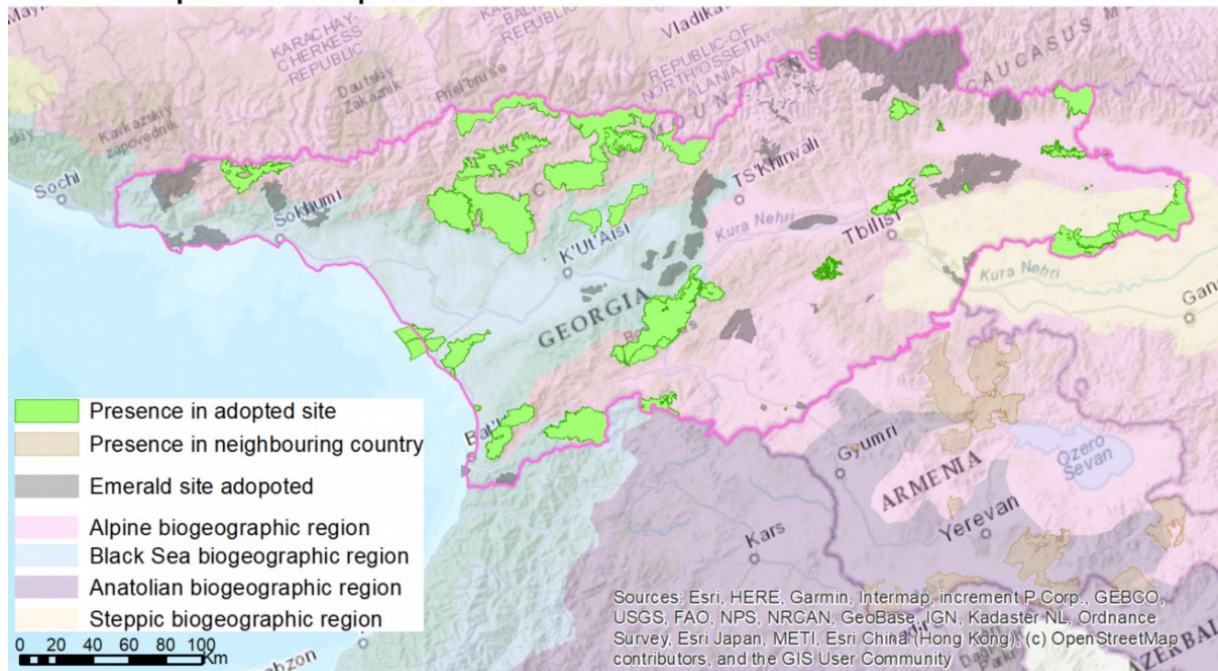
BGR	1303 <i>Rhinolophus hipposideros</i>
BLS	Num. of sites: 25 (B:10, C:14, D:1)
	BGR seminar 2021 conclusion: IN MOD, IN MOD Urta mountain
	Recommendation 2025: Add to sites: Kvareli-Shilda, Algeti, and Davit Gareja. Species occurs in the Urta mountain (check population). Remove from Bugdasheni and Khanchali.
	Comments from external experts: Currently, the species is listed at 25 sites (10B, 14C, 1D sites). Distribution of this species is in all Georgia, in altitudes: 0–1,200 m (Bukhnikashvili and Kandaurov 2004; Schofield et al. 2023). The proposed site, Urta mountain, fills the gap in the central part of the BLS zone.
	Comments from local experts: Remove from Bugdasheni and Khanchali. Add Kvareli-Shilda, Algeti, and Davit Gareja. Species occurs in the Urta mountain (check population).
	References: Schofield et al. 2023; Bukhnikashvili and Kandaurov 2004

1303 *Rhinolophus hipposideros*



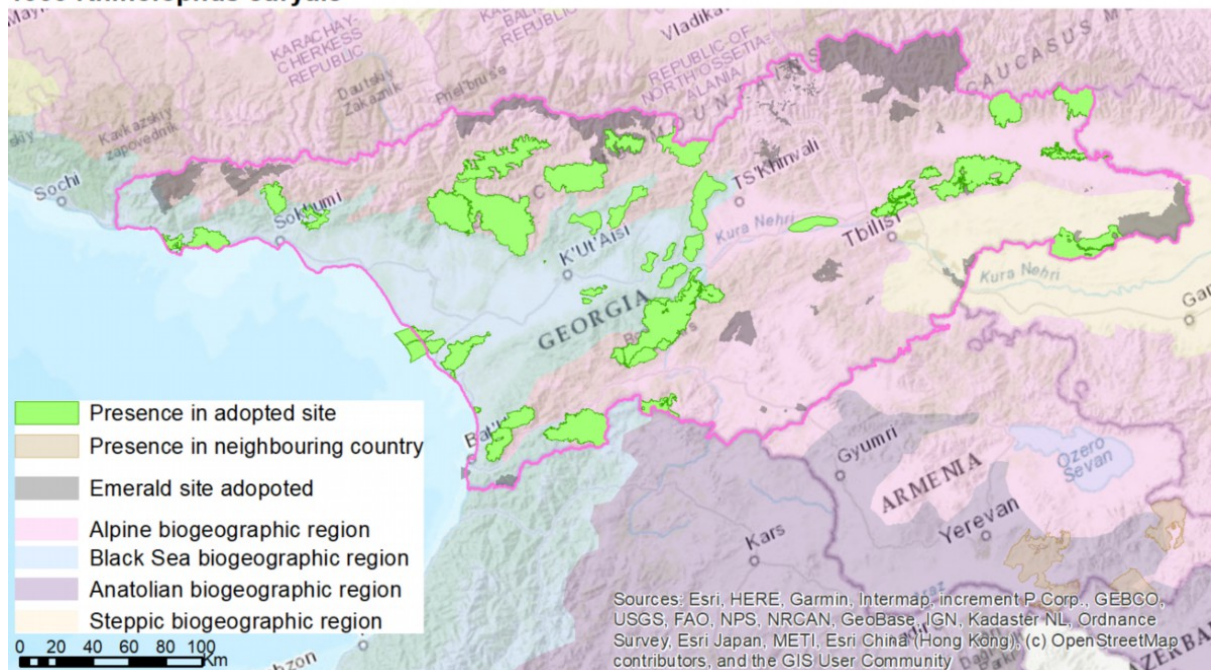
BGR	1304 <i>Rhinolophus ferrumequinum</i>
STE	Num. of sites: 15 (B:1, C:14)
	BGR seminar 2021 conclusion: IN MOD, IN MOD Davit Gareji extension
	Recommendation 2025: Add to sites. Extent site Davit Gareja. Remove Bugdasheni. Add Ajameti, Gardabani, Amtkeli, Bichvinta-Miusera, Gombori, Gumista, Kvareli-Shilda, Machakhela, Ritsa, Dashbashis Kanioni, Prometheus Cave, Gliana Cave, Samshvilde, Kvernaki, Surami 1, Surami 2, Surami 3, Surami 4, Surami 5, and Jandari Lake.
	Comments from external experts: Currently, the species is listed at five sites (2B, 3C sites). Distribution of this species is in all of Georgia, at altitudes: 0–2,200 m (Bukhnikashvili and Kandaurov 2004; Ransome 2023). The proposed site extension, Davit Gareja, is important; therefore, it hosts an important population of this species. Before Davit Gareja was extended from 0.07 to 0.26 ha, which was an insufficient area for such a mobile animal.
	Comments from local experts: Remove Bugdasheni. Add Ajameti, Gardabani, Amtkeli, Bichvinta-Miusera, Gombori, Gumista, Kvareli-Shilda, Machakhela, Ritsa, Dashbashis Kanioni, Prometheus Cave, Gliana Cave, Samshvilde, Kvernaki, Surami 1, Surami 2, Surami 3, Surami 4, Surami 5, Jandari Lake. Extent site Davit Gareja.
	References: Bukhnikashvili and Kandaurov 2004; Ransome 2023

1304 *Rhinolophus ferrumequinum*



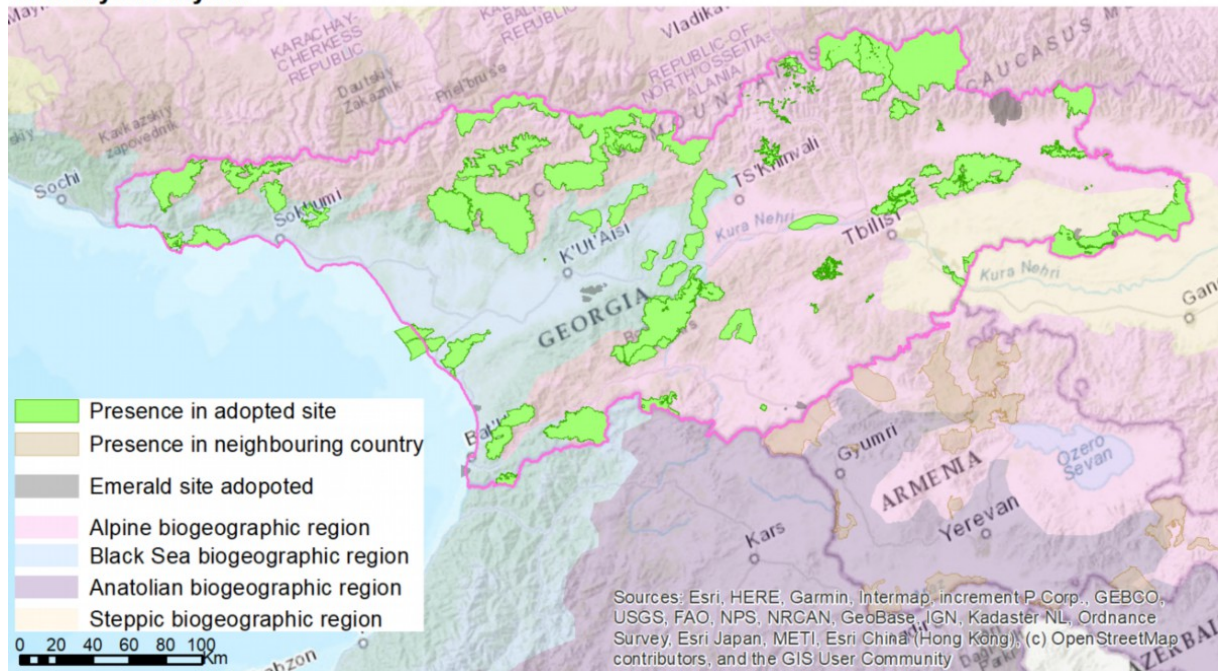
BGR	1305 <i>Rhinolophus euryale</i>
BLS	Num. of sites: 25 (B:7, C:18)
	BGR seminar 2021 conclusion: IN MOD, IN MOD Urta mountain
	Recommendation 2025: Add to sites: Algeti, Artsivis Kheoba, Samshvilde. Remove Ratcha 1, Ratcha 2, Svaneti 2, Erusheti.
	Comments from external experts: Currently, the species is listed at 25 sites (7B, 18C sites). Distribution of this species is in Western Georgia and Eastern Georgia, with two records: from Mt-skheta and Tsalka towns, at altitudes of 0–2,200 m (Bukhnikashvili and Kandaurov 2004). The proposed site, Urta mountain, fills the gap in the central part of the BLS zone.
	Comments from local experts: Agree. Remove Ratcha 1, Ratcha 2, Svaneti 2, Erusheti. Add Algeti, Artsivis kheoba, Samshvilde.
	Reference: Bukhnikashvili and Kandaurov 2004

1305 *Rhinolophus euryale*



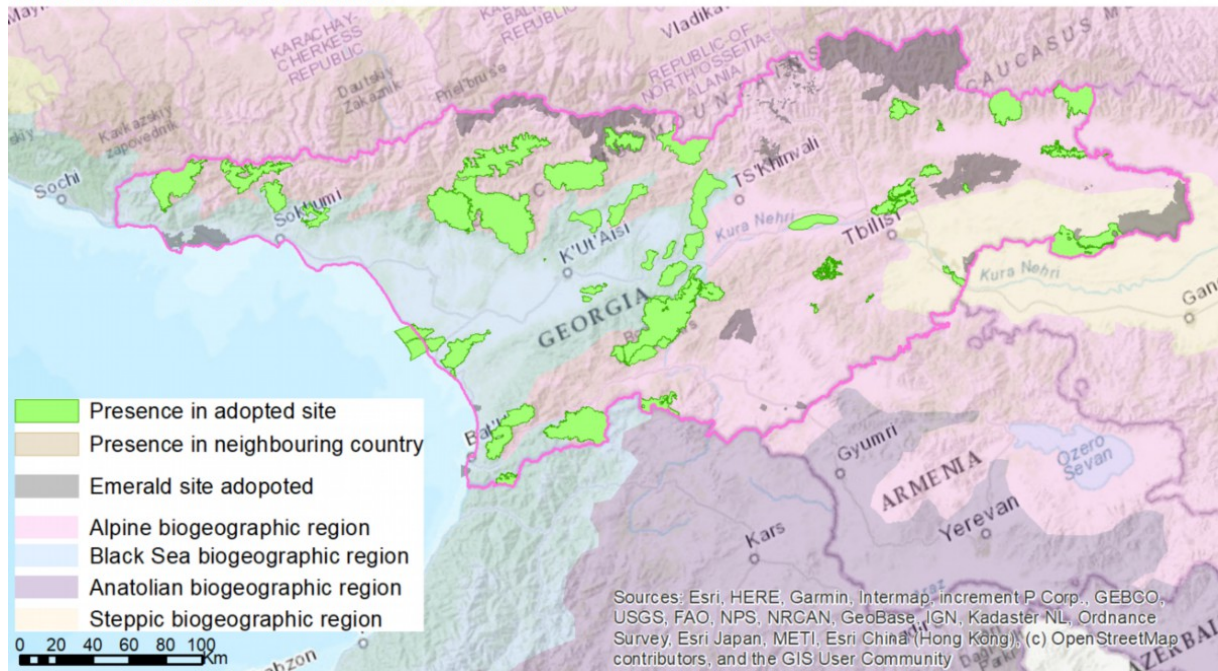
BGR	1307 <i>Myotis blythii</i>
BLS	<p>Num. of sites: 25 (B:8, C:17)</p> <p>BGR seminar 2021 conclusion: IN MOD, IN MOD two caves - Taro and Samethshelek Cave</p> <p>Recommendation 2025: Add to site Davit Gareja. Remove from Khanchali.</p> <p>Comments from external experts: Currently, the species is listed in 25 sites (8B, 17C sites). Distribution of this species is in all of Georgia, at altitudes: 0–2,000 m (Bukhnikashvili and Kandaurov 2004). Proposed sites—two caves—Taro and Samethshelek Caves are new sites and host important populations of this species.</p> <p>Comments from local experts: Agree. Add Davit Gareja. Remove Khanchali.</p> <p>Reference: Bukhnikashvili and Kandaurov 2004</p>
STE	<p>Num. of sites: 6 (C:6)</p> <p>BGR seminar 2021 conclusion: IN MOD, IN MOD Davit Gareji extension</p> <p>Recommendation 2025: Add to sites, extended Davit Gareja site.</p> <p>Comments from external experts: Currently, the species is listed in six sites with C populations. Distribution of this species is in all of Georgia, at altitudes: 0–2,000 m (Bukhnikashvili and Kandaurov 2004). The proposed site extension, Davit Gareja, is important; therefore, it hosts an important population of this species. Before Davit Gareja has been extended from 0.07 to 0.26 ha, which was insufficient for such a mobile animal.</p> <p>Comments from local experts: Agree.</p> <p>Reference: Bukhnikashvili and Kandaurov 2004</p>

1307 *Myotis blythii*



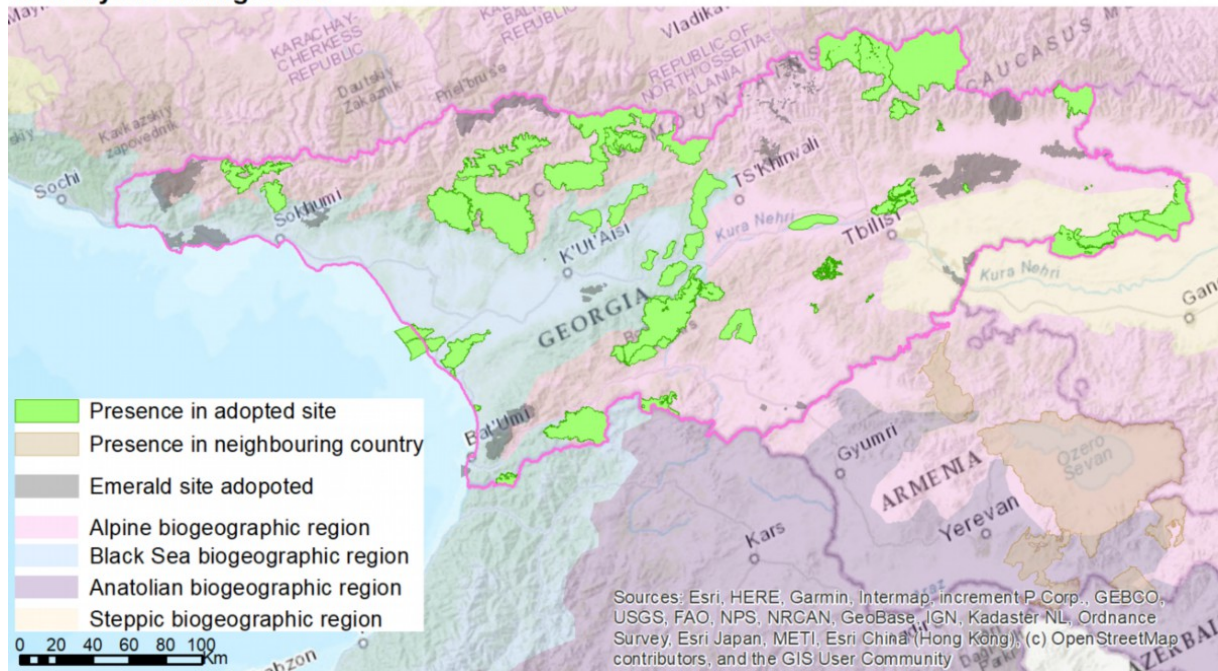
BGR	1308 <i>Barbastella barbastellus</i>
BLS	Num. of sites: 24 (B:12, C:12)
	BGR seminar 2021 conclusion: IN MOD, IN MOD Urta mountain
	Recommendation 2025: Add to sites: Arkhoti, Gombori.
	Comments from external experts: Currently, the species is listed in 24 sites (12B, 12C sites). Distribution of this species is in Tbilisi, Borjomi gorge, Tsalka, and Sairme, in altitudes: 350–1,500 m (Bukhnikashvili and Kandaurov 2004). Gap covered is in central part of BLS zone. The proposed site Urta mountain fills up this gap.
	Comments from local experts: Agree. Add Arkhoti and Gombori.
	Reference: Bukhnikashvili and Kandaurov 2004

1308 *Barbastella barbastellus*



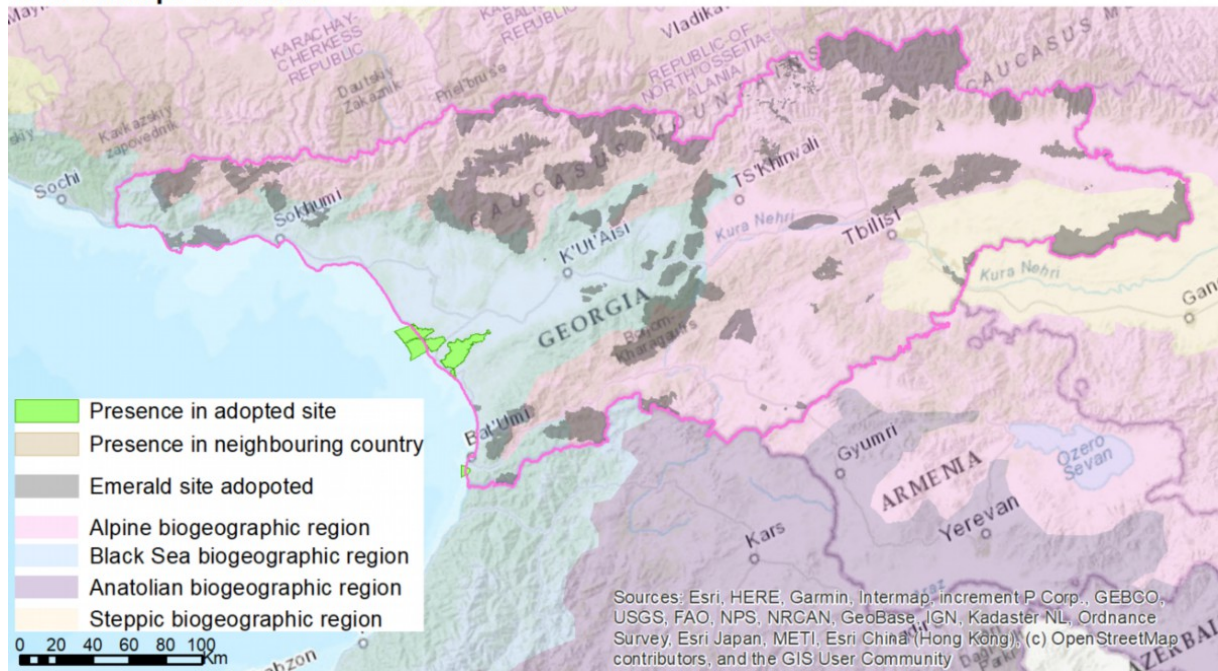
BGR	1321 <i>Myotis emarginatus</i>
STE	Num. of sites: 5 (B:2, C:3)
	BGR seminar 2021 conclusion: IN MOD Davit Gareja extension
	Recommendation 2025: Add to sites. extent site Davit Gareja. Remove from Shavi Mta, Samukhi, and Vashlovani.
	Comments from external experts: Currently, the species is listed at five sites (2B, 3C sites). The proposed site extension, Davit Gareja, is important; therefore, it hosts an important population of this species. Before Davit Gareja was extended from 0.07 to 0.26 ha, which is insufficient for such a movable animal.
	Comments from local experts: Agree. Remove Shavi Mta, Samukhi, and Vashlovani.
	Reference: Bukhnikashvili and Kandaurov 2004

1321 Myotis emarginatus



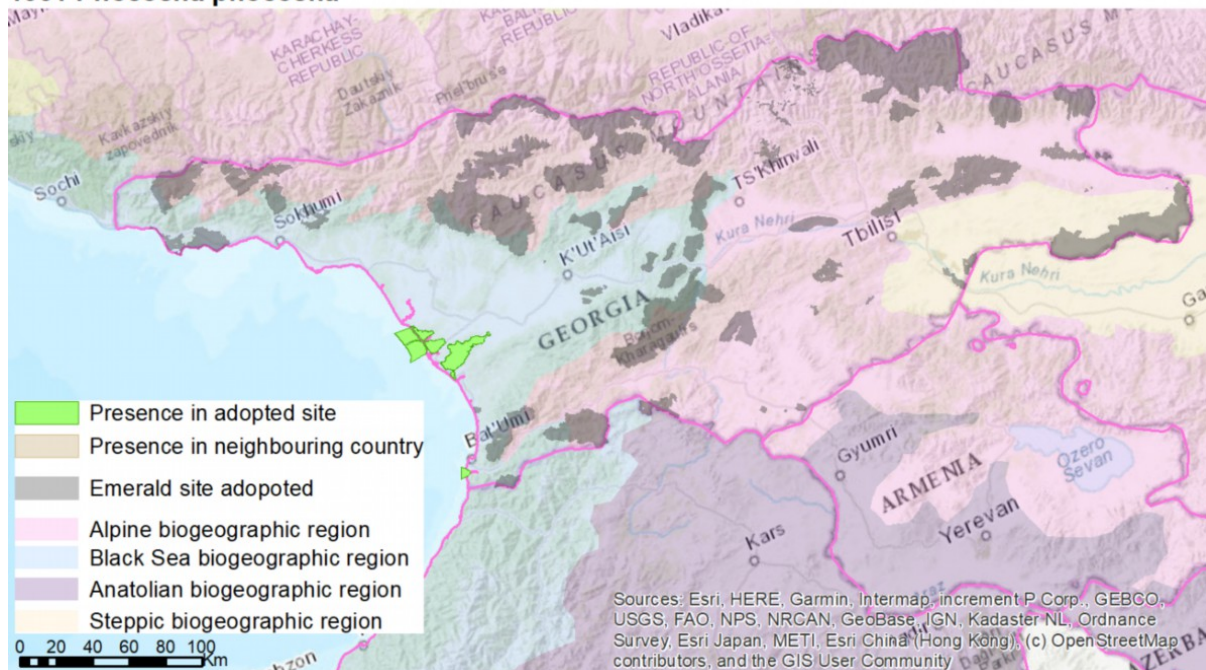
BGR	1349 Tursiops truncatus
BLS	Num. of sites: 3 (A:2, B:1)
	BGR seminar 2021 conclusion: IN MOD/MR
	Recommendation 2025: Add to sites. Species should be listed in MBLS.
	Comments from external experts: Currently, the species is listed at five sites (2A, 1B sites). New sites between Corokhi Delta and Kolkheti sites in the Georgian territorial waters cover core areas of dolphins in the Georgian territorial waters according to Shvelidze (2019)—maps of core polygons (core polygons represent the areas that are important for dolphin feeding and reproduction). Species should be listed in the MBLS.
	Comments from local experts: Agree
	Reference: Shvelidze 2019

1349 Tursiops truncatus



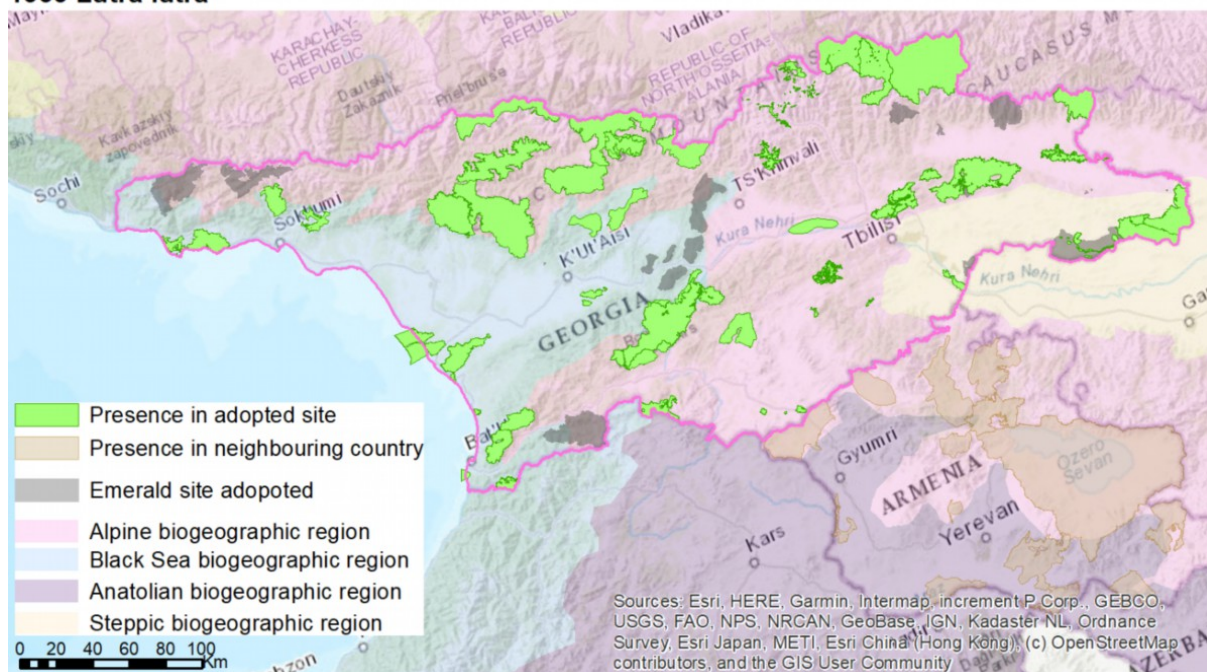
BGR	1351 <i>Phocoena phocoena</i>
BLS	Num. of sites: 4 (A:4)
	BGR seminar 2021 conclusion: IN MOD/MR
	Recommendation 2025: Add to sites. Species should be listed in MBLs. Population assessment is needed.
	Comments from external experts: Agree. Currently, the species is listed on four sites (4A sites). New sites between Corokhi Delta and Kolkheti sites in the Georgian territorial waters cover core areas of dolphins in the Georgian territorial waters, according to Shvelidze (2019)—maps of core polygons (core polygons represent the areas that are important for dolphin feeding and reproduction). Species should be listed in the MBLs. Population assessment is needed.
	Comments from local experts: -
	Reference: Shvelidze 2019

1351 *Phocoena phocoena*



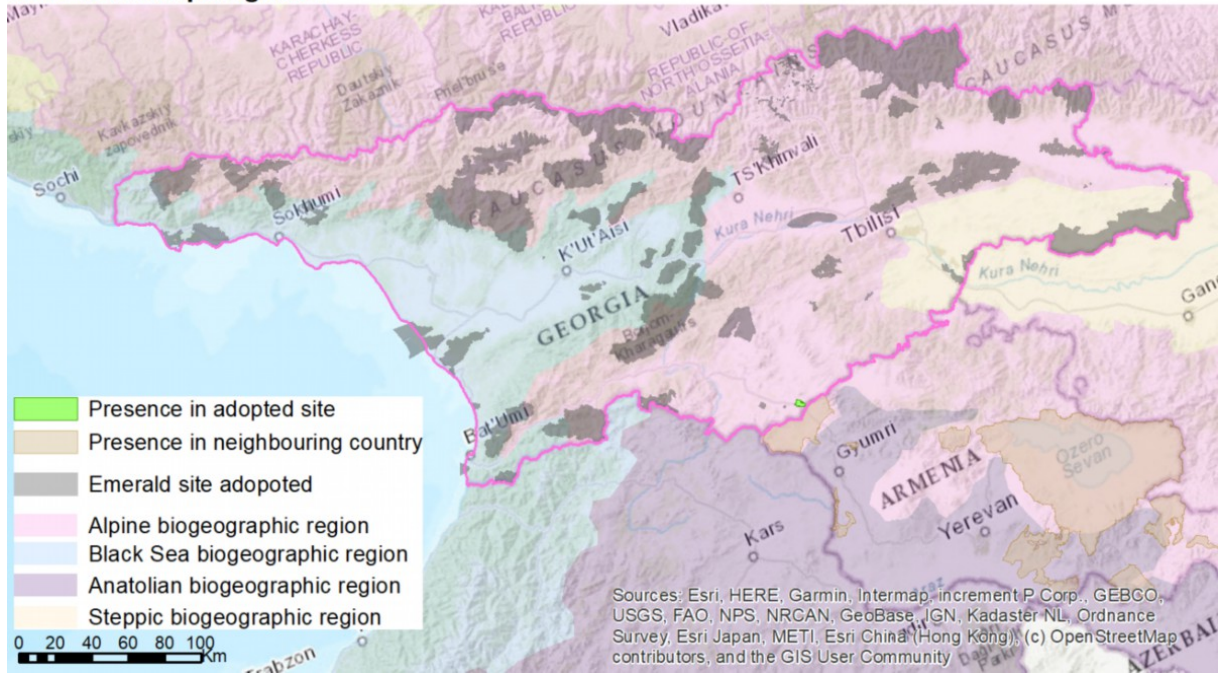
BGR	1355 <i>Lutra lutra</i>
ALP	Num. of sites: 75 (B:37, C:38)
	BGR seminar 2021 conclusion: IN MOD
	Recommendation 2025: Add to sites. Gaps are in the southern part of the ALP in Georgia on the borders with Armenia and in the central part of the ALP zone. More research is needed for the southern part of the ALP zone.
	Comments from external experts: Currently, the species is listed at 75 sites (37B, 38C sites). Distribution of this species is in all of Georgia, in altitudes: 0–2,300 m (Bukhnikashvili and Kandaurov 2004; Loy et al. 2024). 2012 NACRES survey covered 631 sites—otters present at 245 (39 percent). Listed as “nearly extinct” in the Georgian Red book but based on very old data. Not abundant but appears stable. Its population is more than 300 specimens (Yoxon et al. 2019). Its geographic coverage is insufficient; there are gaps in the southern part of the ALP in Georgia on the borders with Armenia and in the central part of the ALP zone.
	Comments from local experts: Agree. More research is needed for the southern part of the ALP zone.
BLS	References: Bukhnikashvili and Kandaurov 2004; Loy et al. 2024; Yoxon et al. 2019
	Num. of sites: 26 (B:11, C:15)
	BGR seminar 2021 conclusion: IN MOD Rioni and possibly other rivers
	Recommendation 2025: Add to the site Ritsa. More research is needed in the central part of the BLS region.
	Comments from external experts: Currently, the species is listed at 26 sites (11B, 15C sites). Distribution of this species is throughout Georgia, at altitudes of 0–2,300 m (Bukhnikashvili and Kandaurov 2004; Loy et al. 2024). 2012 NACRES survey covered 631 sites—otters present at 245 (39 percent). Listed as “nearly extinct” in the Georgian Red book but based on very old data. Not abundant but appears stable. Its population is more than 300 specimens (Yoxon et al. 2019). Its geographical coverage in the BLS zone is insufficient; there is a gap in the central part of the BLS zone. Proposed new sites Rioni River and possibly other rivers fill up this gap.
	Comments from local experts: Add site Ritsa. More research is needed in the central part of the BLS region.
	References: Bukhnikashvili and Kandaurov 2004; Loy et al. 2024; Yoxon et al. 2019

1355 *Lutra lutra*



BGR	2635 <i>Vormela peregusna</i>
ALP	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD, IN MOD Add to Javakheti, Erusheti, (evaluate borders)
	Recommendation 2025: Add to site Eursheti; population assessment is needed; additional research is needed (SR).
	Comments from external experts: Distribution of this species is in Southern Georgia, at altitudes: 500–2,000 m (Bukhnikashvili and Kandaurov 2004). Currently, the species is listed only in one site (GE0000004 Madatapha) with the C population, which is insufficient. The Georgian biodiversity database contains one occurrence of <i>Vormela peregusna</i> from locality Samtskhe-Javakheti (41.157832N, 43.791169E). https://biodiversity.iliauni.edu.ge/index.php?scientificNameID=2440 . This corresponds with the previous conclusion IN MOD - Add to Javakheti, Erusheti (evaluate borders). Currently, it covers less than 2 percent of the population; a population assessment is needed. Knowledge of its current distribution is insufficient; research (SR) is needed.
	Comments from local experts: Agree. Add Erusheti. Additional research is needed.
	Reference: Bukhnikashvili and Kandaurov 2004

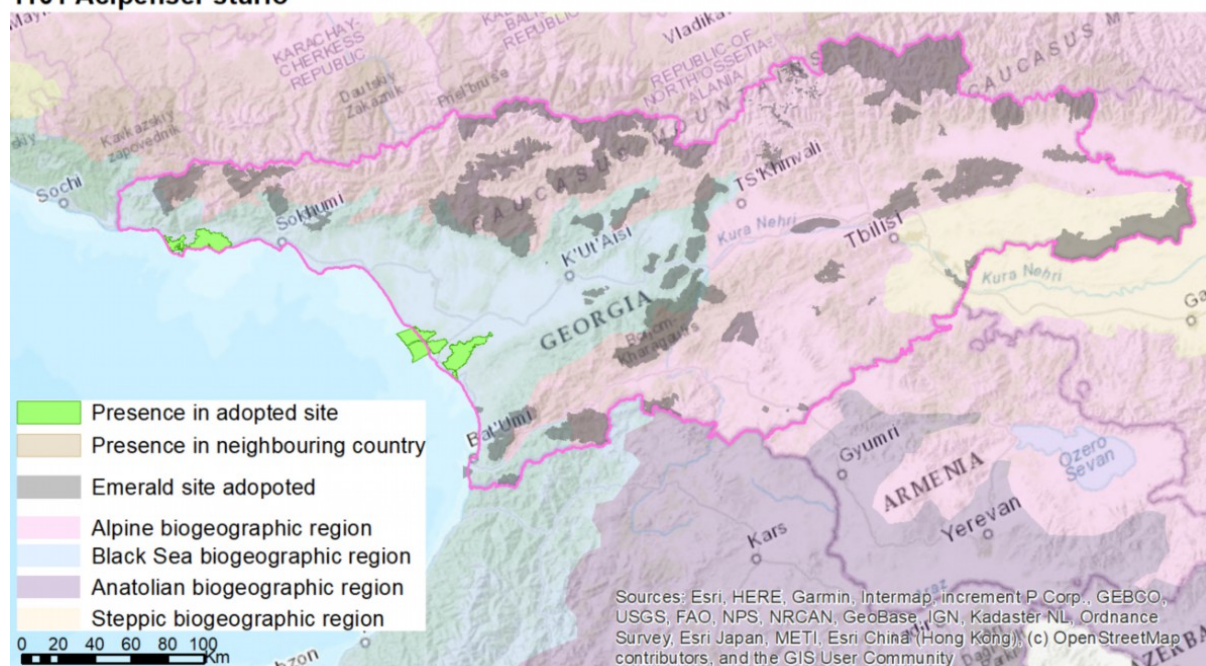
2635 *Vormela peregusna*



Fish

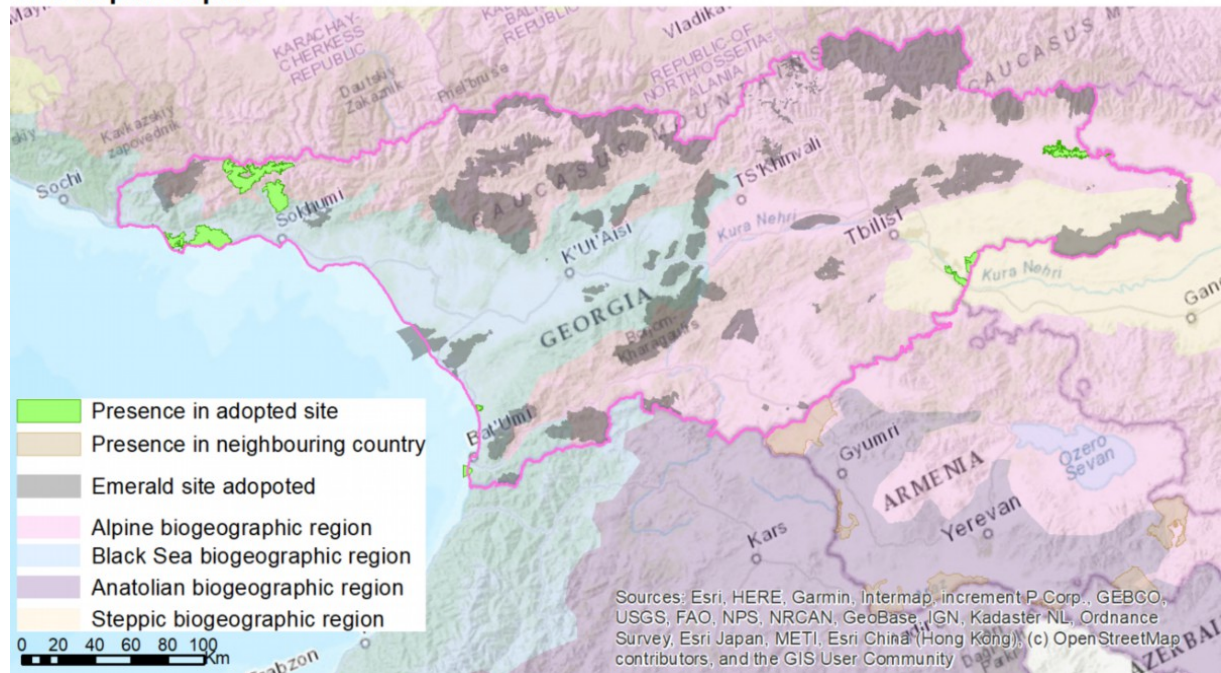
BGR	1101 <i>Acipenser sturio</i>
BLS	Num. of sites: 2 (A:1, D:1)
	BGR seminar 2021 conclusion: IN MOD/MR, IN MOD Rioni
	Recommendation 2025: Research needs to continue, especially in the Anguri River.
	Comments from external experts: Available information suggests the population in Georgia is disappearing. Occurrence in Rioni (breeding) is only two-thirds of the way down the river from the mouth (hydroelectric power plant). Sturgeon spawning grounds - Samtredia Marine, Poti-Ochamchira region.
	Comments from local experts: No occurrences confirmed during the last 30 years of research. Research needs to continue. Research is needed on the Anguri River.
	Reference: Kolman 2011

1101 *Acipenser sturio*



BGR	1130 <i>Aspius aspius</i>
BLS	Num. of sites: 3 (C:3)
	BGR seminar 2021 conclusion: IN MOD Rioni
	Recommendation 2025: Add to the adopted site Kolkheti (GE0000006). Create a new site on the Rioni River. More research is needed.
	Comments from external experts: Paliastomi Lake
	Comments from local experts: Create the Rioni site. Add Kolkheti. More research is needed.
	Reference: Mamcarz et al. 2008

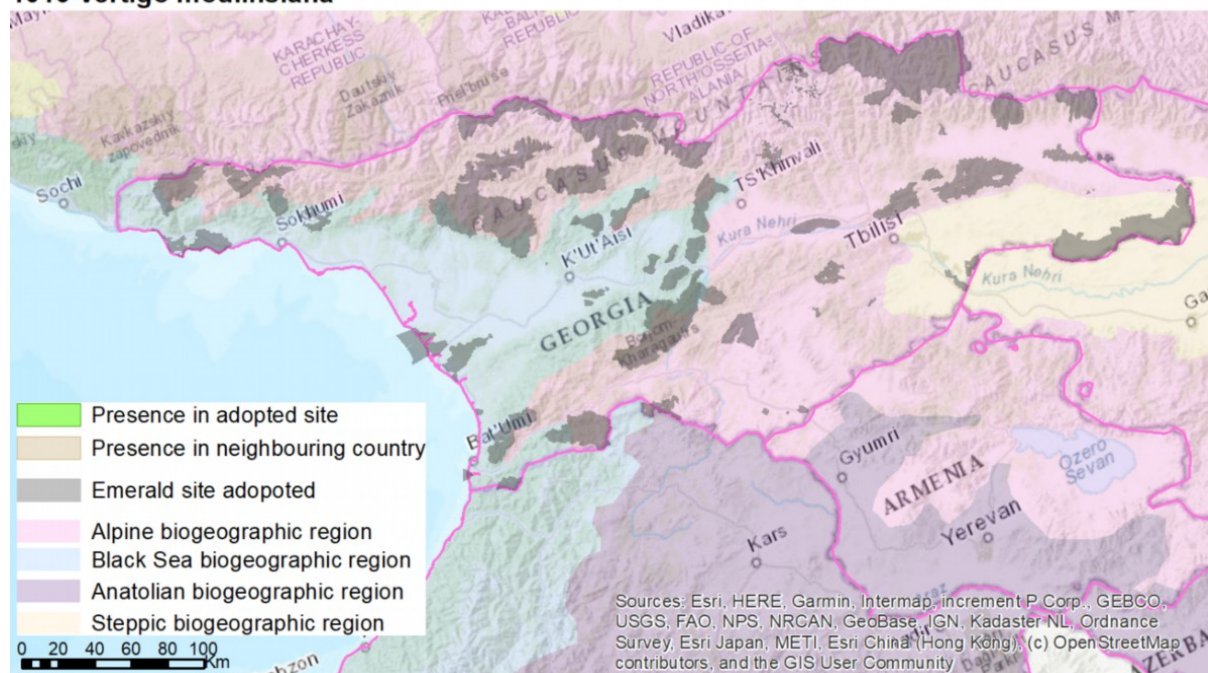
1130 *Aspius aspius*



Invertebrates

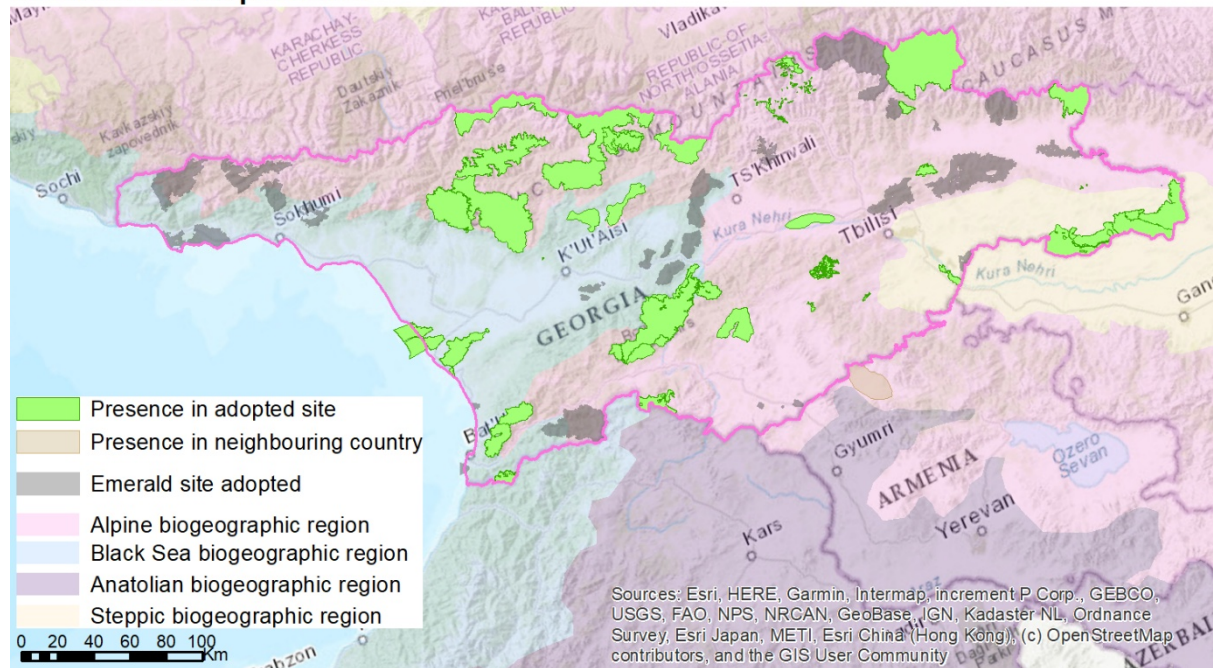
BGR	1016 <i>Vertigo moulinsiana</i>
BLS	Num. of sites: 0
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Further research is needed, especially in Kolkheti. More data could be provided by Prof. Levan Mumladze.
	Comments from external experts: Further research is needed.
	Comments from local experts: Further research is needed especially in Kolkheti. More data could be provided by Prof. Levan Mumladze (lmumladze@gmail.com).
	References: n/a

1016 *Vertigo moulinsiana*



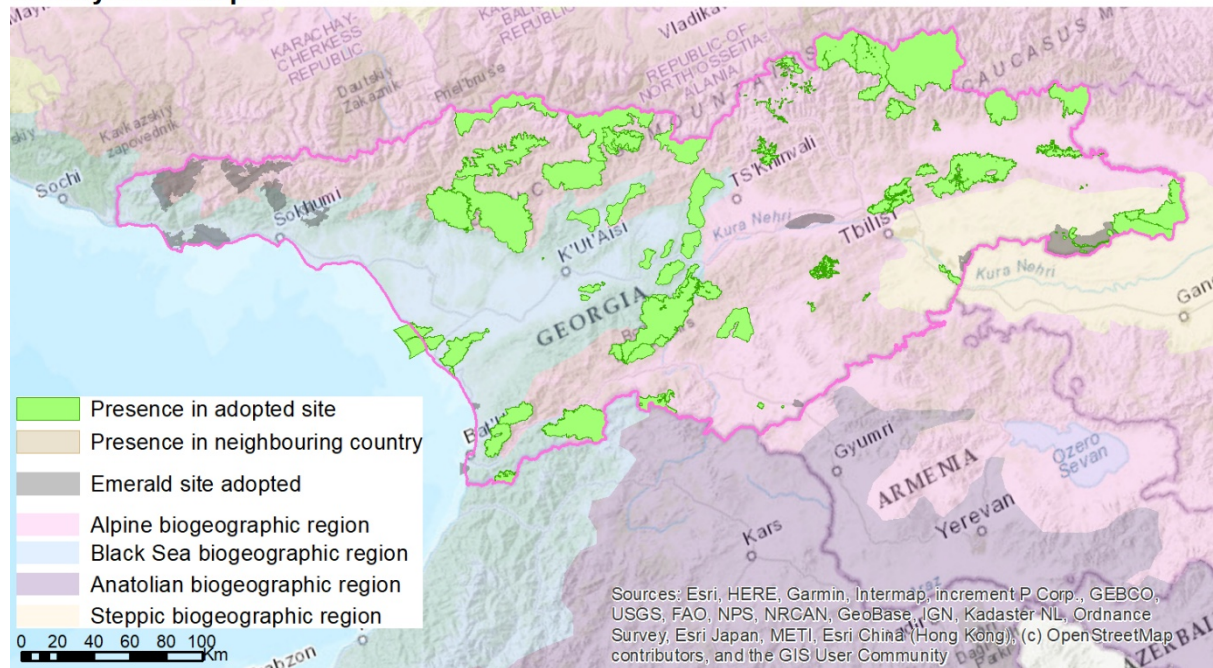
BGR	1042 <i>Leucorrhina pectoralis</i> – REEVALUATION
BLS	Num. of sites: n/a
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Reevaluate: Delete from Gliana Cave.
	Comments from external experts: Not evaluated
	Comments from local experts: Delete from Gliana Cave.
	References: n/a
STE	Num. of sites: n/a
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Reevaluate: Delete from Vashlovani, Chachuna, Davit Gareja, Samukhi, and Kotsakhura.
	Comments from external experts: Not evaluated
	Comments from local experts: Delete from Vashlovani, Chachuna, Davit Gareja, Samukhi, and Kotsakhura.
	References: n/a

1042 *Leucorrhina pectoralis*



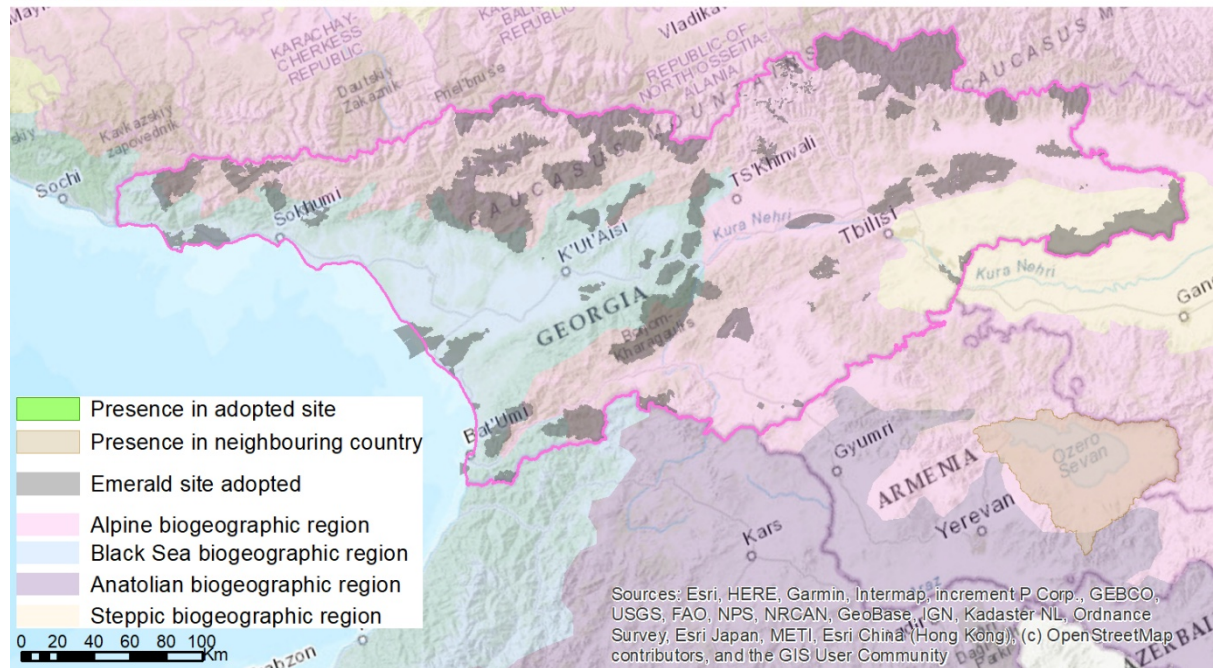
BGR	1060 <i>Lyceana dispar</i> – REEVALUATION
BLS	Num. of sites: n/a
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Reevaluate, add Jandari Lake, delete from Chachuna, Vashlovani, Artsivis kheoba.
	Comments from external experts: Not evaluated
	Comments from local experts: Add Jandari Lake, delete from Chachuna, Vashlovani, and Artsivis kheoba.
STE	References: n/a
	Num. of sites: n/a
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Reevaluate. Delete from Gliana Cave.
	Comments from external experts: Not evaluated
	Comments from local experts: Reevaluate. Delete from Gliana Cave.
	References: n/a

1060 *Lyceana dispar*



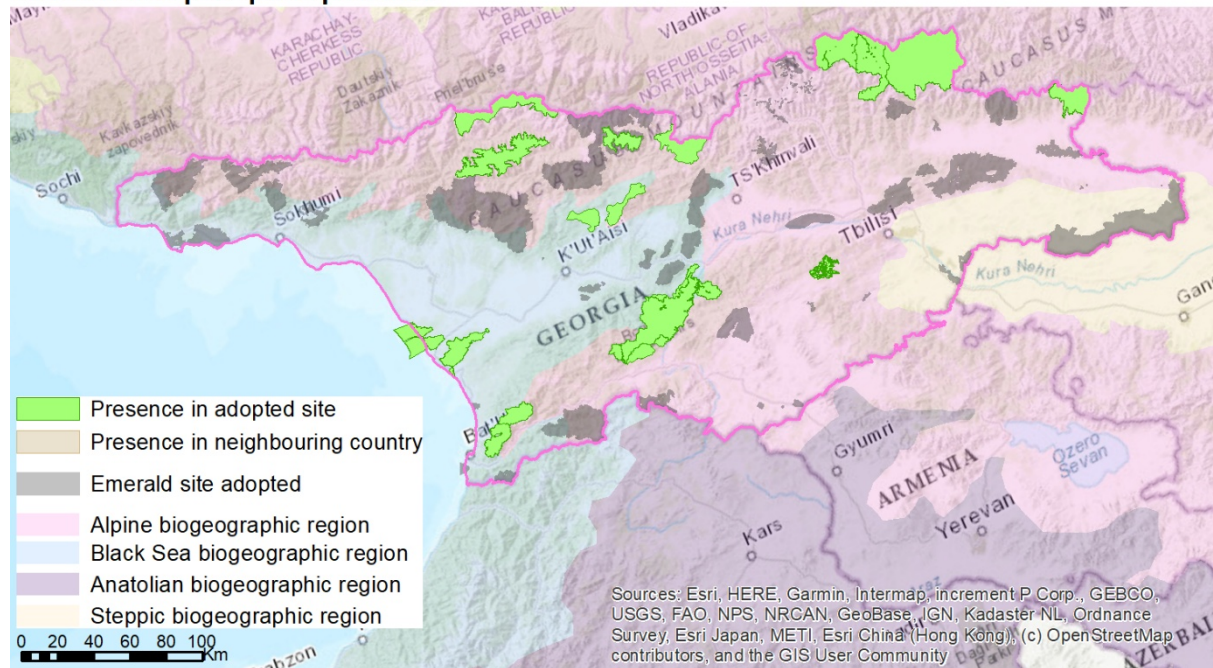
BGR	1061 <i>Maculinea nausithous</i> – REEVALUATION
ALP	Num. of sites: n/a
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Add to reference list. Add Bugdasheni, Madatapha, Ktsia-Tabatskuri, and Khanchali.
	Comments from external experts: Not evaluated
	Comments from local experts: Add Bugdasheni, Madatapha, Ktsia-Tabatskuri, and Khanchali.
	References: n/a
BLS	Num. of sites: n/a
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Reevaluate: Add Mtirala, Kintrishi, and Tusheti.
	Comments from external experts: Not evaluated
	Comments from local experts: Add Mtirala, Kintrishi, and Tusheti.
	References: n/a

1061 *Maculinea nausithous*



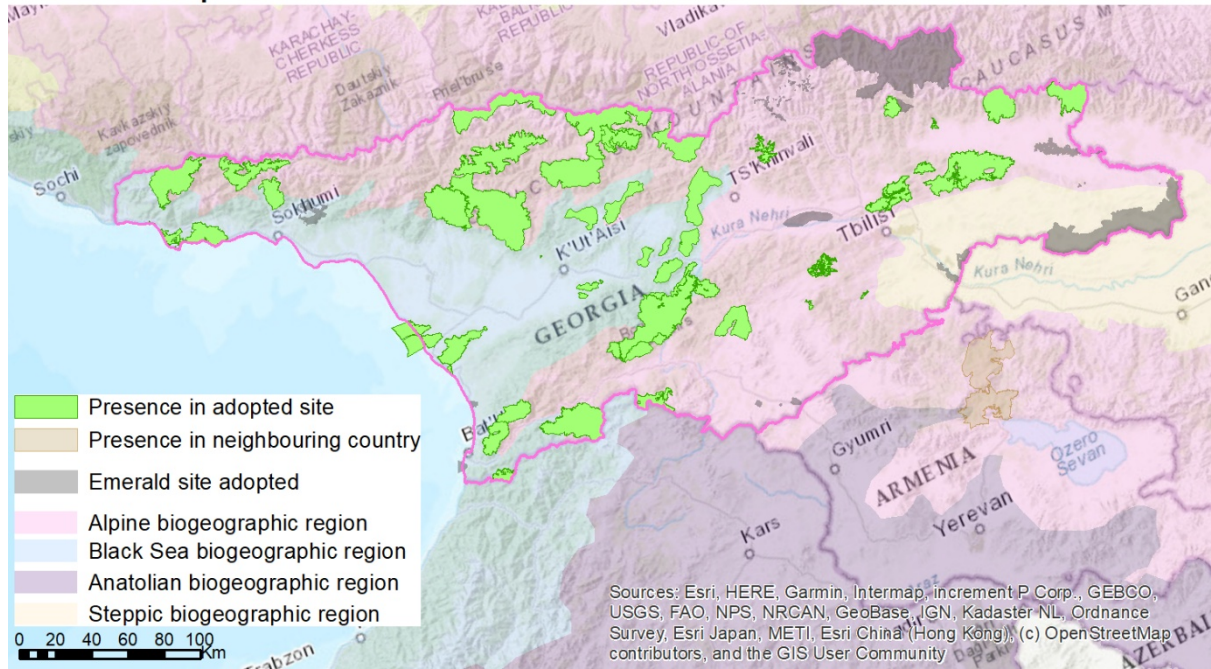
BGR	1078 <i>Callimorpha quadripunctata</i> – REEVALUATION
ALP	Num. of sites: n/a
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Reevaluate: Add Kvareli-Shilda, Kazbegi, Gumista, Gombori, and Goderdzi.
	Comments from external experts: Not evaluated
	Comments from local experts: Add Kvareli-Shilda, Kazbegi, Gumista, Gombori, and Goderdzi.
	References: n/a
STE	Num. of sites: n/a
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Reevaluate: Add Kotsakhura.
	Comments from external experts: Not evaluated
	Comments from local experts: Add Kotsakhura.
	References: n/a

1078 *Callimorpha quadripunctata*



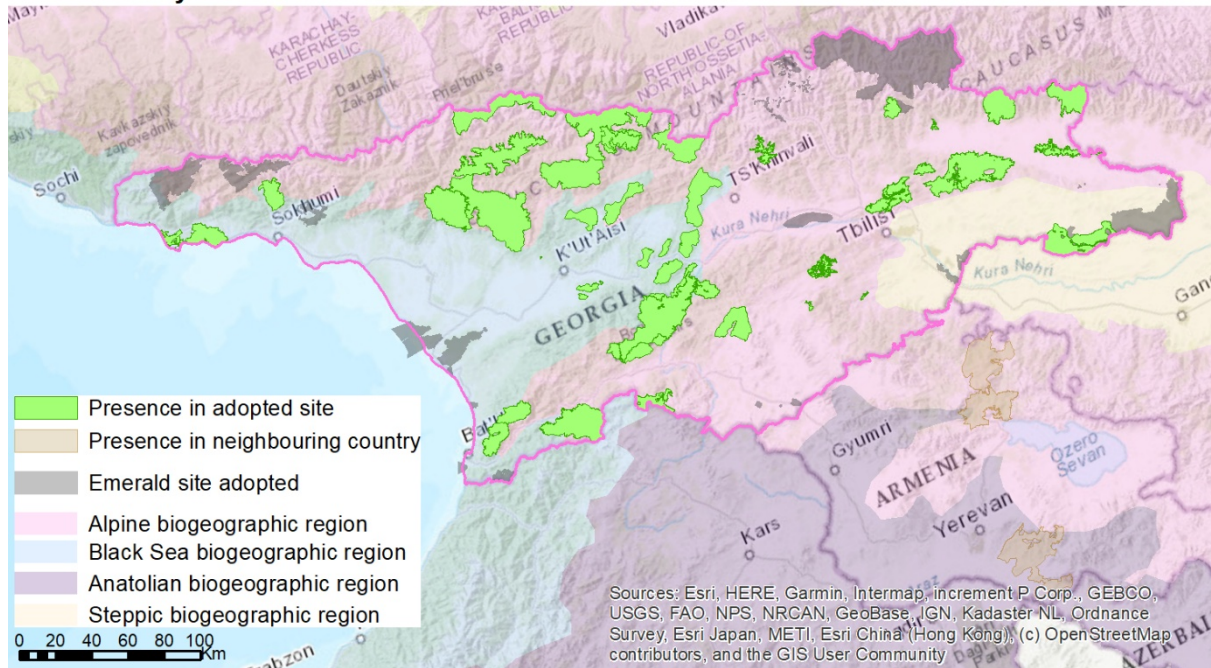
BGR	1087 <i>Rosalia alpine</i> – REEVALUATION
BLS	Num. of sites: n/a
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Reevaluate; delete Gliana Cave.
	Comments from external experts: Not evaluated
	Comments from local experts: Delete Gliana Cave.
	References: n/a
ALP	Num. of sites: n/a
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Reevaluate: Add Batsara and Amtkeli. Delete Samshvilde, Prometheus Cave, and Dashbashis Kanioni.
	Comments from external experts: Not evaluated.
	Comments from local experts: Add Batsara, Amtkeli. Delete Samshvilde, Prometheus Cave, and Dashbashis Kanioni.
	References: n/a

1087 Rosalia alpine



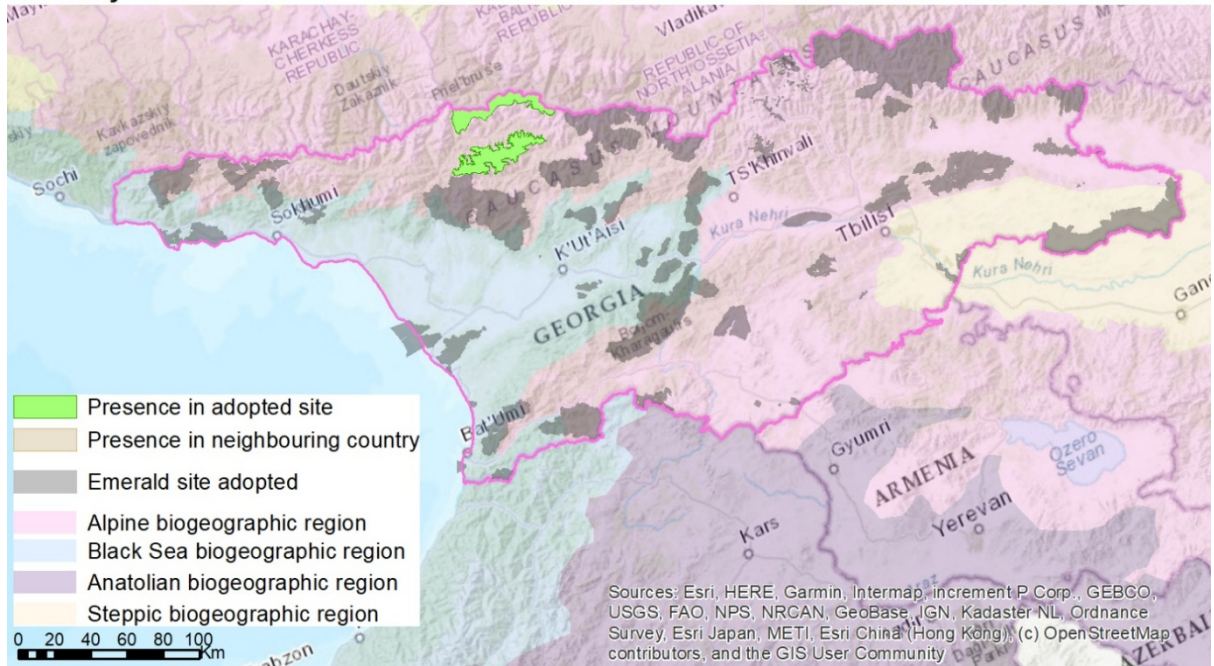
BGR	1088 Cerambyx cerdo – REEVALUATION
BLS	Num. of sites: n/a
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Reevaluate. Delete from Prometheus Cave and Giana Cave.
	Comments from external experts: Not evaluated
	Comments from local experts: Delete from Prometheus Cave and Giana Cave.
	References: n/a

1088 Cerambyx cerdo



BGR	4026 <i>Rhysodes sulactus</i> – REEVALUATION
ALP	Num. of sites: 0
	BGR seminar 2021 conclusion: n/a
	Recommendation 2025: Add to sites Batsara and Borjomi-Kharagauli 2.
	Comments from external experts: Not evaluated
	Comments from local experts: IN MAJ Batsara, Borjomi-Kharagauli 2
	References: n/a

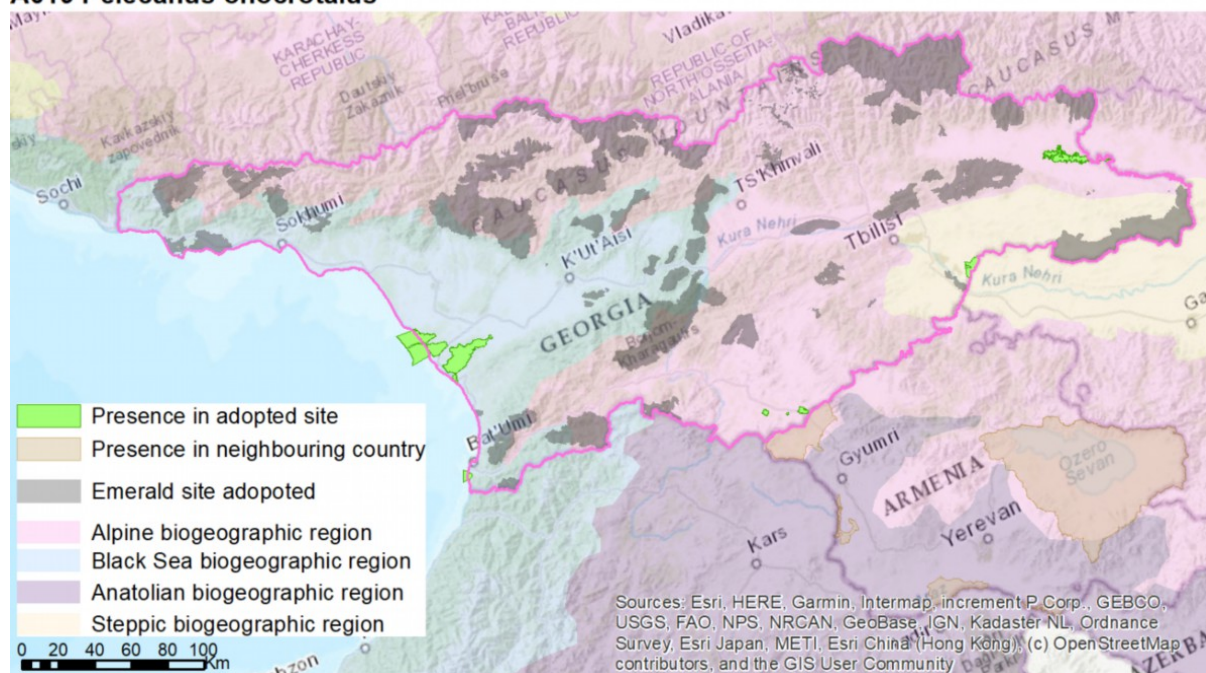
4026 *Rhysodes sulactus*



Birds

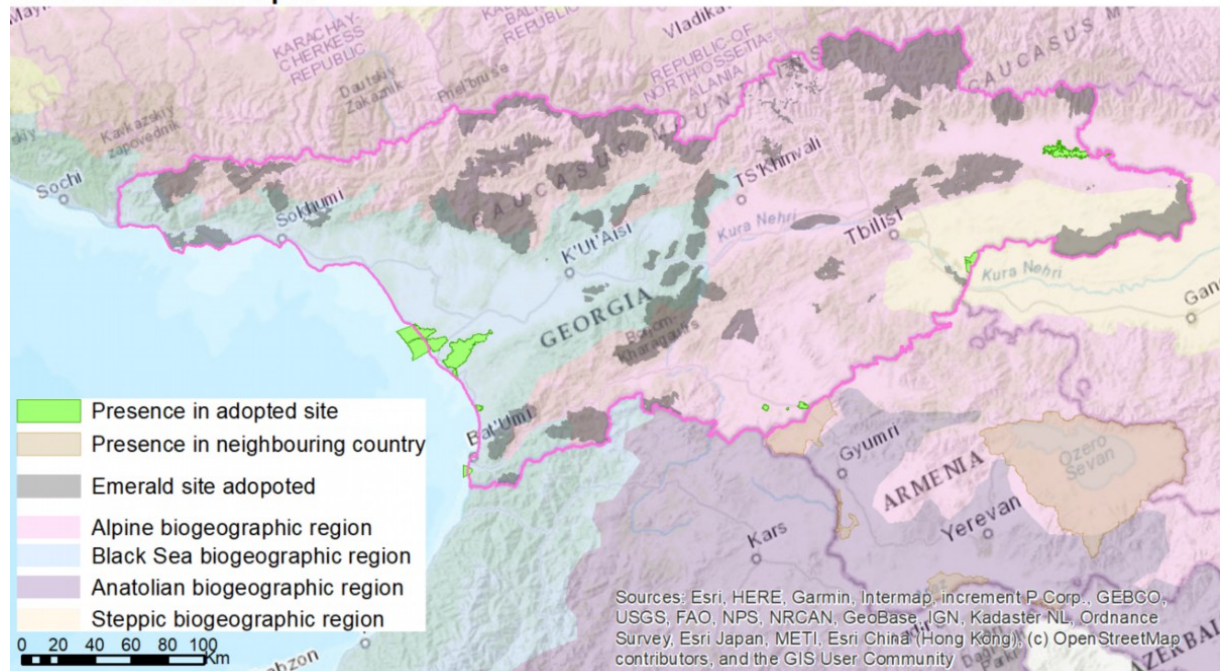
BGR	A019 <i>Pelecanus onocrotalus</i>
Not applicable	Num. of sites: 7 (A:3, B:1, C:3)
	BGR seminar 2021 conclusion: IN MOD Kartsakhi
	Recommendation 2025: Add new Kartsakhi Lake site.
	Comments from external experts: ERL: (10–100 bp). Add new site Kartsakhi Lake (in the south, on the border with Türkiye).
	Comments from local experts: Agree
	References: BirdLife International 2021; gbif.org (accessed February 19, 2025); eBird 2025 (accessed February 20, 2025) https://ebird.org/home ; observation.org; Keller et al. 2020

A019 *Pelecanus onocrotalus*



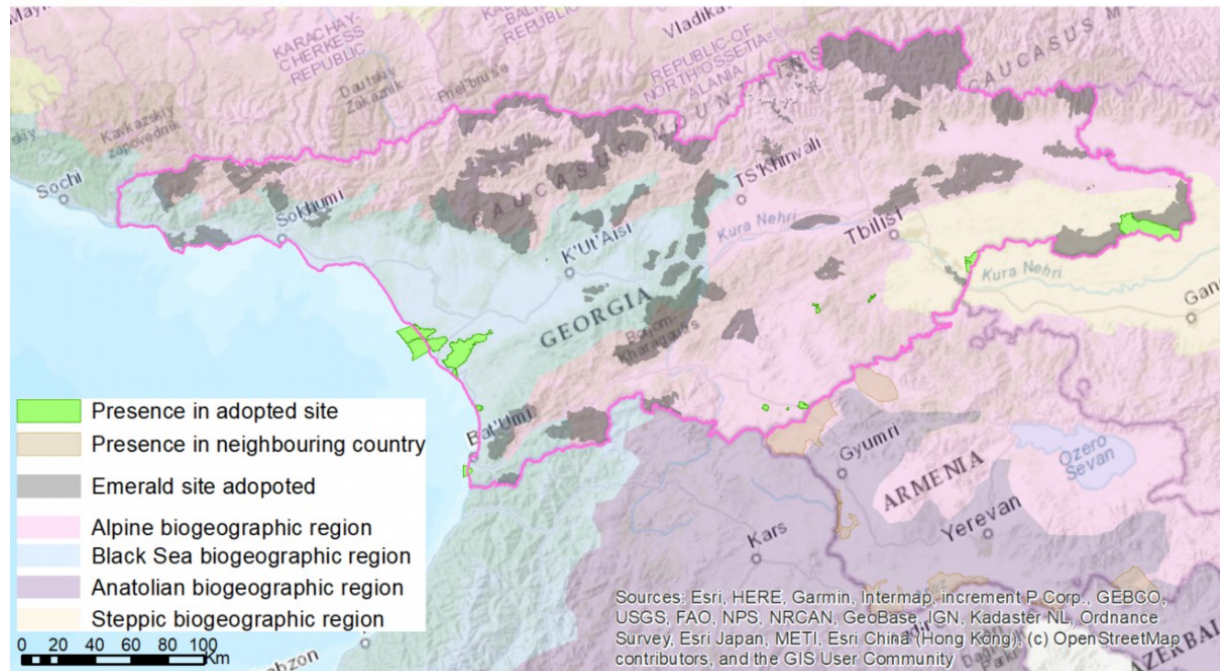
BGR	A020 <i>Pelecanus crispus</i>
Not applicable	Num. of sites: 9 (A:4, B:2, C:3)
	BGR seminar 2021 conclusion: IN MOD Kartsakhi
	Recommendation 2025: Add new site Kartsakhi Lake.
	Comments from external experts: ERL: (11–110 bp). Add new site Kartsakhi Lake (in the south on the border with Türkiye) (c = 1–14 (150) i).
	Comments from local experts: Agree
	References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020

A020 *Pelecanus crispus*



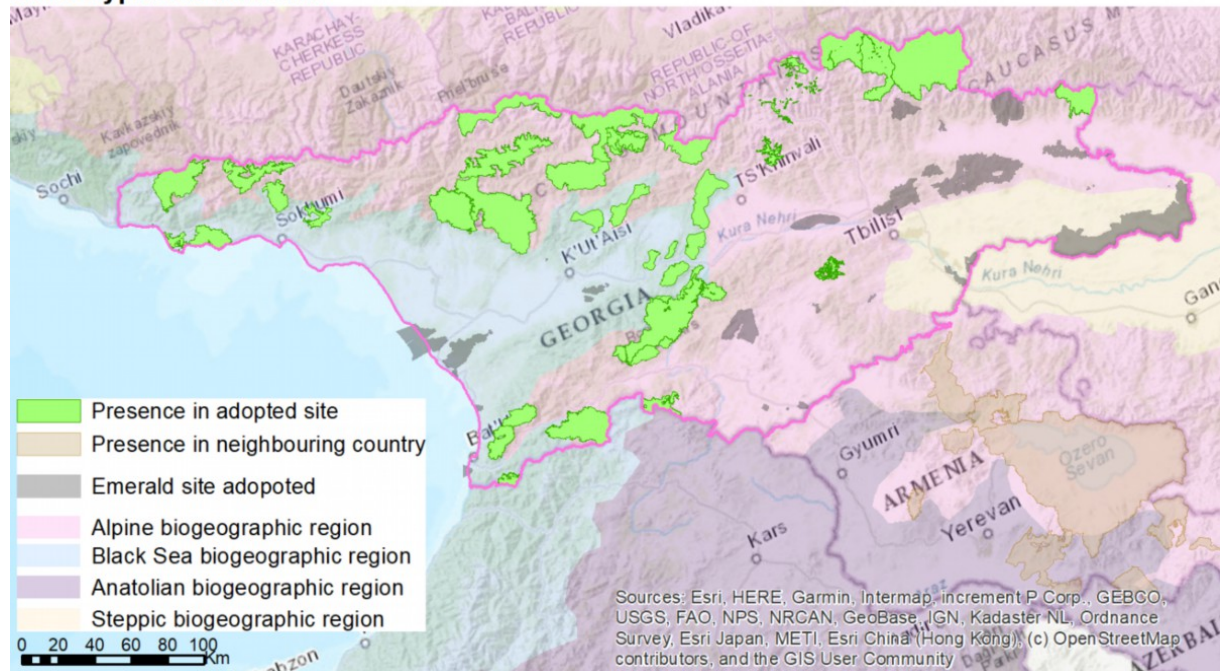
BGR	A031 <i>Ciconia ciconia</i>
Not applicable	Num. of sites: 11 (A:2, B:3, C:6)
	BGR seminar 2021 conclusion: IN MOD Paravani Lake, Javakheti region in general
	Recommendation 2025: Add new sites: Paravani Lake; Tabatskuri Lake (Ktsia-Tabatskuri - GE0000038); Tsalka (Khrami) Reservoir; Kumisi Reservoir
	Comments from external experts: ERL: (0 bp); SDF: $r = (30-40p)$; $c = (0-22i)$. Add new sites: Paravani Lake; Tabatskuri Lake (Ktsia-Tabatskuri - GE0000038); Tsalka (Khrami) Reservoir; Kumisi Reservoir.
	Comments from local experts: Agree
	References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020

A031 Ciconia ciconia



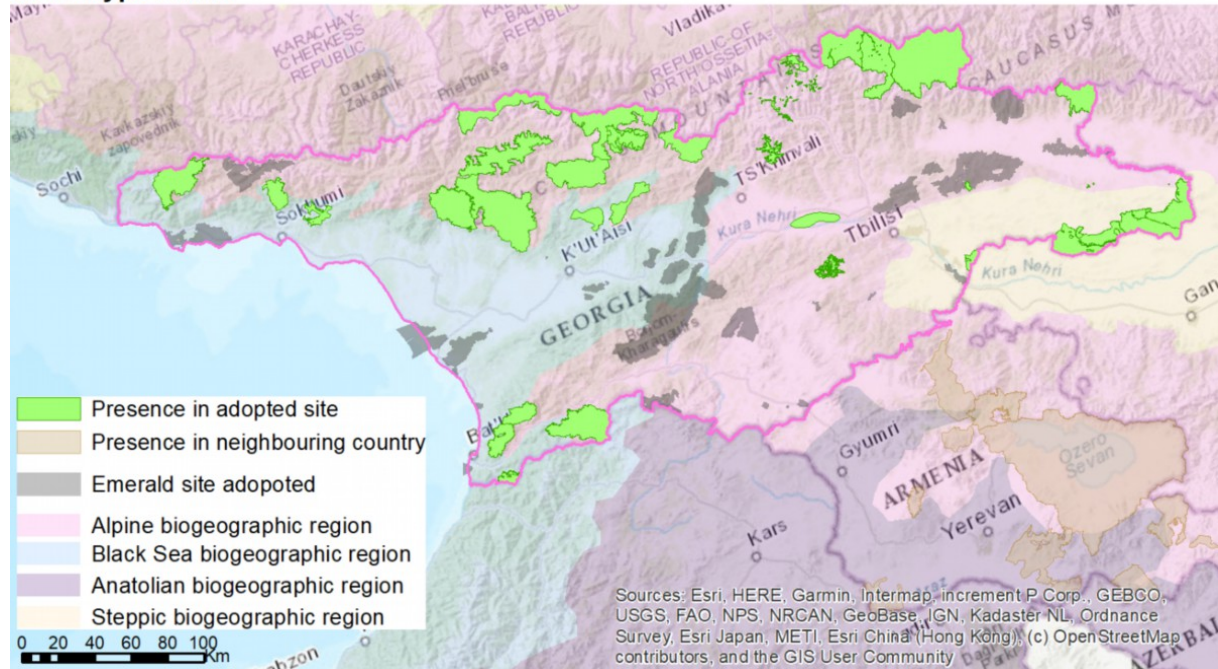
BGR	A076 <i>Gypaetus barbatus</i>
Not applicable	Num. of sites: 34 (A:11, B:8, C:15)
	BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Kazbegi and Erusheti (evaluate borders). IN MIN for three sites
	Recommendation 2025: Add Dashbashis Kanioni (GE0000036), Kvareli-Shilda (GE0000029), and Kvernaki (GE0000046; C population). Remove Surami 1 (GE0000034), Surami 2 (GE0000049), Surami 3 (GE0000050), Surami 4 (GE0000052), Surami 5 (GE0000053). Evaluate borders: Erusheti (GE0000066). Harmonize population status (11A, 8B, 15C) >100 percent?.
	Comments from external experts: ERL: (19–22 bp); SDF: c, p, r. Species added to Kazbegi (GE0000009) and Erusheti (GE0000066; boundaries remain to be reevaluated). No change for Dashbashis Kanioni (GE0000036). Harmonize population status: (11A, 8B, 15C) >100 percent?
	Comments from local experts: Remove from Surami; add a site in the Kvareli-Shilda area and Kvernaki.
	References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020

A076 *Gypaetus barbatus*



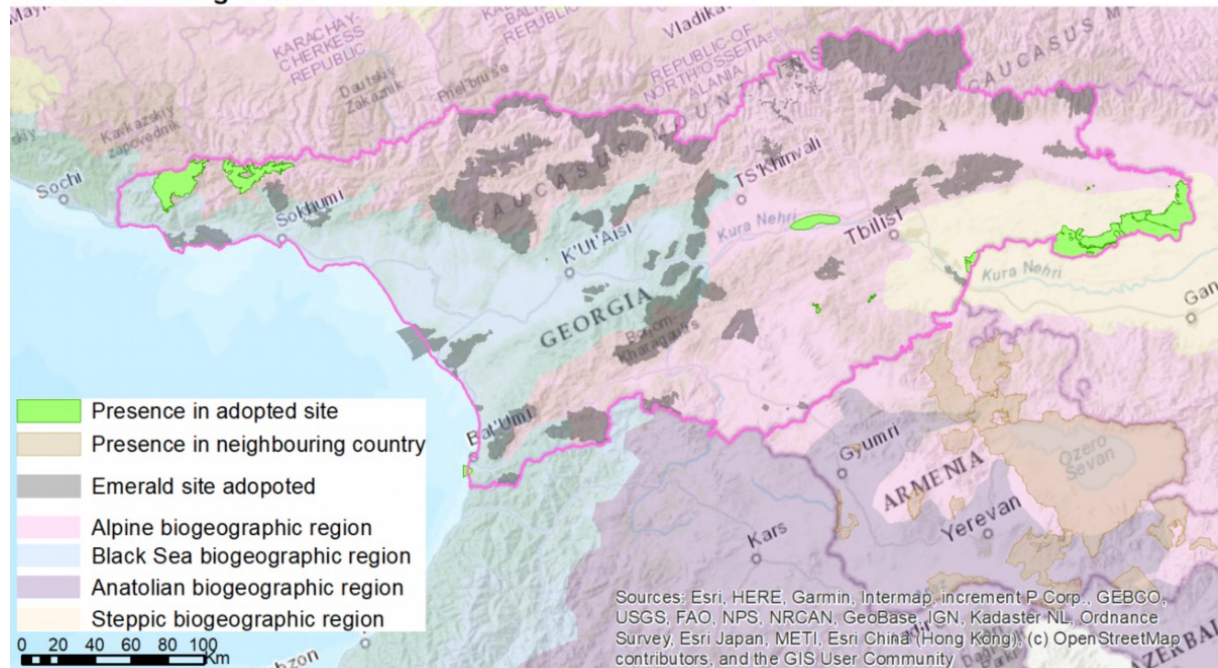
BGR	A078 <i>Gyps fulvus</i>
Not applicable	Num. of sites: 35 (A:10, B:6, C:19)
	BGR seminar 2021 conclusion: IN MOD Erusheti site (evaluate borders), but no change to Javakheti and Kazbegi; this site is indeed needed
	Recommendation 2025: Add Erusheti (GE0000066) and reevaluate the borders. Harmonize population status: (10A, 6B, 19C) >100 percent?
	Comments from external experts: ERL: (120–1,300 bp); SDF: c, p, r, w. Species added to Kazbegi (GE0000009). No change for Erusheti (GE0000066). No change at Javakheti National Park (according to the available databases, there have been no sightings of the species).
	Comments from local experts: Agree
	References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020

A078 *Gyps fulvus*



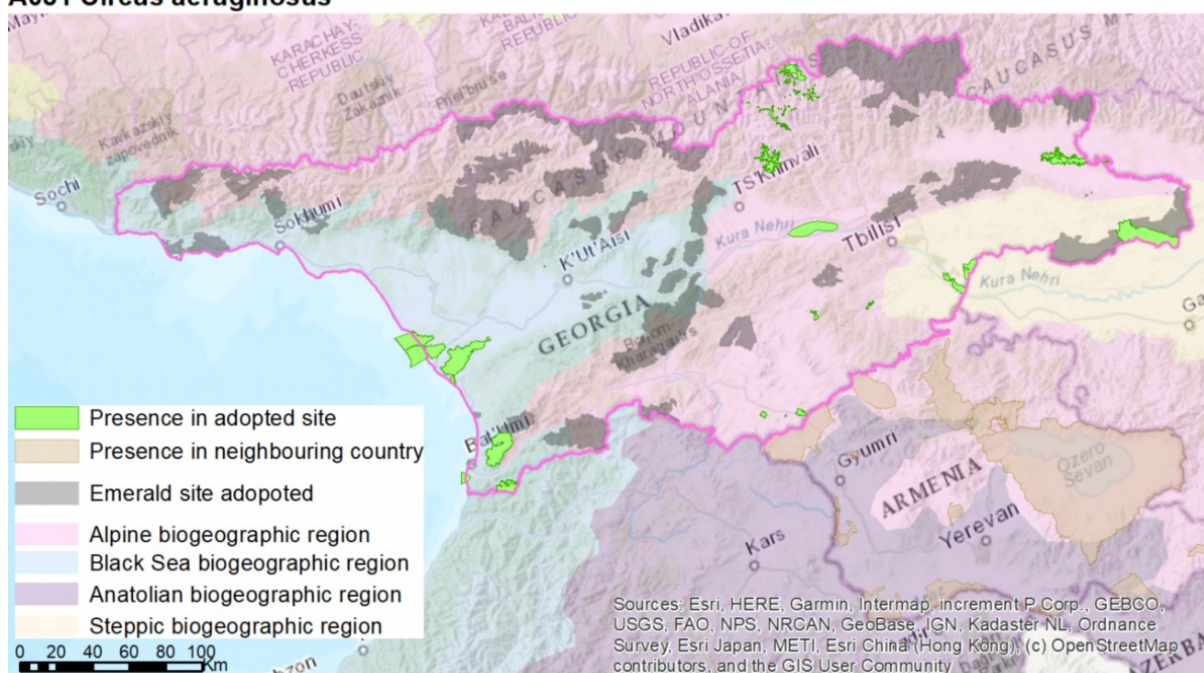
BGR	A080 <i>Circaetus gallicus</i>
Not applicable	Num. of sites: 14 (A:1, B:3, C:10)
	BGR seminar 2021 conclusion: IN MOD/IN MIN/CD, IN MOD: Erusheti (evaluate borders). IN MIN: Jandari Lake and two other sites. CD
	Recommendation 2025: Add Erusheti (GE0000066) and reevaluate the borders.
	Comments from external experts: ERL: (110–1,200 bp); SDF: c, r, w. Erusheti (GE0000066) has not been added yet. Jandari Lake (GE0000062) has been added.
	Comments from local experts: Agree
	References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020

A080 *Circaetus gallicus*



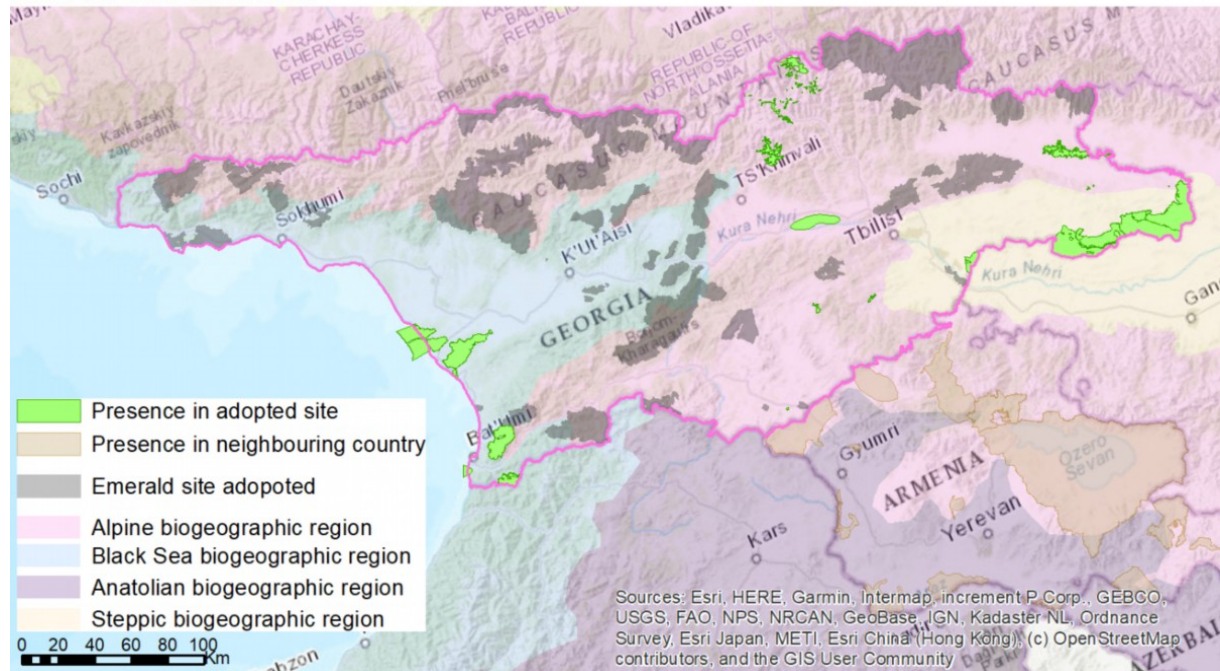
BGR	A081 <i>Circus aeruginosus</i>
Not applicable	<p>Num. of sites: 17 (A:2, B:4, C:11)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN/CD, IN MOD: Kartsakhi and Paravani Lakes; CD: Prometheus Cave should be removed.</p> <p>Recommendation 2025: Add the species to existing sites: Bugdasheni (GE0000005), Ktsia-Tabatskuri (GE0000038). Add new sites: Kartsakhi Lake; Paravani Lake; Kumisi Reservoir; Bareti Lake (near Tsalka). Remove Liakhvi (GE0000030).</p> <p>Comments from external experts: ERL: (70–690 bp); SDF: r, c, p, w. Add the species to existing sites: Bugdasheni (GE0000005), Ktsia-Tabatskuri (GE0000038). Add new sites: Kartsakhi Lake; Paravani Lake; Kumisi Reservoir; Prometheus Cave (GE0000039) has been removed (according to the available databases, there have been no sightings of the species).</p> <p>Comments from local experts: Remove from Liakhvi; add Bareti Lake. Do not add: Bazaleti Lake and Tsalka Reservoir.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A081 *Circus aeruginosus*



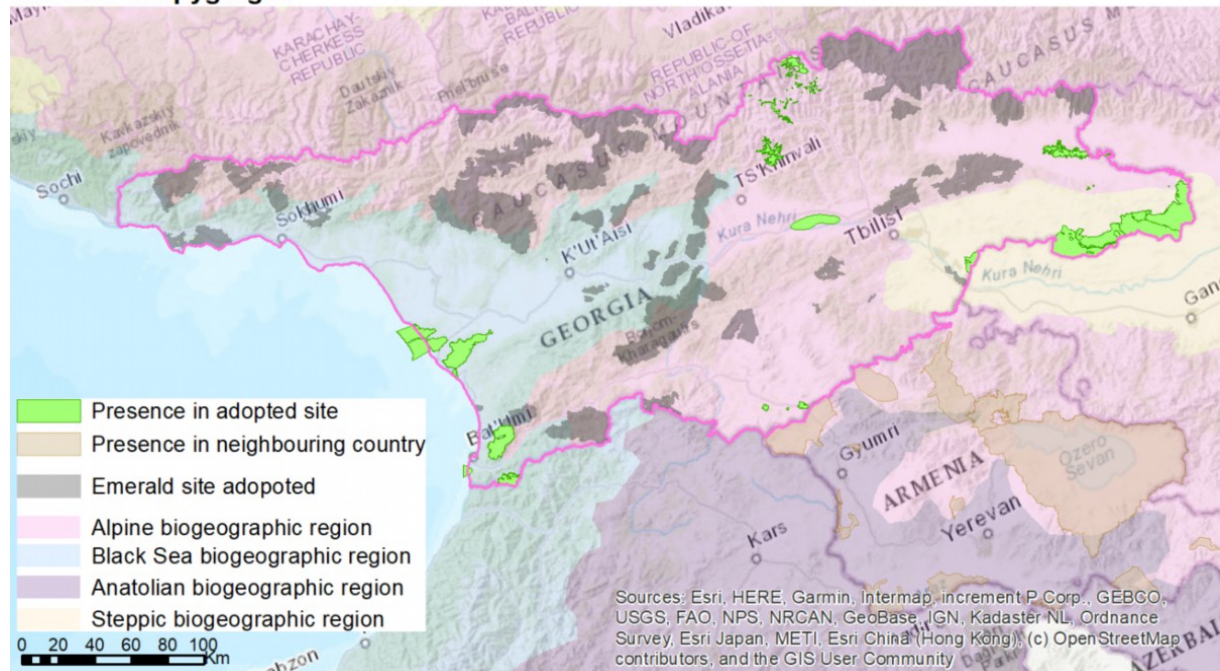
BGR	A083 <i>Circus macrourus</i>
Not applicable	<p>Num. of sites: 19 (A:1, B:4, C:14)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Kartsakhi; IN MIN: GE0000017, GE0000004</p> <p>Recommendation 2025: Add the species to existing sites: Khanchali (GE0000017) and Madatapha Lake (GE0000004). Add new sites: Kartsakhi Lake. Add sites in the northeastern part of Georgia.</p> <p>Comments from external experts: ERL: (- bp); SDF: c, p, w. Add the species to existing sites: Khanchali (GE0000017) and Madatapha Lake (GE0000004). Add new sites: Kumisi Reservoir; Kartsakhi Lake. Madatapha Lake (GE0000004) is questionable (irregular occurrence).</p> <p>Comments from local experts: Migrates through the Javakheti Plateau; add to sites in the northeastern part of Georgia (migratory species via the northeastern part).</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A083 Circus macrourus



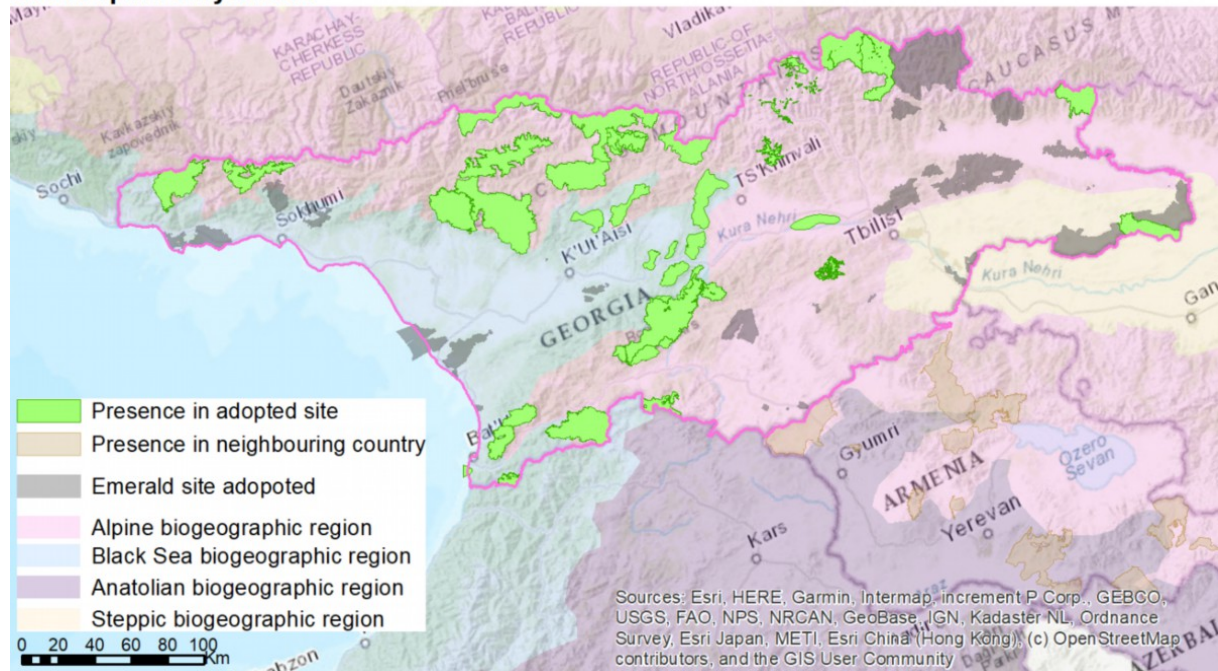
BGR	A084 Circus pygargus
Not applicable	Num. of sites: 19 (A:2, B:4, C:13)
	BGR seminar 2021 conclusion: IN MOD Javakheti extension
	Recommendation 2025: Add new sites: Kartsakhi Lake; Paravani Lake. Remove sites: Liakhvi (GE0000030) and Kazbegi (GE0000009).
	Comments from external experts: ERL: (38–370 bp); SDF: r, c, p, w. Add new sites: Kartsakhi Lake; Tbilisi Reservoir. Most occurrences of the species are in the south/southeast and in the Terek River Valley (possible extension of Kazbegi (GE0000009)?—Javakheti National Park extension?; added: GE0000004, GE0000005, GE0000017..
	Comments from local experts: Agree with Kartsakhi Lake (do not add: Tbilisi Reservoir). Add new site: Paravani Lake; remove Liakhvi and Kazbegi.
	References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020

A084 *Circus pygargus*



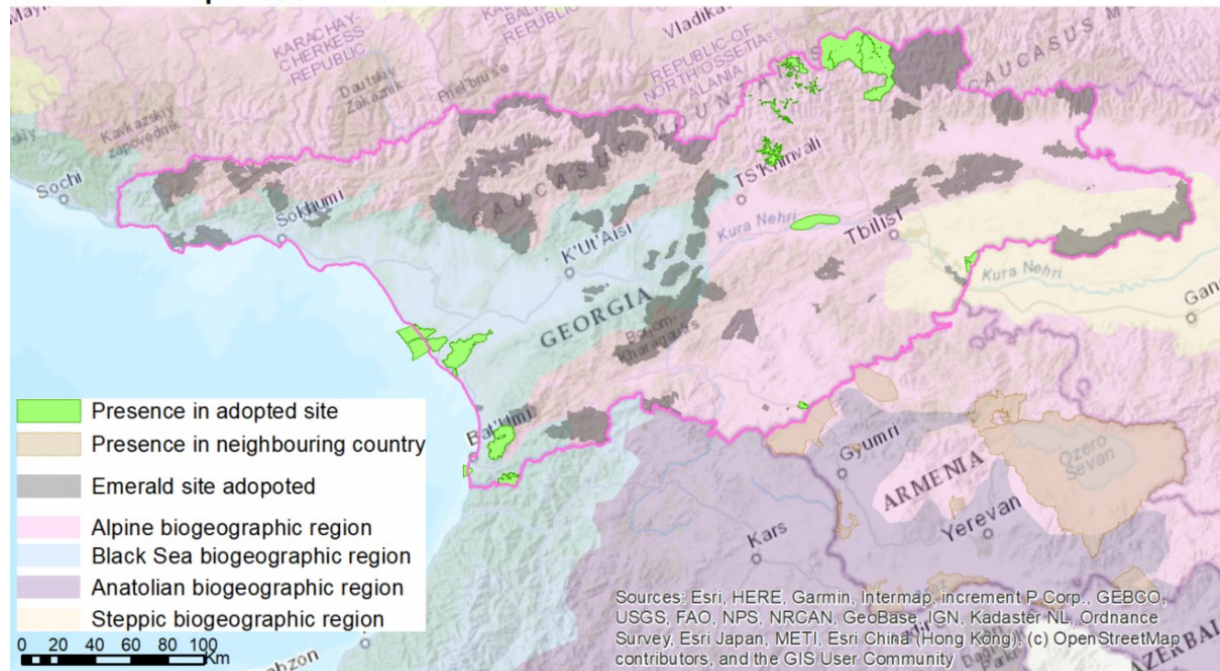
BGR	A091 <i>Aquila chrysaetos</i>
Not applicable	<p>Num. of sites: 33 (A:3, B:12, C:18)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Erusheti (evaluate borders), Javakheti extension. IN MIN: Greater Caucasus</p> <p>Recommendation 2025: Add to existing sites: Tusheti (GE0000008) and Kvareli-Shilda (GE0000029). Reevaluate/extend Erusheti (GE0000066) boundaries. Remove sites: Surami 1 (GE0000034), Surami 2 (GE0000049), Surami 3 (GE0000050), Surami 4 (GE0000052), and Surami 5 (GE0000053).</p> <p>Comments from external experts: ERL: (25–35 bp); SDF: r, c, p, w. Added to Erusheti (boundaries remain to be extended). The species is regularly recorded at Vardzia Cave Monastery in the south. Madatapha Lake (Javakheti, GE0000004) should also have been added (per previous conclusions). Also, a regular occurrence in Tusheti (northeastern part (N-E); GE0000008). Not added: Javakheti (sites 4, 5, 17—according to the available databases, there have been no records of the species).</p> <p>Comments from local experts: Agree: Add Tusheti and extend Erusheti. Tusheti and Kvareli-Shilda are important; remove the species from most southern sites and remove Surami. Javakheti is not important for the species.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A091 *Aquila chrysaetos*



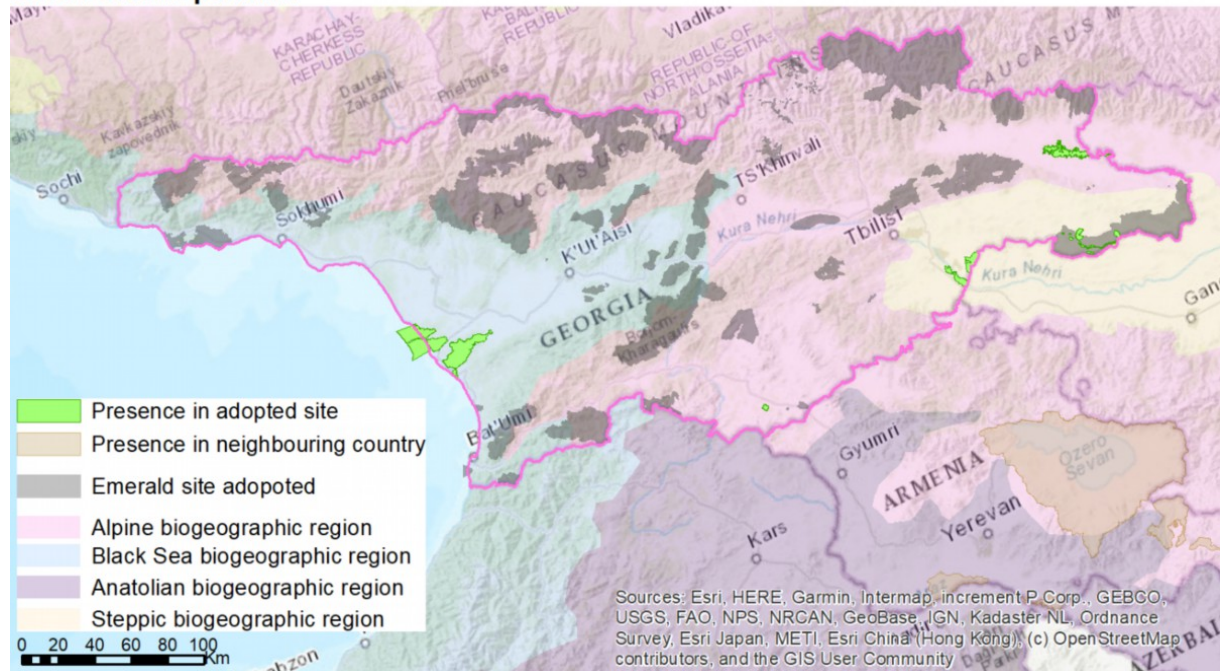
BGR	A097 <i>Falco vespertinus</i>
Not applicable	<p>Num. of sites: 11 (A:1, B:4, C:6)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Javakheti; IN MIN: Bugdasheni and Kanchali</p> <p>Recommendation 2025: Add site: Kotsakhura (southeastern part (S-E); GE0000051). Add new site: Saghamo Lake (Javakheti).</p> <p>Comments from external experts: ERL: (0 bp); SDF: c, w. Consider Kotsakhura (S-E; GE0000051) and the new site Saghamo Lake (Javakheti). Added: Madatapha Lake (Javakheti, GE0000004). Not added: Javakheti-Bugdasheni (GE0000005), Khanchali (GE0000017) (according to the available databases, there have been no records of the species).</p> <p>Comments from local experts: Agree. The species does not breed regularly in the Javakheti Upland. Western and southeastern sites are important for migration.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A097 Falco vespertinus



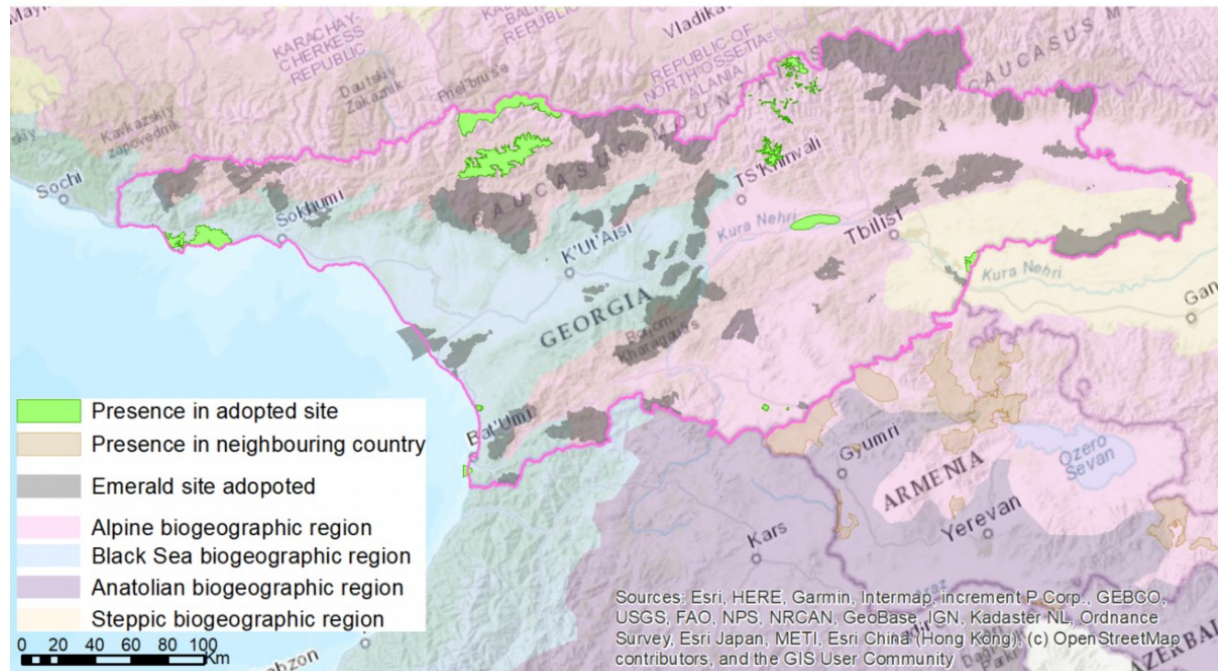
BGR	A119 <i>Porzana porzana</i>
Not applicable	<p>Num. of sites: 6 (B:2, C:4)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Kartsakhi and Javakheti extension. IN MIN: 05, 04, Gombori</p> <p>Recommendation 2025: Add new sites: Kartsakhi Lake and the Javakheti area (including Madatapha - GE0000004 and Bugdasheni - GE0000005).</p> <p>Comments from external experts: ERL: (320–3200 bp); SDF: c, p. Add new sites: Kartsakhi Lake; Tbilisi Reservoir; and the Javakheti area (including Madatapha - GE0000004 and Bugdasheni - GE0000005). Gombori (GE0000027)? According to the available databases, there have been no records of the species.</p> <p>Comments from local experts: Agree, but do not include the Tbilisi Reservoir: it is present there, but not important.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A119 Porzana porzana



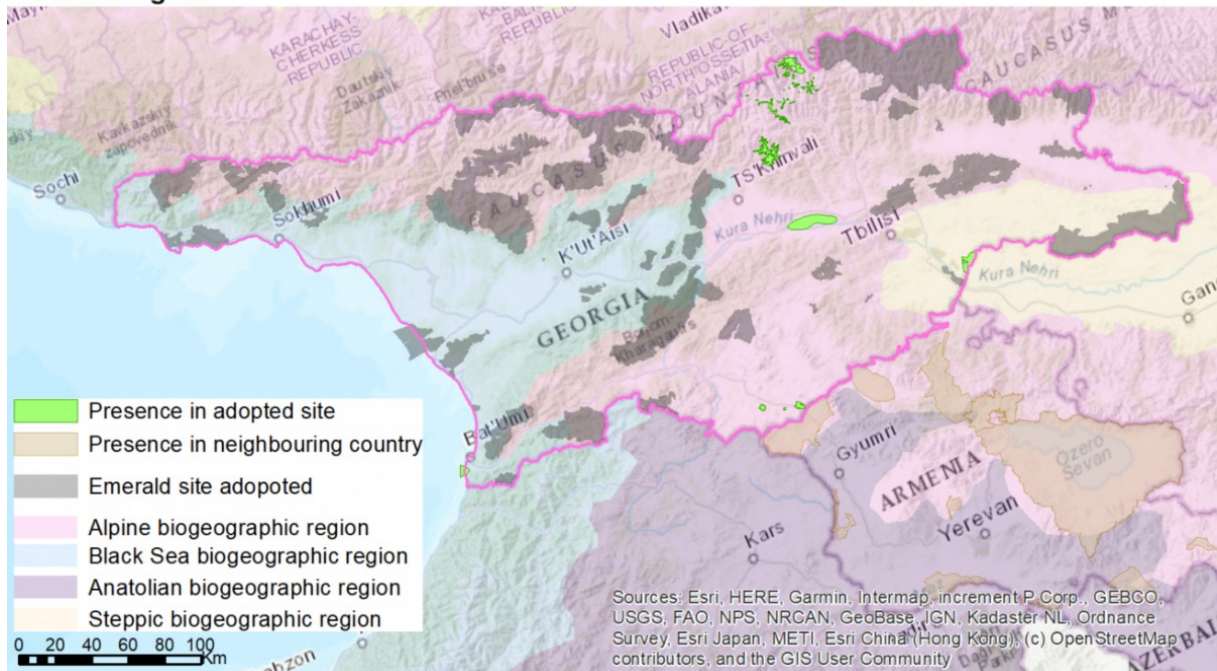
BGR	A122 <i>Crex crex</i>
Not applicable	<p>Num. of sites: 13 (A:1, B:2, C:10)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Kazbegi extension. IN MIN: GE0000038, GE0000027, GE0000054, GE0000008, GE0000009, GE0000011, GE0000040, GE0000041, GE0000042, GE0000012, GE0000045</p> <p>Recommendation 2025: Extend Kazbegi (GE0000009; Terek River Valley). IN MIN: GE0000027, GE0000038</p> <p>Comments from external experts: ERL: (820–1,700 bp); SDF: r, c, p, w. Add the species to the Terek River Valley (extension of Kazbegi - GE0000009) and to sites (IN MIN): GE0000008, GE0000011, GE0000027, GE0000038, GE0000040, GE0000041, GE0000042. Added: GE0000009, GE0000012, GE0000045, GE0000054</p> <p>Comments from local experts: The species does not occur in Tusheti (GE0000008) or Ratcha (11, 40, 41, 42). The species occurs in Gombori (GE0000027) and Ktsia-Tabatskuri (GE0000038).</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A122 *Crex crex*



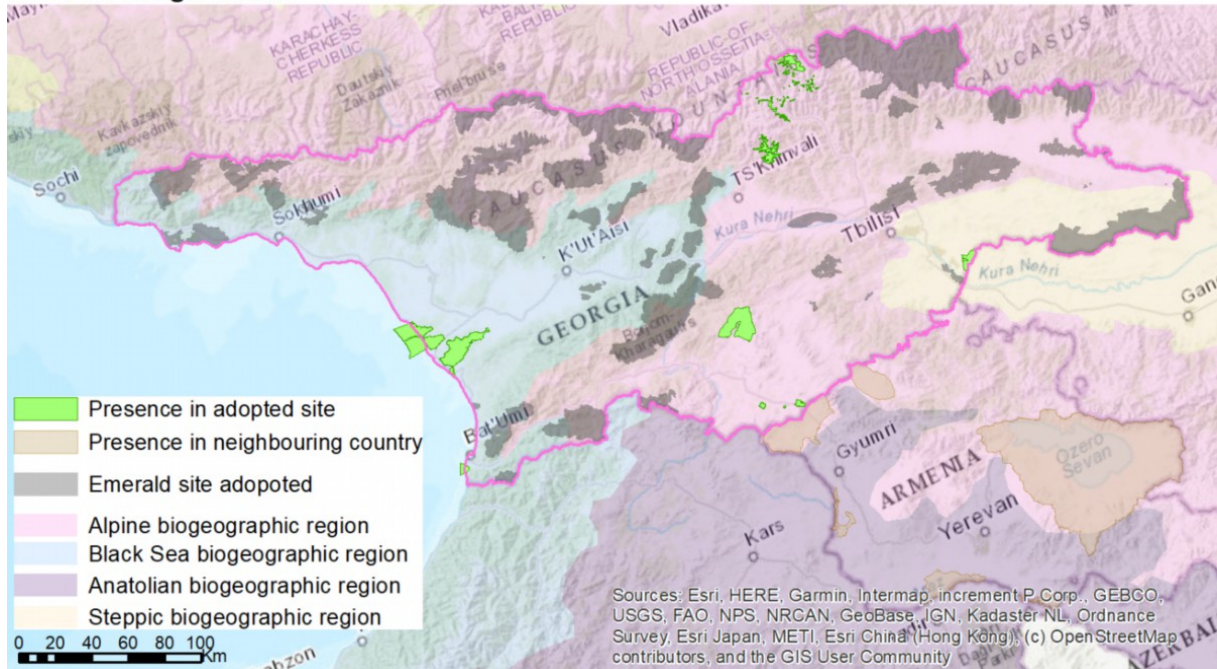
BGR	A127 <i>Grus grus</i>
Not applicable	<p>Num. of sites: 9 (A:2, B:1, C:6)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Javakheti Lakes; IN MIN: GE0000007 Vashlovani and GE0000038 Ktsia-Tabatskuri</p> <p>Recommendation 2025: Add new sites: Kartsakhi Lake; Paravani Lake; Kumisi Reservoir. IN MIN: Ktsia-Tabatskuri (GE0000038) and Vashlovani (S-E; GE0000007). Exclude sites: Kazbegi (GE0000009); Liakhvi (GE0000030); Kvernaki (GE0000046).</p> <p>Comments from external experts: ERL: (12–16 bp); SDF: r, c. Add new sites: Kartsakhi Lake; Paravani Lake. IN MIN: Ktsia-Tabatskuri (GE0000038) and Vashlovani (S-E; GE0000007). Added: Madatapha (Javakheti, GE0000004); Bugdasheni (Javakheti, GE0000005); Khanchali (Javakheti, GE0000017).</p> <p>Comments from local experts: Agree. Breeding pairs occur in Javakheti, but the number of sites is not relevant. Exclude Kazbegi, Liakhvi, and Kvernaki, and add Kumisi Lake as a stopover site during migration. All lakes in the south should be included.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A127 *Grus grus*



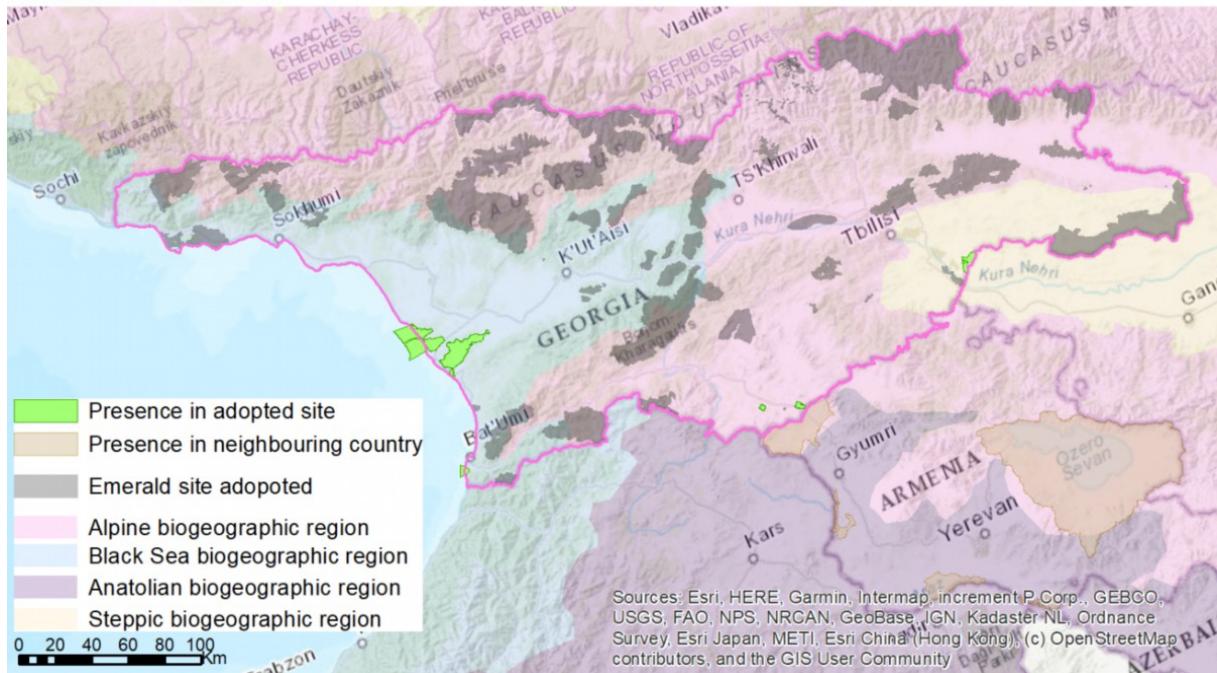
BGR	A154 <i>Gallinago media</i>
Not applicable	Num. of sites: 9 (A:2, B:3, C:4)
	BGR seminar 2021 conclusion: IN MOD Javakheti extension
	Recommendation 2025: IN MIN: Alazani (GE0000022)
	Comments from external experts: ERL: (- bp); SDF: c. No change at Javakheti National Park (according to the available databases, there have been no sightings of the species). Added: Madatapha (Javakheti, GE0000004); Bugdasheni (Javakheti, GE0000005); Khanchali (Javakheti, GE0000017).
	Comments from local experts: Agree, add it to the Alazani area.
	References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020

A154 Gallinago media



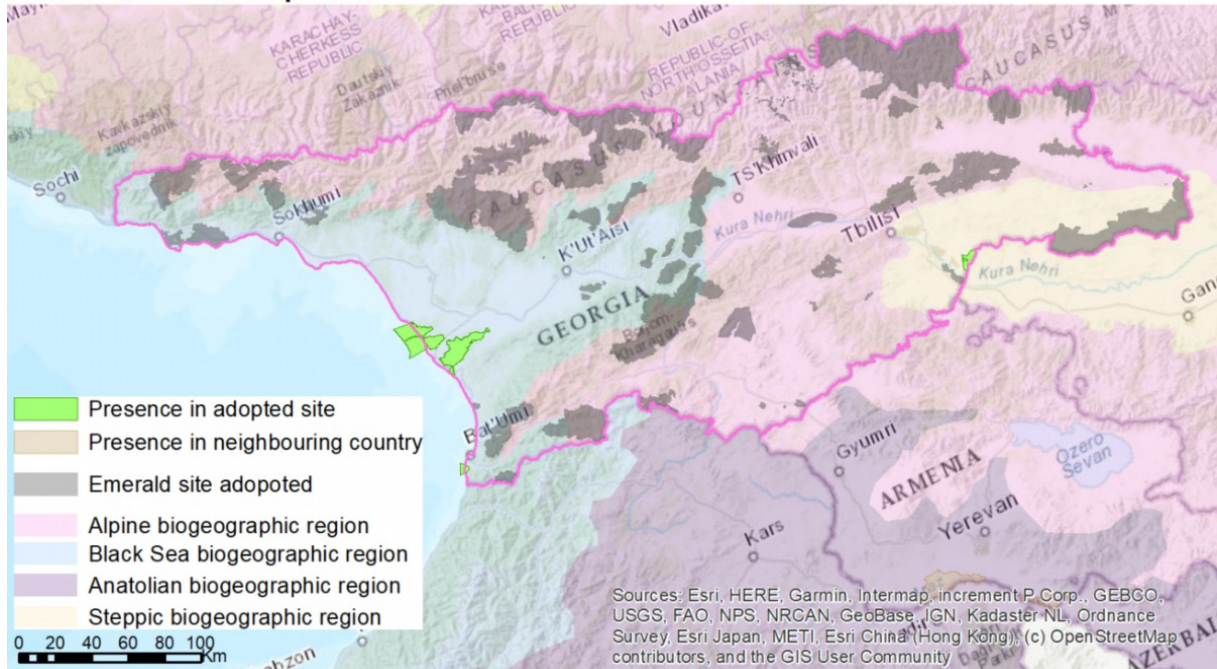
BGR	A167 <i>Xenus cinereus</i>
Not applicable	<p>Num. of sites: 5 (A:1, B:1, C:3)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Javakheti extension; IN MIN: 05 Bugdasheni</p> <p>Recommendation 2025: No change at Javakheti (extend as an Emerald site). Add new site: Kartsakhi Lake. IN MIN: Bugdasheni (GE0000005).</p> <p>Comments from external experts: ERL: (- bp); SDF: c. Extend Javakheti (added: Madatapha - GE0000004 and Khanchali - GE0000017). Add new site: Kartsakhi Lake. IN MIN: Bugdasheni (GE0000005).</p> <p>Comments from local experts: Agree</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A167 *Xenus cinereus*



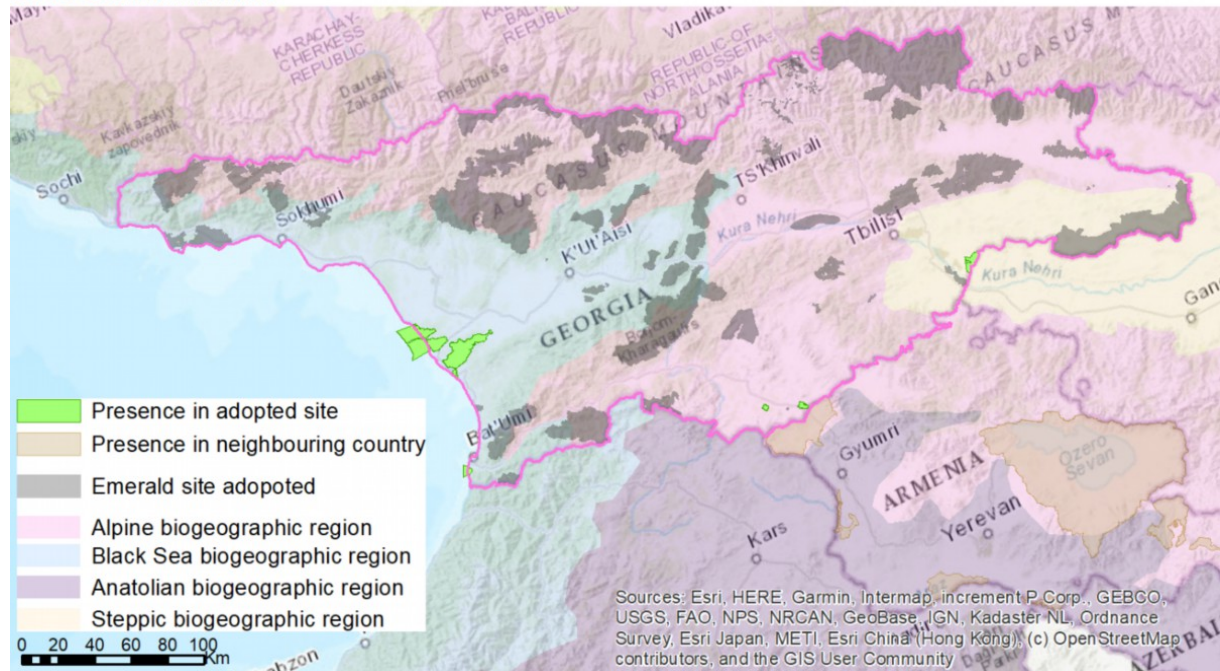
BGR	A176 <i>Larus melanocephalus</i>
Not applicable	Num. of sites: 3 (A:1, C:2)
	BGR seminar 2021 conclusion: IN MOD, IN MOD: Rioni extension
	Recommendation 2025: Add new site: Rioni River (IN MOD).
	Comments from external experts: ERL: (- bp); SDF: c, w. No change at Rioni River. Add new site: Tbilisi Reservoir; add site: Madatapha (GE0000004).
	Comments from local experts: Agree with the extension of Rioni. The species does not occur in Tbilisi Reservoir or Madatapha.
	References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020

A176 *Larus melanocephalus*



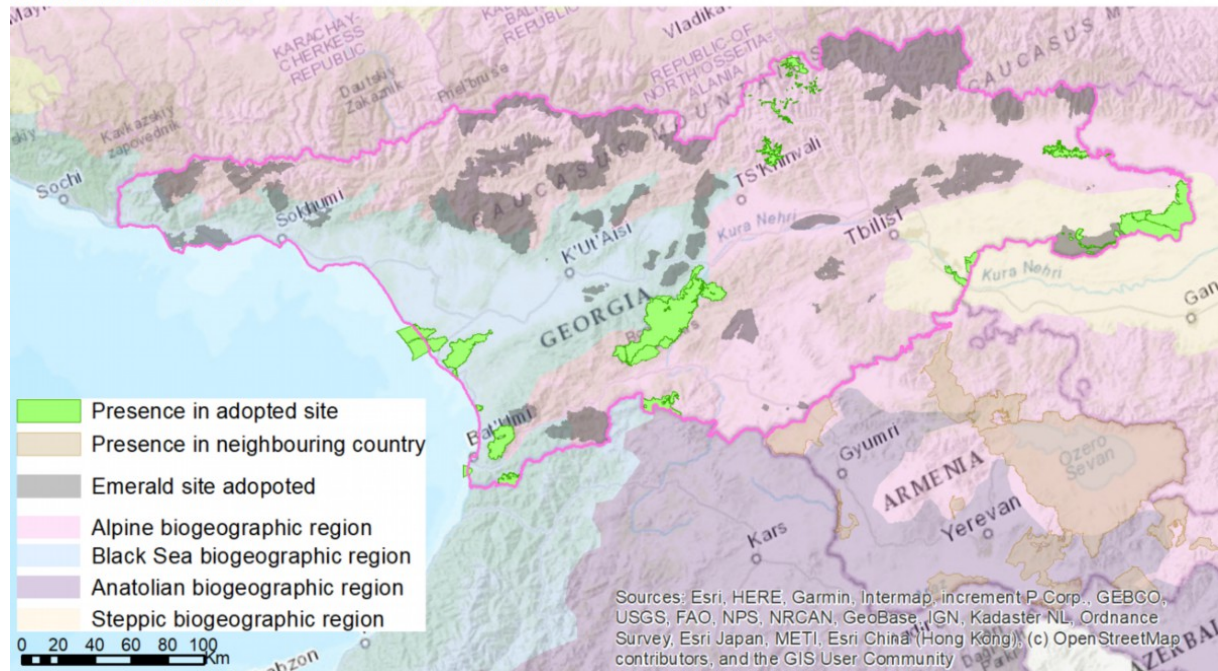
BGR	A193 <i>Sterna hirundo</i>
Not applicable	<p>Num. of sites: 5 (A:1, B:1, C:3)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Javakheti extension; IN MIN: Two sites</p> <p>Recommendation 2025: IN MIN: Bugdasheni (GE0000005) and Ktsia-Tabatskuri (GE0000038). Add new site: Paravani Lake.</p> <p>Comments from external experts: ERL: (22–220 bp); SDF: c. IN MIN: Bugdasheni (GE0000005) and Ktsia-Tabatskuri (GE0000038). Add new sites: Tbilisi Reservoir; Paravani Lake (irregular occurrence?). Added: Jandari Lake (GE0000062).</p> <p>Comments from local experts: Agree; do not include Tbilisi Lake.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A193 Sterna hirundo



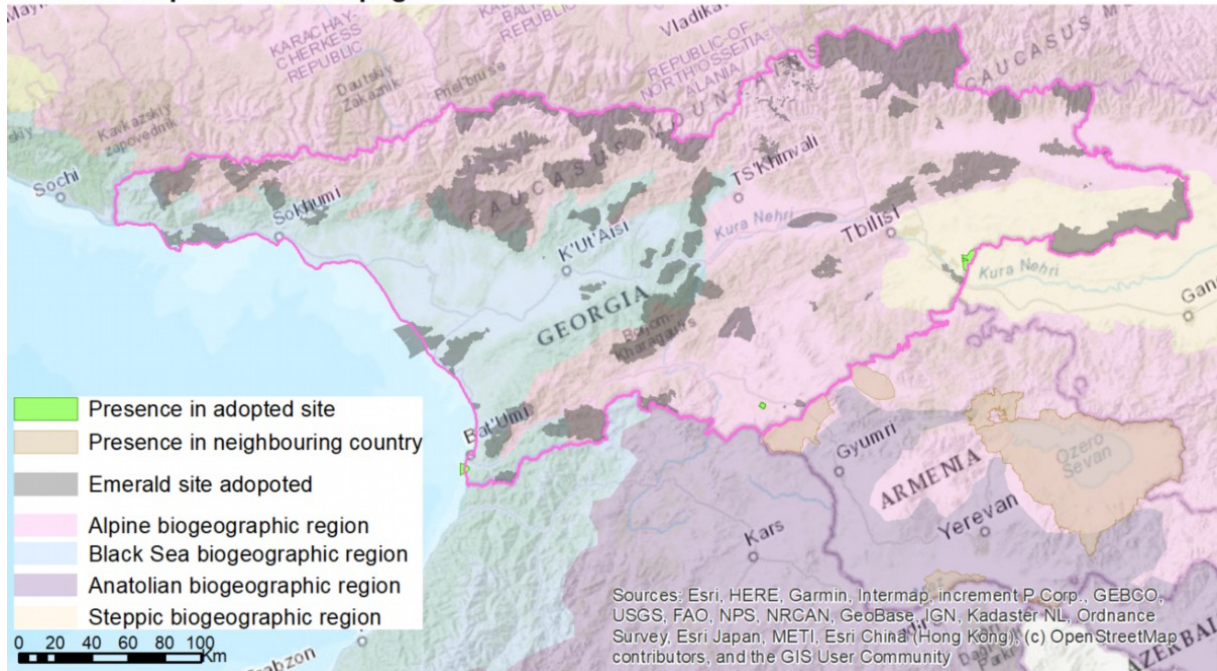
BGR	A229 <i>Alcedo atthis</i>
Not applicable	<p>Num. of sites: 19 (A:5, B:2, C:10, D:2)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Rioni; IN MIN: 3 Javakheti Lakes</p> <p>Recommendation 2025: Add new site: Rioni River. IN MIN: Madatapha (Javakheti, GE0000004); Bugdasheni (Javakheti, GE0000005); Khanchali (Javakheti, GE0000017); Bichvinta-Miusera (West; GE0000025). Exclude site: Shavi Mta (GE0000063).</p> <p>Comments from external experts: ERL: (380–3,900 bp); SDF: r, p, c. Add new site: Rioni River. IN MIN: Madatapha (Javakheti, GE0000004); Bugdasheni (Javakheti, GE0000005); Khanchali (Javakheti, GE0000017); Bichvinta-Miusera (W; GE0000025); Kotsakhura (S-E; GE0000051). Add new sites: Kumisi Reservoir; Terek River Valley (extension of Kazbegi - GE0000009?).</p> <p>Comments from local experts: Agree; remove Shavi Mta and do not add Kotsakhura.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A229 Alcedo atthis



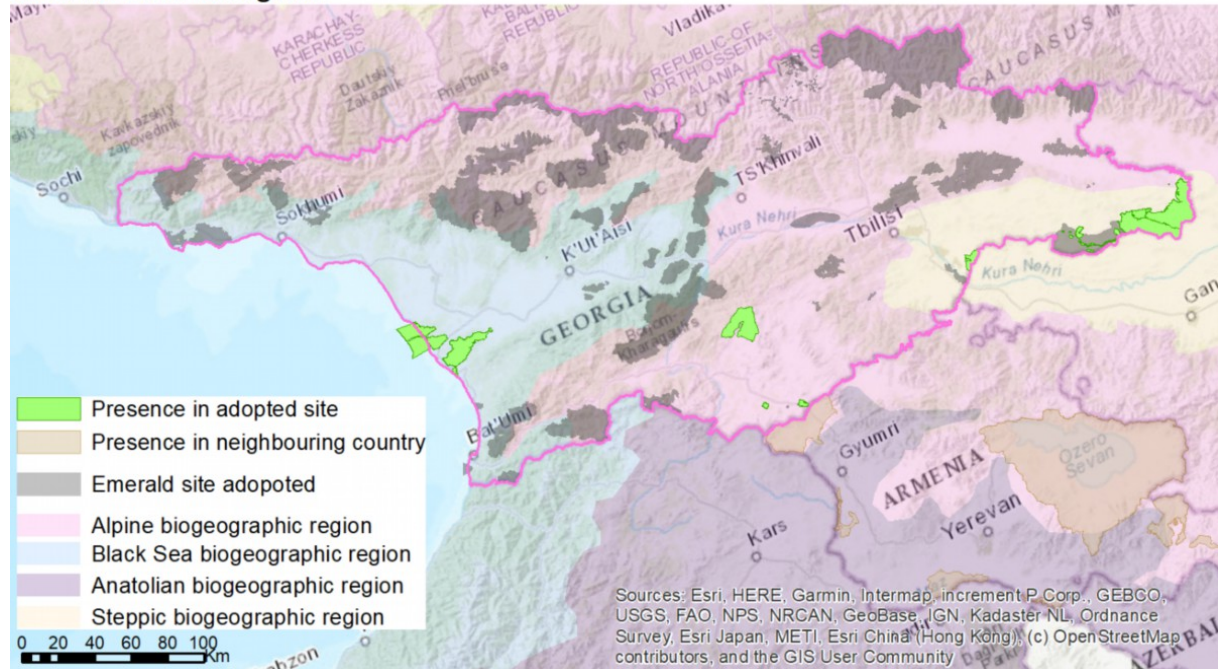
BGR	A293 <i>Acrocephalus melanopogon</i>
Not applicable	<p>Num. of sites: 3 (B:1, C:2)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Kartsakhi and Paravani; IN MIN: Kobuleti and Javakheti Lakes</p> <p>Recommendation 2025: Add new sites: Kartsakhi Lake; Paravani Lake. IN MIN: Madatapha (GE0000004); Bugdasheni (GE0000005); Kolkheti (GE0000006); Kobuleti (GE0000060); Ktsia-Tabatskuri (GE0000038); Kotsakhura (GE0000051).</p> <p>Comments from external experts: ERL: (810–8,200 bp); SDF: r, c, w. No change at Kartsakhi Lake and Paravani Lake. IN MIN: Madatapha (GE0000004); Bugdasheni (GE0000005); Kolkheti (GE0000006); Kobuleti (GE0000060); Ktsia-Tabatskuri (GE0000038); Chachuna (GE0000003) (irregular occurrence?). Add new site: Tbilisi Reservoir. According to EBBA2, the breeding distribution of the species in Georgia was in 11 squares. Has the breeding population coverage decreased since then?</p> <p>Comments from local experts: Agree. Do not include Chachuna; add Kotsakhura; do not add Tbilisi Lake.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A293 *Acrocephalus melanopogon*



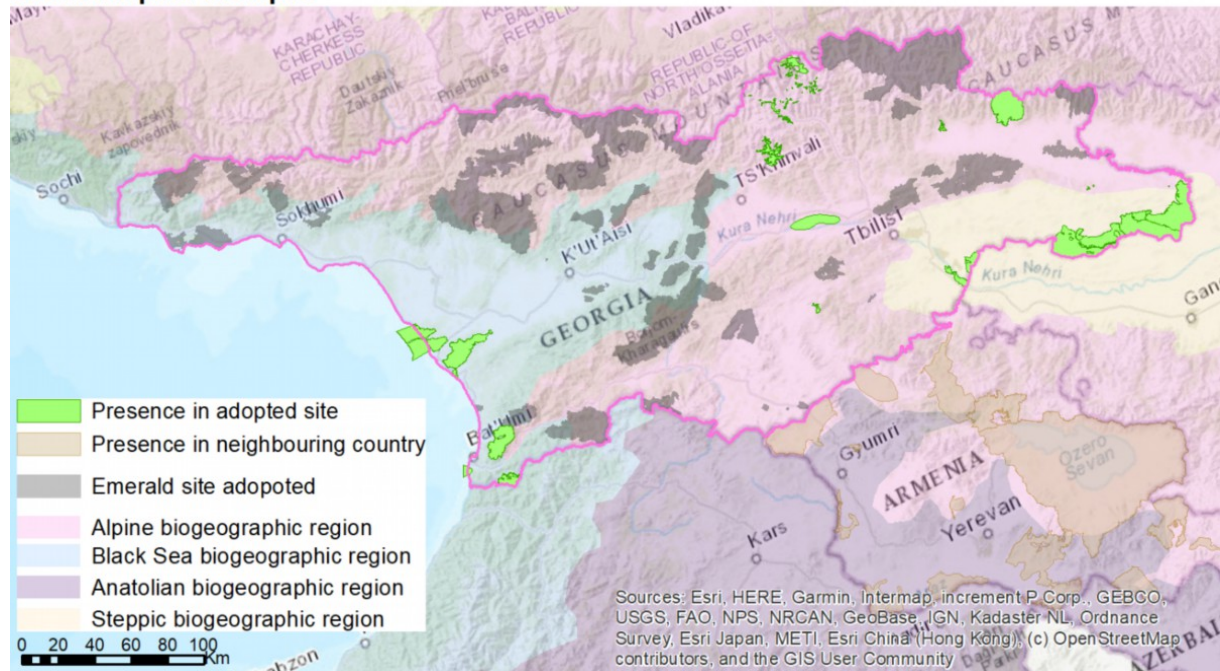
BGR	A397 <i>Tadorna ferruginea</i>
Not applicable	<p>Num. of sites: 9 (B:3, C:6)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Kartsahi. IN MIN: Bugdasheni</p> <p>Recommendation 2025: Add new site: Kartsakhi Lake. IN MIN: Bugdasheni (GE0000005); Kvernaki (GE0000046); Kotsakhura (GE0000051).</p> <p>Comments from external experts: ERL: (140–1,500 bp); SDF: r, p, w. Add new sites: Kartsakhi Lake; Paravani Lake. IN MIN: Bugdasheni (GE0000005); Kvernaki (GE0000046).</p> <p>Comments from local experts: Agree. Do not include Paravani; add Kotsakhura.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A397 *Tadorna ferruginea*



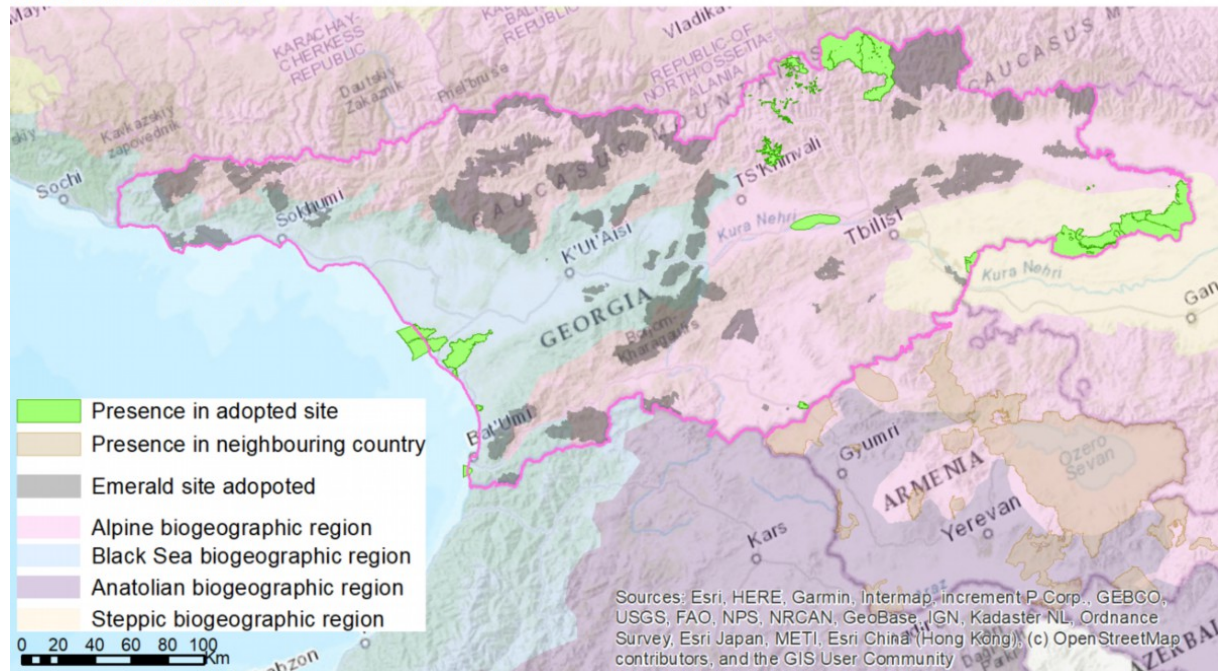
BGR	A402 <i>Accipiter brevipes</i>
Not applicable	<p>Num. of sites: 20 (A:2, B:3, C:15)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN/CD, IN MOD: Erusheti (evaluate borders). IN MIN: Alazani. CD: A to C population</p> <p>Recommendation 2025: IN MIN: Alazani (GE0000022). Remove sites: Kvareli-Shilda (GE0000029), Babaneuri (GE0000064), Kazbegi (GE0000009), Liakhvi (GE0000030), Machakhela (GE0000031), Dashbashis Kanioni (GE0000036), Artsivis Kheoba (GE0000035) and Shavi Mta (GE0000063). Further research needed on population status at localities.</p> <p>Comments from external experts: ERL: (10–90 bp); SDF: r, c, p. IN MIN: Erusheti (GE0000066); Alazani (GE0000022). No change in the population at Mtirala National Park (GE0000022)? According to EBBA2, the species breeds mainly in the east and northeast.</p> <p>Comments from local experts: Agree. Remove Kvareli-Shilda, Babaneuri, Kazbegi, Liakhvi, Machakhela, Dashbashis Kanioni, Artsivis Kheoba and Shavi Mta. Breeding occurs only in the east.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A402 Accipiter brevipes



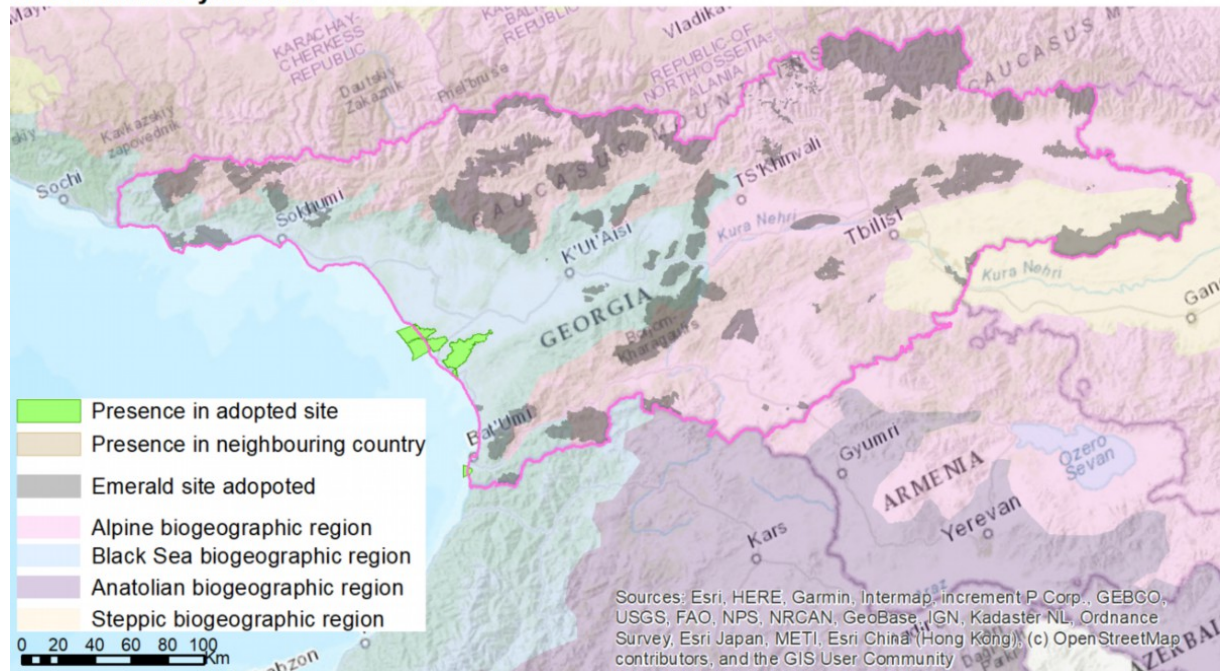
BGR	A403 <i>Buteo rufinus</i>
Not applicable	<p>Num. of sites: 16 (A:2, B:1, C:13)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Javakheti, Erusheti (evaluate borders). IN MIN: Dashbashis Kanioni, Bugdasheni</p> <p>Recommendation 2025: Add Javakheti National Park (not designated as an Emerald site) and extend Erusheti (GE0000066). IN MIN: Dashbashis Kanioni (GE0000036); Bugdasheni (Javakheti, GE0000005); Khanchali (Javakheti, GE0000017). Remove northern sites.</p> <p>Comments from external experts: ERL: (49–480 bp); SDF: c, p, w. No change at Javakheti National Park (not designated as an Emerald site) and the extension of Erusheti (GE0000066). IN MIN: Dashbashis Kanioni (GE0000036); Bugdasheni (Javakheti, GE0000005); Khanchali (Javakheti, GE0000017).</p> <p>Comments from local experts: Agree, remove northern sites.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A403 *Buteo rufinus*



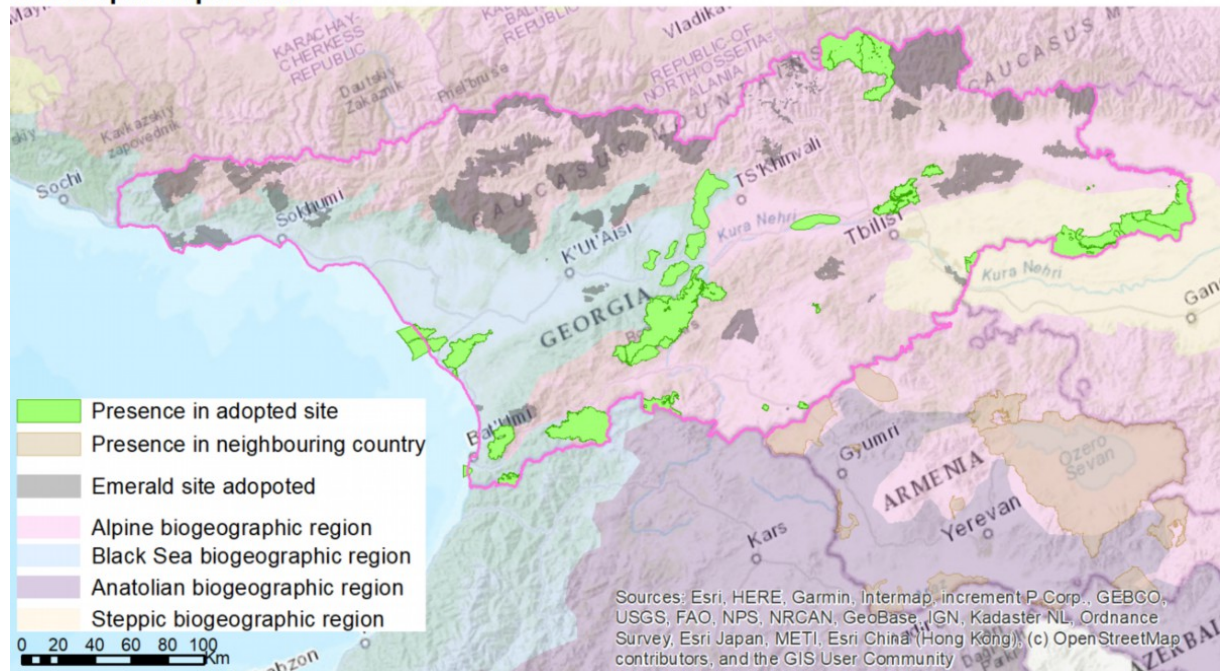
BGR	A464 <i>Puffinus yelkouan</i>
Not applicable	Num. of sites: 2 (A:1, C:1)
	BGR seminar 2021 conclusion: SR
	Recommendation 2025: Add new site: Enguri Delta.
	<p>Comments from external experts: ERL: (- bp); SDF: r, w; MR. Added Chorokhi Delta (GE0000054). <i>Puffinus yelkouan</i> is an endemic to the Mediterranean and Black seas. Its breeding colonies are restricted to the central and eastern part of the Mediterranean. At sea and outside of the breeding season birds move to forage mostly in winter in the Black Sea, including areas along the Georgian coast.</p>
	<p>Comments from local experts: The species occurs only in Kolkheti (GE0000006; already added) and Chorokhi Delta (GE0000054; already added) (remove SR). Among marine sites, it occurs in the Rioni and Enguri Deltas.</p>
	<p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A464 *Puffinus yelkouan*



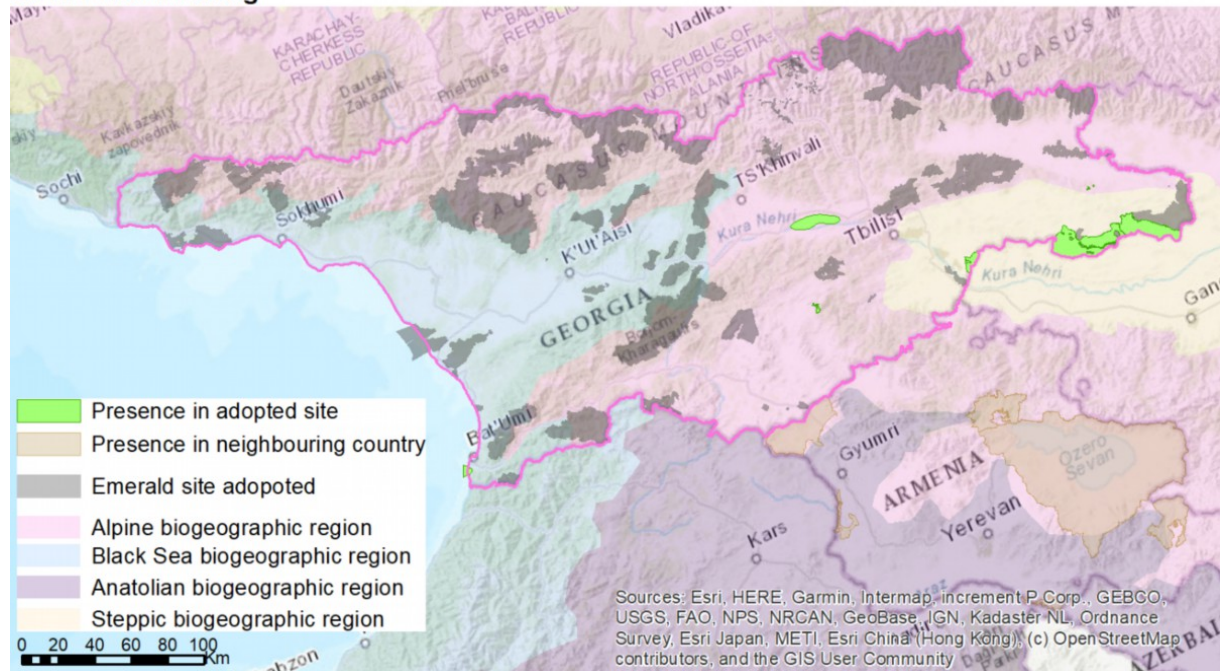
BGR	A509 <i>Aquila nipalensis</i>
Not applicable	<p>Num. of sites: 28 (A:1, B:10, C:17)</p> <p>BGR seminar 2021 conclusion: IN MOD, IN MOD: Javakheti extension, Erusheti (evaluate borders)</p> <p>Recommendation 2025: IN MIN: Bugdasheni (Javakheti, GE0000005); Gardabani (GE0000019). Add new site: Javakheti National Park. Reevaluate/extend Erusheti (GE0000066) boundaries. Remove sites: Arkhoti (GE0000002); Surami (GE0000034, GE0000049, GE0000050, GE0000052, GE0000053); Borjomi (GE0000010, GE0000056); Saguramo (GE0000047); Kistauri (GE0000055); Shavi Mta (GE0000063); Goderdzi (GE0000026).</p> <p>Comments from external experts: ERL: (- bp); SDF: c, p, w. IN MIN: Bugdasheni (Javakheti, GE0000005); Gardabani (GE0000019). Add new site: Javakheti National Park. Reevaluate/extend Erusheti (GE0000066) boundaries.</p> <p>Comments from local experts: Agree with the recommendation. The main area is southeastern Javakheti; add Erusheti and Trialeti. Remove Arkhoti, Surami, Borjomi, Tbilisi National Park, Shavi Mta, Goderdzi, and other sites in the north and central parts.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A509 *Aquila nipalensis*



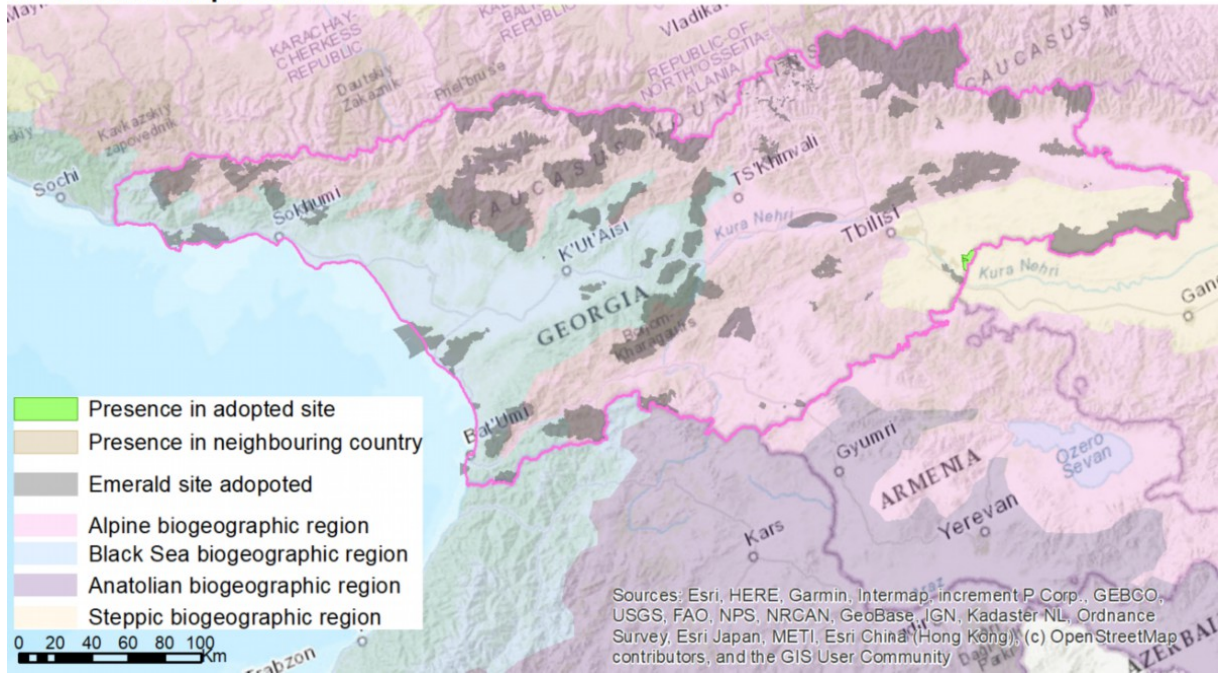
BGR	A511 <i>Falco cherrug</i>
Not applicable	<p>Num. of sites: 8 (C:8)</p> <p>BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: extension of Gareji, IN MIN: GE0000007, GE0000003, GE0000022</p> <p>Recommendation 2025: IN MIN: Vashlovani (S-E; GE0000007); Chachuna (S-E; GE0000003). Add new sites: middle lori; slightly extend Davit Gareja (south (S); GE0000037).</p> <p>Comments from external experts: ERL: (1–2 bp); SDF: c, p, w. IN MIN: Vashlovani (S-E; GE0000007); Chachuna (S-E; GE0000003); Alazani (east €; GE0000022). Add new sites: middle lori; slightly extend Davit Gareja (S; GE0000037).</p> <p>Comments from local experts: Agree, except Alazani.</p> <p>References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020</p>

A511 Falco cherrug



BGR	A533 <i>Oenanthe pleschanka</i>
Not applicable	Num. of sites: 1 (C:1)
	BGR seminar 2021 conclusion: IN MOD/IN MIN, IN MOD: Gareji extension; IN MIN: GE0000003, GE0000007, GE0000051.
	Recommendation 2025: Add to Davit Gareja; slightly extend the site (S; GE0000037). IN MIN: Vashlovani (S-E; GE0000007); Chachuna (S-E; GE0000003); Kotsakhura (S-E; GE0000051). Add new site: Vardzia Cave Monastery.
	Comments from external experts: ERL: (130–1,400 bp); SDF: r. Based on the number of breeding pairs in the ERL, one site provides insufficient coverage. Add to Davit Gareja; slightly extend the site (S; GE0000037). IN MIN: Vashlovani (S-E; GE0000007); Chachuna (S-E; GE0000003); Kotsakhura (S-E; GE0000051). Add new site: Vardzia Cave Monastery.
	Comments from local experts: Agree
	References: BirdLife International 2021; gbif.org; eBird 2025; observation.org; Keller et al. 2020

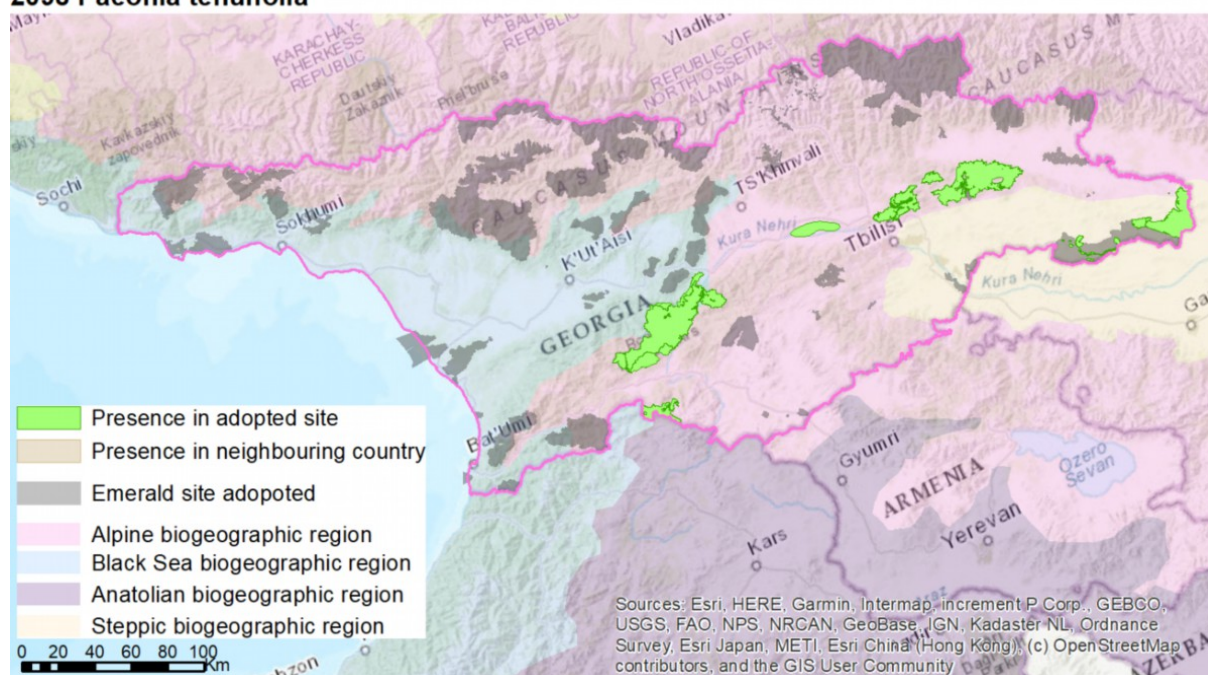
A533 Oenanthe pleschanka



Plants

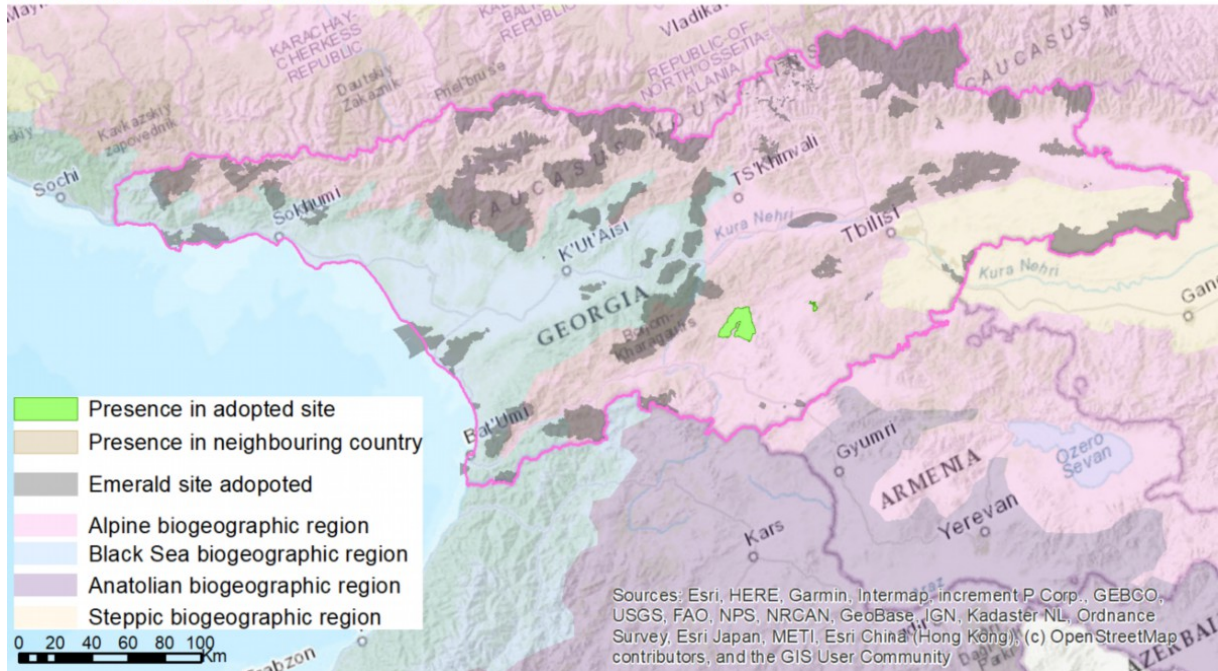
BGR	2098 <i>Paeonia tenuifolia</i>
ALP	Num. of sites: 7 (B:3, C:4)
	BGR seminar 2021 conclusion: IN MOD
	Recommendation 2025: Further research is needed. Check area between Dirbi and Abisi, near GE0000046 Kvernaki. Use the knowledge of a local expert.
	Comments from external experts: Potential localities exist between Dirbi and Abisi, near GE0000046 (Igoeti).
	Comments from local experts: Species distribution could be consulted with Katevan Batsatsashvili.
	Reference: GBIF 2025, https://www.gbif.org/species/7316533 .

2098 *Paeonia tenuifolia*



BGR	6216 <i>Hamatocaulis vernicosus</i>
ALP	Num. of sites: 2 (C:2)
	BGR seminar 2021 conclusion: IN MOD/IN MIN
	Recommendation 2025: Further research is needed.
	Comments from external experts: According to the Biodiversity Information System for Europe, the distribution range does not include Georgia.
	Comments from local experts: Species distribution could be consulted with Katevan Batsatsashvili.
	Reference: Biodiversity Information System for Europe. https://biodiversity.europa.eu/species/14002 .

6216 Hamatocaulis vernicosus



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

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

- Regarding marine and coastal habitats, we recommend reviewing the marine conclusions when the European Environment Agency (EEA) establishes links to the Red List of Marine Habitats factsheets, especially for those habitats where appropriate recommendations are available. These fact sheets contain potential distribution maps that can be useful.
- We propose to improve knowledge of habitat distribution, both by mobilizing the knowledge that Georgian scientists and other experts might have and by conducting fieldwork aimed at mapping the distribution of relevant habitats to address this gap.
- It would be beneficial if the mapping were supported by a comprehensive guidebook and a habitat manual describing Emerald habitat types; therefore, we propose preparing them. Georgia has a reasonable basis for preparing the Emerald habitat manual. Both publications on vegetation (for example, Batsatsashvili et al. 2020; Nakhutsrishvili 1999; Nakhutsrishvili 2013) and on Natura 2000 habitat types (Akhalkatsi 2019; Akhalkatsi and Tarkhnishvili 2012) can be helpful for this purpose.
- For some habitats with insufficient knowledge (SR), we propose to discuss the habitat's interpretation with Armenia because this might help, and at least, the coherence and continuation are ensured. Even for other habitats that are not IN MOD (for instance, H2.3), it is interesting to consider Armenia's interpretation of the habitat types.
- Some species and habitats belong to the MBLS, which is not maintained in the current Emerald Network for Georgia. The MBLS should be added to the Georgian Emerald Network. Species and habitats belonging to this region should be removed from the BLS zone there (for example, *Tursiops truncatus*, *Phocoena phocoena*, several habitats - A1.11 Mussel and/or barnacle communities, A2.2 Littoral sand and muddy sand, A2.5 Coastal saltmarshes and saline reedbeds, A3 Infralittoral rock and other hard substrata, and so on).
- There is a lack of marine data, and therefore, the designation of Marine Reserve was agreed upon at the last seminar in 2021, but no new sites were added after the seminar. Currently, only a few BLS sites are covered, partly also the marine part. The new marine sites should be added based on previous marine research of both habitats and species (SR).
- For birds (and other taxa), it would be appropriate to add lower and upper population-size limits to the SDF based on monitoring data. Subsequently, reassess the A–C (D) population status.
- For some terrestrial animals and plants, there are doubts about the presence of a permanent population in the country; therefore, further research is needed (SR on reference list). For example, *Vertigo moulinsiana*. Species have not been verified by experts; the presence of species in Georgia may not be certain. Species is listed in Wikipedia but not listed in the last IUCN Red List by Killeen et al. 2012.
- The occurrence of *Rhinolophus mehelyi* in the BLS zone is questionable. Currently, the species is listed in six sites with C populations, but the presence of *R. mehelyi* in Abkhazia remains doubtful (Benda et al. 2011). Also, according to the distribution map, the species does not currently occur in Georgia (UNEP/Eurobats, Puechmaille 2023); therefore, further research in the BLS and ALP regions is needed. Its presence in the Emerald sites should be confirmed by research. Historically, the species was recorded in the Buknari village (Kobuleti district) on Black Sea coast (Bukhnikashvili and Kandaurov 2004).
- Another problematic species is *Mustela lutreola*. Currently, in the BLS region species is listed in one site with the A population and in the ALP region in one site with the C population. Distribution: Abkhazia, but only old data from 1963–1982. Altitudes: 1,500–2,000 m (Bukhnikashvili and Kandaurov 2004). In the last IUCN Red List by Maran et al. (2016), the species is considered “Regionally extinct” in Georgia; therefore, additional research is needed.

- The assessments of population sizes are also problematic and can only be determined through intensive research and long-term monitoring. One of the problematic species in terms of population assessment is *Vormela peregusna*. The species is distributed in Southern Georgia, in altitudes of 500–2,000 m (Bukhnikashvili and Kandaurov 2004). Currently, the species is listed only in one site (GE0000004 Madatapha) with the C population for all of Georgia, which is insufficient. It means that, as of now, less than 2 percent (0–2 percent) of the population is covered by the Emerald site; thus, a population assessment is needed. The Georgian biodiversity database contains one occurrence of *V. peregusna* from locality Samtskhe-Javakheti (41.157832N, 43.791169E). Knowledge of its current distribution is insufficient (SR); research is needed.
- Monitoring of all Emerald habitats and species is desirable. This can determine population sizes and habitat area, their changes over time, and trends to which conservation management measures can then be linked (for example, available information suggests the population of *Acipenser sturio* in Georgia is disappearing, but detailed data are missing, and so on).

Participants of the self-evaluation workshop identified additional activities for further improvement of Georgia's Emerald Network:

- At the national level, there is still insufficient information, especially regarding habitats. The EU accession process will necessitate more comprehensive data collection; however, these efforts must be systematically supported through technical assistance and adequate funding to ensure full compliance with EU standards.
- The management plans are prepared for forest land, also outside protected areas. In other lands, there is no legislative background for preparing management plans. Based on management plans, the management for protecting habitats and species is to be adopted.
- It is expected that a new biodiversity law will be adopted. This is important, but building human capacities for Emerald is equally important.
- Local experts on invertebrates suggest reevaluating the distribution of *Leucorrhina pectoralis*, *Lycaena dispar*, *Callimorpha quadripunctata*, *Rosalia alpina*, *Cerambyx cerdo*, *Rhysodes sulcatus*, and adding *Maculinea nausithous* to the sites and the reference list. Information about their distribution is provided in the section 'Progress, current situation, gaps, and recommendations for the next round of biogeographical seminar'.

The main purpose of this document is to serve as a tool to help prepare Georgia for the next round of the biogeographical seminar and to support the further development of the Emerald Network. Following the self-evaluation workshop held in Tbilisi on November 11, 2025, authorities have indicated their intention to submit an updated database to the Bern Convention Secretariat as soon as possible. We strongly encourage this crucial submission, as it is vital for the Emerald Network's advancement.

4. ეროვნული ბურმუხტის ქსელის შემდგომი გაუმჯობესებისთვის საჭირო ღონისძიებები

შეფასებული სახეობებისა და ბუნებრივი ჰაბიტატების ანალიზის საფუძველზე შემუშავდა შემდეგი რეკომენდაციები:

- საზღვაო და სანაპირო ჰაბიტატებთან დაკავშირებით, რეკომენდირებულია საზღვაო ჰაბიტატების თაობაზე გაკეთებული დასკვნების გადახედვა მას შემდეგ, რაც ევროპის გარემოს დაცვის სააგენტო მოახდენს მათ დაკავშირებას საზღვაო ჰაბიტატების წითელი ნუსხის საინფორმაციო ფურცლებთან; განსაკუთრებით იმ ჰაბიტატებისთვის, რომელთათვისაც შემუშავებულია რეკომენდაციები. აღნიშნული საინფორმაციო ფურცლები შეიცავს სავარაუდო გავრცელების რუკებს, რაც შეიძლება სასარგებლო იყოს.
- სასურველია ჰაბიტატების გავრცელების შესახებ ცოდნის გაღრმავება როგორც ქართველი მეცნიერებისა და სხვა ექსპერტების ხელთ არსებული ცოდნის თავმოყრის, ისე სავლელ კვლევების ჩატარების გზით, იმისათვის, რომ მოხდეს ბუნებრივი ჰაბიტატების გავრცელების არეალების რუკაზე დატანა ამ საკითხში მეტი სიზუსტის შესატანად.
- სასარგებლო იქნება ჰაბიტატების რუკაზე დატანის პარალელურად შეიქმნას ამომწურავი გზამკვლევი და ჰაბიტატების სახელმძღვანელო, რომელიც არწერს ბურმუხტის ქსელის ჰაბიტატების ტიპებს. საქართველოში ხელმისაწვდომია პუბლიკაციები, რომლებიც შესაძლოა საფუძვლად დაედოს ბურმუხტის ქსელის ჰაბიტატების სახელმძღვანელოს მომზადებას. ამისათვის შესაძლოა გამოყენებული იქნას როგორც მცენარეული საფარის შესახებ გამოქვეყნებული ნაშრომები (მაგ., გ. ნახუცრიშვილი, 2013; ქ. ბაცაცაშვილი და სხვ., 2020), ასევე Natura 2000-ის ჰაბიტატების ტიპებზე არსებული პუბლიკაციები (მ. ახალკაცი და დ. თარხნიშვილი, 2012; მ. ახალკაცი, 2019).
- ზოგიერთი იმგვარი ბუნებრივი ჰაბიტატისთვის, რომლის შესახებ არსებული ცოდნა არასაკმარისია, სასურველია ჰაბიტატის განმარტების განხილვა სომხურ მხარესთან ერთად, რადგან ეს შესაძლოა სასარგებლო გამოდგეს, სულ მცირედ, ერთიანი მიდგომებისა და თანხვედრილობის უზრუნველსაყოფად. სომხეთის მიერ ჰაბიტატების ტიპების ინტერპრეტაციის გათვალისწინება მიზანშეწონილია იმ ჰაბიტატების შემთხვევაშიც კი, რომლებიც IN MOD⁵ კატეგორის არ განეკუთვნებიან (მაგალითად, H2.3).
- ზოგიერთი სახეობა და ბუნებრივი ჰაბიტატი მიეკუთვნება შავი ზღვის საზღვაო ბიოგეოგრაფიულ რეგიონს (MBLS), რომელიც ამჟამად საქართველოს ბურმუხტის ქსელში წარმოდგენილი არ არის. MBLS ბიოგეოგრაფიული რეგიონი უნდა დაემატოს საქართველოს ბურმუხტის ქსელს და ამ რეგიონს სახეობები და ჰაბიტატები ამოღებული უნდა იქნეს საქართველოს ბურმუხტის ქსელის BLS ბონიდან (მაგ., *Tursiops truncatus*, *Phocoena phocoena*; ასევე რამდენიმე ჰაბიტატი: A1.11 Mussel and/or barnacle communities (მიდიებისა და/ან ბალანუსების თანასამოგადოებები), A2.2 Littoral sand and muddy sand

⁵ IN MOD – 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 - ჰაბიტატი ან სახეობა დაცულია ბურმუხტის ქსელით, მაგრამ დაცულობა არასაკმარისია და ჰაბიტატის ან სახეობის ჯვრითი დაცვისთვის საჭიროა ბურმუხტის ქსელში მეტი ტერიტორიების შეტანა.

(ლიტორალური ქვიშა და ტალახიანი ქვიშა), A2.5 Coastal saltmarshes and saline reedbeds (სანაპირო მარილიანი ჭაობები და მარილიანი ლერწამიანები), A3 Infralittoral rock and other hard substrata (ინფრალიტორალური კლდეები და სხვა მყარი სუბსტრატები) და სხვ.).

- საზღვაო სივრცის შესახებ არსებული მონაცემები არასაკმარისია. ამიტომაც 2021 წელს ჩატარებულ ბოლო ბიოგეოგრაფიულ სემინარზე მისი მონაწილეები შეთანხმდნენ, რომ უნდა შეიქმნას საზღვაო ნაკრძალი. თუმცა, სემინარის შემდეგ არც ერთი ახალი ტერიტორია არ დამატებულა. ამჟამად ქსელით დაფარულია BLS ზონის მხოლოდ რამდენიმე ტერიტორია, რომლებიც ნაწილობრივ საზღვაო სივრცესაც მოიცავს. საჭიროა ზურმუხტის ქსელში ახალი საზღვაო ტერიტორიების (SR⁶) შეტანა ჰაბიტატებისა და სახეობების შესახებ ადრე ჩატარებული კვლევების შედეგებზე დაყრდნობით.
- ფრინველებისთვის (და სხვა ტაქსონებისთვის) მიზანშეწონილია მონიტორინგის მონაცემებზე დაყრდნობით მონაცემთა სტანდარტულ ფორმას⁷ (SDF) დაემატოს პოპულაციის რიცხოვნობის ქვედა და ზედა ზღვრები. ამის შემდეგ კი ხელახლა შეფასდეს პოპულაციის სტატუსი A–C (D) კატეგორიების მიხედვით.
- საქართველოში ხმელეთის ზოგიერთი ცხოველისა და მცენარის მუდმივი (სტაბილური) პოპულაციის არსებობა საეჭვოა. შესაბამისად, საჭიროა დამატებითი კვლევა (საცნობარო სიაში შეტანილი სამეცნიერო ნაკრძალი). ასეთ სახეობებს განეკუთვნება, მაგალითად, *Vertigo moulinsiana*. იგი ექსპერტების მიერ დადასტურებული არ არის. ამიტომ საქართველოში მისი არსებობა შეიძლება გადაჭრით ვერ დგინდებოდეს (ეს სახეობა, საქართველოზე მითითებით, შეტანილია 2006 წლის ბუნების კონსერვაციის საერთაშორისო კავშირის⁸ მიერ დადგენილ გადაშენების პირას მყოფი სახეობების წითელ ნუსხაში შტეფეკის პუბლიკაციაზე (J. Steffek, 1996) დაყრდნობით და იგივე ინფორმაცია იძებნება Wikipedia-ში; თუმცა, ბუნების კონსერვაციის საერთაშორისო კავშირის წითელი ნუსხის ბოლო ვერსიაში (I.J. Killeen et al., 2012) იგი აღარ არის შეტანილი).
- *Rhinolophus mehelyi*-ის არსებობა BLS ზონაში საეჭვოა. ამჟამად სახეობა ექვს ტერიტორიაზეა მითითებული, პოპულაციის კატეგორიით C. თუმცა აფხაზეთში *R. mehelyi*-ის არსებობა კვლავ ეჭვქვეშ დგას (P. Benda et al., 2011). ასევე, გავრცელების რუკის მიხედვით, სახეობა ამჟამად საქართველოში არ არის დაფიქსირებული (UNEP/Eurobats; Puechmaile, 2023); შესაბამისად, საჭიროა დამატებითი კვლევა BLS და ALP რეგიონებში. ზურმუხტის ქსელის ტერიტორიებზე მისი არსებობა კვლევით უნდა დადასტურდეს. ისტორიული მონაცემებით სახეობა დაფიქსირდა სოფელ ბუკნარში (ქობულეთის მუნიციპალიტეტი), შავი ზღვის სანაპიროზე (ა. ბუხნიკაშვილი და ა. ყანდაუროვი, 2004).
- კიდევ ერთი პრობლემური სახეობაა *Mustela lutreola*. ამჟამად, BLS რეგიონში სახეობა 1 ტერიტორიაზეა მითითებული პოპულაციის კატეგორიით A, ხოლო ALP რეგიონში - 1 ტერიტორიაზე პოპულაციის კატეგორიით C. გავრცელებულია აფხაზეთში. თუმცა, მონაცემები მხოლოდ ძველ პერიოდს (1963–1982 წლები) მოიცავს. გავრცელების არეალის სიმაღლე ზღვის დონიდან 1 500–2 000 მეტრია (ა. ბუხნიკაშვილი და ა. ყანდაუროვი, 2004). ბუნების კონსერვაციის საერთაშორისო კავშირის წითელი ნუსხის ბოლო გამოცემაში (T. Maran et al., 2016) მიჩნეულია, რომ საქართველოში ეს სახეობა რეგიონულად გადაშენებულია. შესაბამისად, საჭიროა დამატებითი კვლევა.

⁶ SR - scientific reserve - სამეცნიერო ნაკრძალი

⁷ SDF – standard data form

⁸ IUCN – The International Union for Conservation of Nature

- პოპულაციების რიცხოვნობის შეფასება ასევე პრობლემურია და მისი დადგენა მხოლოდ ინტენსიური კვლევისა და გრძელვადიანი მონიტორინგის გზით არის შესაძლებელი. პოპულაციის შეფასების თვალსაზრისით ერთ-ერთი პრობლემური სახეობაა *Vormela peregusna*. სახეობა გავრცელებულია სამხრეთ საქართველოში, ზღვის დონიდან 500–2 000 მ სიმაღლეებზე (ა. ბუხნიკაშვილი და ა. ყანდაუროვი, 2004). ამჟამად საქართველოში სახეობა მითითებულია მხოლოდ ერთ ტერიტორიაზე (GE0000004 მადატაფა) პოპულაციის კატეგორიით C, რაც არასაკმარისია. ეს ნიშნავს, რომ ამ ეტაპზე ზურმუხტის ქსელის ტერიტორიით დაფარულია პოპულაციის 2%-ზე ნაკლები (0–2%), შესაბამისად, საჭიროა პოპულაციის შეფასება. საქართველოს ბიომრავალფეროვნების მონაცემთა ბაზაში მითითებულია, რომ *Vormela peregusna* მხოლოდ ერთხელაა დაფიქსირებული სამცხე-ჯავახეთის მიმდებარედ (41.157832N, 43.791169E). მისი ამჟამინდელი გავრცელების შესახებ ცოდნა არასაკმარისია (SR); საჭიროა დამატებითი კვლევა.
- სასურველია ზურმუხტის ქსელის ყველა ბუნებრივი ჰაბიტატისა და სახეობის მონიტორინგი. ეს შესაძლებელს გახდის პოპულაციების რიცხოვნობისა და ჰაბიტატების ფართობის დადგენას და დროში მათი ცვლილების ტენდენციების შეფასებას. ამ მონაცემთა საფუძველზე შეიძლება დაიგეგმოს და განხორციელდეს კონსერვაციის მართვის ღონისძიებები (მაგ., არსებული ინფორმაციით, საქართველოში *Acipenser sturio*-ის პოპულაცია ქრება, თუმცა დეტალური მონაცემები არ არის ხელმისაწვდომი და ა.შ.).

თვითშეფასების სამუშაო შეხვედრის მონაწილეებმა საქართველოს ზურმუხტის ქსელის გაუმჯობესებისთვის შემდეგი დამატებითი ღონისძიებები დასახეს:

- ეროვნულ დონეზე ინფორმაცია კვლავ არასაკმარისია, განსაკუთრებით ჰაბიტატების შესახებ. ევროკავშირში განვერვიანების პროცესი მოითხოვს უფრო სრულყოფილი მონაცემების შეგროვებას. ამ ძალისხმევას თან უნდა ახლდეს სისტემური მხარდაჭერა ტექნიკური დახმარებისა და ადეკვატური დაფინანსების სახით, რათა უზრუნველყოფილი იქნას ევროკავშირის სტანდარტებთან სრული შესაბამისობა.
- მართვის გეგმები მზადდება ტყიანი ფართობებისთვის, მათ შორის დაცული ტერიტორიების ფარგლებს გარეთაც. მინის სხვა კატეგორიებისთვის მართვის გეგმების მოსამზადებლად საკანონმდებლო საფუძველი არ არსებობს. ჰაბიტატებისა და სახეობების დაცვისა და მართვის ღონისძიებები კი სწორედ მართვის გეგმებზე დაყრდნობით უნდა მუშავდებოდეს.
- მოსალოდნელია ბიომრავალფეროვნების შესახებ ახალი კანონის მიღება. ეს მნიშვნელოვანია, თუმცა არანაკლებ მნიშვნელოვანია ზურმუხტის ქსელის მართვისთვის ადამიანური რესურსებისა და ინსტიტუციური შესაძლებლობების გაძლიერება.
- უხერხემლო ცხოველებზე მომუშავე ადგილობრივი ექსპერტების რჩევაა ხელახლა შეფასდეს *Leucorrhina pectoralis*, *Lycaena dispar*, *Callimorpha quadripunctata*, *Rosalia alpina*, *Cerambyx cerdo* და *Rhysodes sulcatus*-ის გავრცელება, ხოლო *Maculinea nausithous* დაემატოს შესაბამის ტერიტორია(ებ)ს და რეფერალურ სიას. ამ სახეობების გავრცელების შესახებ ინფორმაცია მოცემულია დოკუმენტის მე-3 თავში სათაურით „გადადგმული ნაბიჯები, არსებული მდგომარეობა, ხარვეზები და რეკომენდაციები შემდეგი ბიოგეოგრაფიული სემინარისთვის“.

წინამდებარე დოკუმენტის დანიშნულებაა იყოს პრაქტიკული ინსტრუმენტი, რომელიც დაეხმარება საქართველოს შემდეგი ბიოგეოგრაფიული სემინარისთვის მომზადებაში

და ხელს შეუწყობს ზურმუხტის ქსელის განვითარებას. 2025 წლის 11 ნოემბერს თბილისში გამართული თვითშეფასების სამუშაო შეხვედრის შემდეგ პასუხისმგებელმა პირებმა გამოხატეს მზაობა განახლებული მონაცემთა ბაზა შესაძლებლობისამებრ სწრაფად წარუდგინონ ბერნის კონვენციის სამდივნოს. ეს წარდგენა დიდად მისასალმებელია და არსებითად წაადგება ზურმუხტის ქსელის შემდგომ განვითარებას.

References

- Akhalkatsi, M and D. Tarkhishvili. 2012. *Habitats of Natura2000 in Georgia*. Tbilisi: Publisher of Plant Genetic Resources Division of Botany Institute.
- Akhalkatsi, M. 2019. *Plant Species of Natura 2000 Habitats in Georgia*. Tbilisi: Publisher of Plant Genetic Resources Division of Botany Institute. <https://doi.org/10.1117/978-3-319-25637-8>.
- Batsatsashvili, K., Nersesyan, A., Mehdiyeva, N., Murtazaliev, R., Eminağaoğlu, and Ö. Kavousi, K., 2020. Flora and vegetation of the Caucasus. – In: Zazanashvili, N., Garforth, M., Bitsadze, m: (eds.): Ecoregional Conservation Plan for the Caucasus, 2020 Edition: Supplementary Reports. WWF, KfW, Tbilisi: 106-118.
- Benda, P., V. Hanák, and J. Červený. 2011. “Bats (Mammalia: Chiroptera) of the Eastern Mediterranean and Middle East. Part 9. Bats from Transcaucasia and West Turkestan in Collection of the National Museum, Prague.” *Acta Soc. Zool. Bohem* 75: 159–222.
- BirdLife International 2021. “European Red List of Birds 2021.” Brussels: BirdLife International and European Commission, Directorate-General for Environment. Accessed February 20, 2025. <https://data.europa.eu/doi/10.2779/959320>.
- Bukhnikashvili, A. K., and A. Kandaurov. 2004. “The Annotated List of Mammals of Georgia.” Accessed February 21, 2025. https://www.academia.edu/13409158/The_Annotated_List_of_Mammals_of_Georgia.
- Chertoprud, E. S., et al. 2020. “Aquatic Macro-Invertebrate Fauna of Caves of Samegrelo-Zemo Svaneti and Imereti, Western Georgia, Caucasus: Troglotibiotic and Epigeal Species Complexes.” *Зоологический журнал* 99 (3): 275–289. <https://doi.org/10.31857/S0044513420030058>.
- Denk, T., N. Frotzler, and N. Davitashvili. 2001. “Vegetational Patterns and Distribution of Relict Taxa in Humid Temperate Forests and Wetlands of Georgia (Transcaucasia).” *Biological Journal of the Linnean Society* 72 (2): 287–332. <https://doi.org/10.1006/bjil.2000.0502>.
- EU4Environment. 2024. “Guidelines for Managing Forest Habitats on Georgia’s Emerald Sites.” Accessed February 21, 2025. <https://www.eu4environment.org/app/uploads/2024/07/GE-Emerald-Forest-Mgmt-Guidelines-final.pdf>.
- Galvez, R. A., L. Gavashelishvili, and Z. Javakhishvili. 2005. *Raptors and Owls of Georgia*. Martin Jacoby.
- Georgian Journal. 2025. “Cave Cities to Visit in Georgia.” Accessed February 21, 2025. <https://georgianjournal.ge/discover-georgia/35476-cave-cities-to-visit-in-georgia.html>.
- Kalníková, V., et al. 2020. “Natural Habitat and Vegetation Types of River Gravel Bars in the Caucasus Mountains, Georgia.” *Folia Geobotanica* 55 (1): 41–62. <https://doi.org/10.1007/s12224-020-09364-6>.
- Kavgacı, A., et al. 2023. “Classification of Forest and Shrubland Vegetation in Central and Eastern Euxine Turkey and SW Georgia.” *Applied Vegetation Science* 26 (4): e12753. <https://doi.org/10.1111/avsc.12753>.
- Keller, V., et al. 2020. “European Breeding Bird Atlas 2: Distribution, Abundance and Change.”
- Japoshvili, B, Mumladze, L., Bikashvili, A., Gioshvili, M., 2015. Major benthic animal groups in Black Sea, near to Kvartati village (Georgia). – In: Tzvetkov, P., Todorov, P. (eds.): Common borders. Common solutions. Research and Restoration of the Essential Filters of the Sea – REEFS Project Research Digest. Bulgarian Biodiversity Foundation, Sofia: 33-34. https://www.researchgate.net/publication/313838284_Research_and_Restoration_of_the_Essential_Filters_of_the_Sea_-_REEFS_Project_Research_Digest
- Killeen, I., Moorkens, E. and Seddon, M. 2012. “Vertigo moulinsiana”. The IUCN Red List of Threatened Species 2012: e. T22939A128409258. <http://dx.doi.org/10.2305/IUCN.UK.2012-1.RLTS.T22939A128409258.en>
- Kolman, R. 2011. “European Sturgeon, *Acipenser sturio* in Georgia.” In *Biology and Conservation of the European Sturgeon*, edited by P. Williot, E. Rochard, N. Desse-Berset, F. Kirschbaum, and

- J. Gessner, 243–250. Berlin, Heidelberg: Springer. https://doi.org/10.1007/978-3-642-20611-5_17.
- Loy, A., et al. 2024. "Eurasian Otter *Lutra lutra* (Linnaeus, 1758)." In *Handbook of the Mammals of Europe*, edited by K. Hackländer and F. E. Zacos, 1–36. Cham: Springer. https://doi.org/10.1007/978-3-319-65038-8_127-1.
- Mamcarz, A., R. Kujawa, and D. Kucharczyk. 2008. *Boleń (Aspius aspius Linnaeus, 1758) Monografia*. <https://doi.org/10.13140/2.1.2048.5927>.
- Maran, T., et al. 2016. "Mustela lutreola: The IUCN Red List of Threatened Species 2016." <https://doi.org/10.2305/IUCN.UK.2016-1.RLTS.T14018A45199861.en>.
- Nakhutsrishvili, G. 1999. *The Vegetation of Georgia (Caucasus)*. Springer.
- Nakhutsrishvili, G. 2013. *The Vegetation of Georgia (South Caucasus)*. Springer. <https://doi.org/10.1007/978-3-642-29915-5>.
- Nakhutsrishvili, G., Abdaladze, O., Batsatsashvili, K., Spehn, E., and Körner, C. 2017. *Plant Diversity in the Central Great Caucasus: A Quantitative Assessment*. Springer. <https://doi.org/10.1007/978-3-319-55777-9>.
- Noroozi, J., ed. 2020. *Plant Biogeography and Vegetation of High Mountains of Central and South-West Asia*. Springer. <https://doi.org/10.1007/978-3-030-45212-4>.
- Novák, P., et al. 2020. "Ecology and Vegetation Types of Oak-Hornbeam and Ravine Forests of the Eastern Greater Caucasus, Georgia." *Folia Geobotanica* 55 (4): 333–349. <https://doi.org/10.1007/s12224-020-09386-0>.
- Novák, P., et al. 2021. "Carpinus orientalis Forests in Georgian Colchis." *Tuexenia* 41: 37–51. <https://doi.org/10.14471/2021.41.012>.
- Novák, P., et al. 2023. "Alluvial Alder Forests of the Greater Caucasus, Georgia." *Tuexenia* 43: 9–36. <https://doi.org/10.14471/2023.43.003>.
- Puechmaille, S. J. 2023. "Mehely's Horseshoe Bat *Rhinolophus mehelyi*." In *Chiroptera*, edited by D. Russo, 909–936. Cham: Springer. https://doi.org/10.1007/978-3-030-44029-9_42.
- Ransome, R. 2023. "Greater Horseshoe Bat *Rhinolophus ferrumequinum*." In *Chiroptera*, edited by D. Russo, 839–874. Cham: Springer. https://doi.org/10.1007/978-3-030-44029-9_38.
- Romanov, R. E., et al. 2023. "Charophytes from Dagestan Aquatic Habitats." *Environments* 10 (9): 153.
- Schofield, H., G. Reiter, and S. E. Dool. 2023. "Lesser Horseshoe Bat *Rhinolophus hipposideros*." In *Chiroptera*, edited by D. Russo, 875–908. Cham: Springer. https://doi.org/10.1007/978-3-030-44029-9_39.
- Shvelidze, T. 2019. "Conservation Actions of Cetaceans in Georgian Territorial Waters." Accessed February 4, 2026. https://www.conservationleadershipprogramme.org/wp-content/uploads/2024/12/CLP_FinalReport_CetaceansinGeorgia_Shvelidze_2017.pdf
- IUCN (International Union for Conservation of Nature). 2025. "The IUCN Red List of Threatened Species." Accessed February 21, 2025. <https://www.iucnredlist.org/en>.
- Tielidze, L. 2018. *Geomorphology of Georgia*. Springer.
- Tielidze, L., et al. 2019. "Supraglacial Debris-Cover Changes in the Caucasus Mountains." *The Cryosphere Discussions* 14 (2): 585–598. <https://doi.org/10.5194/tc-2018-259>.
- Tielidze, L., et al. 2022. "Strong Acceleration of Glacier Area Loss in the Greater Caucasus between 2000 and 2020." *The Cryosphere* 16 (2): 489–504. <https://doi.org/10.5194/tc-16-489-2022>.
- Yoxon, P., B. Yoxon, and P. Org. 2019. "Eurasian Otter (*Lutra lutra*): A Review of the Current World Status." *Journal of the International Otter Survival Fund*: 53–73.