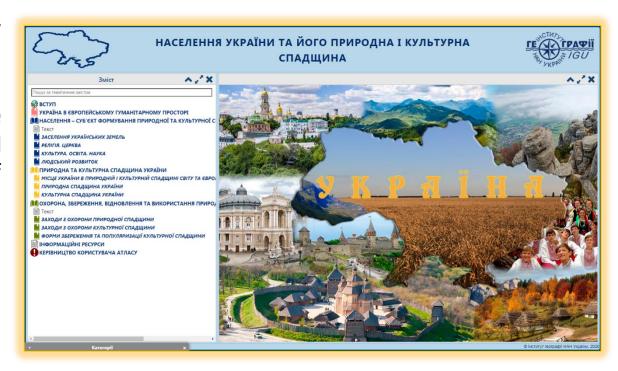
INTERACTIVE ATLAS MAPPING OF UKRAINE'S POPULATION AND ITS NATURAL AND CULTURAL HERITAGE

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Atlas "Population of Ukraine and its natural and cultural heritage"

The Institute of Geography of NASU has created an interactive atlas "Population of Ukraine and its natural and cultural heritage". The mapping of complex and long-term processes of mutual influence between the population and its natural and cultural heritage has been carried out in it.



The scientific concept of the Atlas, classification and systematisation of research objects, justification and use of geoinformation mapping methods were developed. Conceptually, the developers relied on the experience gained during the creation of the

National Atlas of Ukraine (2007).

Atlas "Population of Ukraine and its natural and cultural heritage"

- The main task of the creation of the Atlas is to provide up-to-date information and knowledge about the historical stages of the development of the population of Ukraine as a subject of the formation of natural and cultural heritage and to reveal the regularities and peculiarities of its formation, type, distribution and functioning
- □ The result of the work is the creation of the first interactive atlas on this subject, which contains about 5 gigabytes of various information, which can be focused on 97 vector maps, texts, photos and tables
- The main technological solutions are the use of the framework of Atlas solutions containing 8 patterns and the framework of the Atlas architecture, which combined all the patterns



The Atlas consists of separate chapters which are:

- Introduction
- Ukraine in the European humanitarian space
- The population of Ukraine as a subject of natural and cultural heritage formation (from the Paleolithic to 2020)
 - Settling of Ukrainian lands
 - Religion, church
 - Culture, education, science
 - Human development
- Natural and cultural heritage
 - Ukraine's place in world heritage
 - Natural heritage of Ukraine
 - Cultural heritage of Ukraine
- Protection, preservation, restoration and use of natural and cultural heritage
 - Heritage protection measures
 - Forms of preservation and popularization of heritage
- Information resources
- Atlas user guide

→ 57 maps

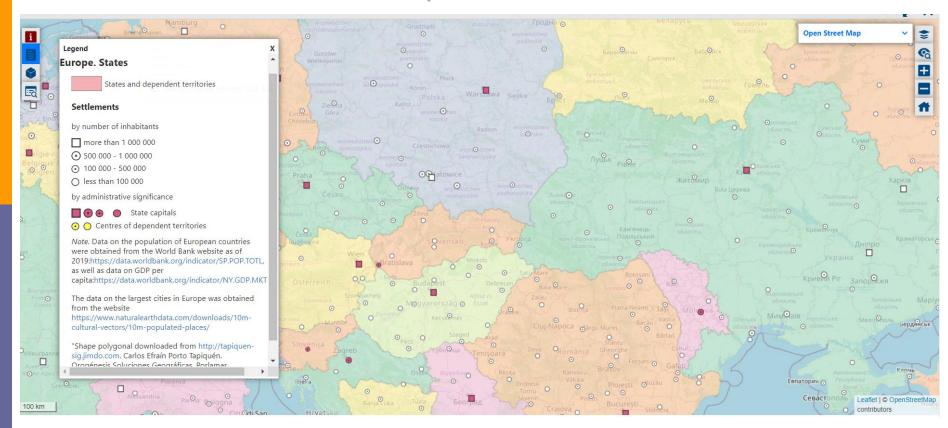
3 maps

→ 28 maps

— 9 maps

The thematic block "Ukraine in the European humanitarian space" is filled with maps characterising the place of Ukraine in the geographical, political and humanitarian space of Europe. The latter reflects the position of the Ukrainian nation among other European nations in terms of its basic characteristics (national, linguistic, religious composition), the accumulation of objects of cultural, historical and natural value, and the development of cultural ties.

Examples of maps **Europe. States**



The thematic block "Population as the subject of formation of natural and cultural heritage" contains maps that reflect the peculiarities of settlement of the territory of modern Ukraine by different ethnic groups in different historical periods and characteristics of the population as the bearers of values that motivate them to create - the basis for the creation of their humanitarian space - faith, morality, traditions, customs, culture.

The maps of the block are divided into thematic sections:

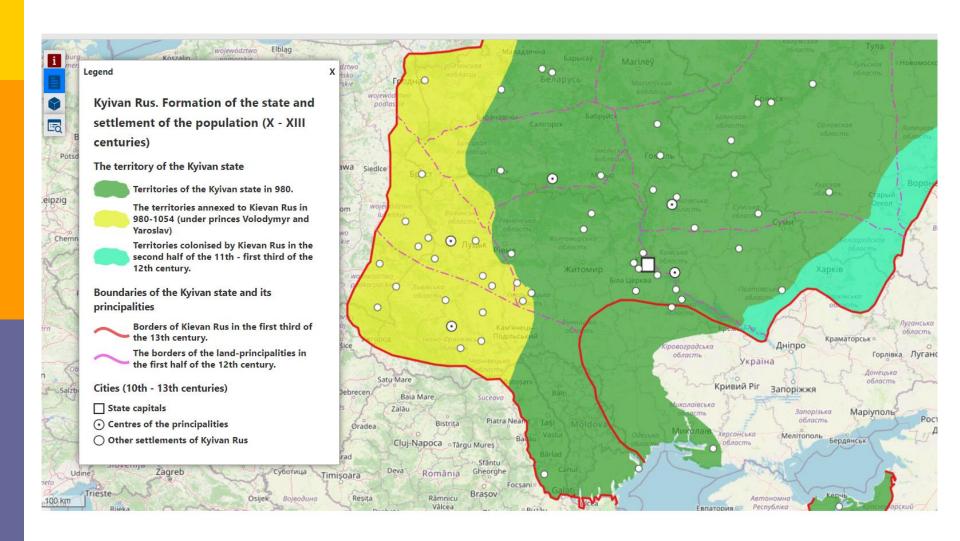
- Settlement of Ukrainian lands 38 maps;
- 🗫 Religion. Church 10 maps;
- Culture. Education. Science 7 maps;
- Human Development 2 maps.

Each section contains maps characterising the above situations in different periods of historical development of the territory of modern Ukraine, namely:

- Antiquity,
- Middle Ages and Early Modern Times,
- Modern Times
- Modern and Contemporary Times.

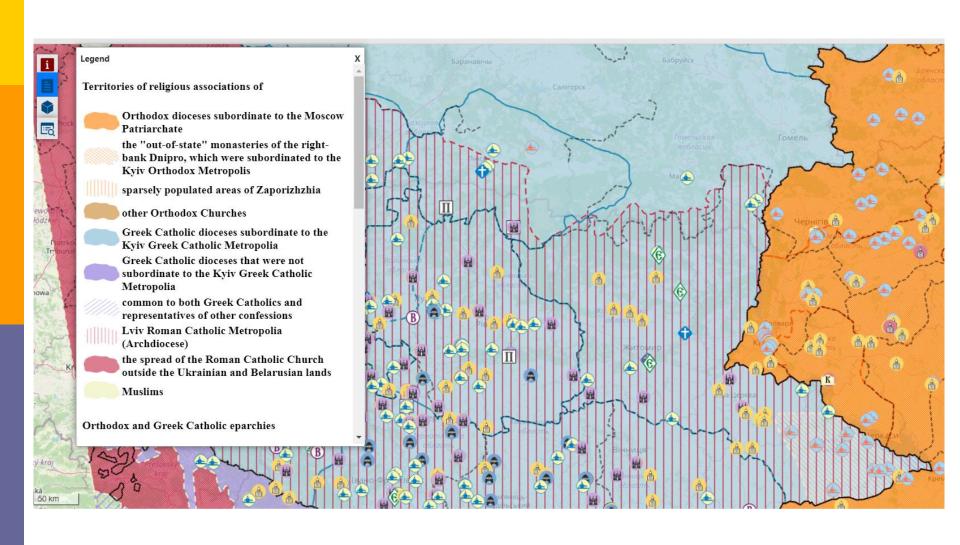
Examples of maps

Kyivan Rus. State formation and population settlement (X-XIII centuries)

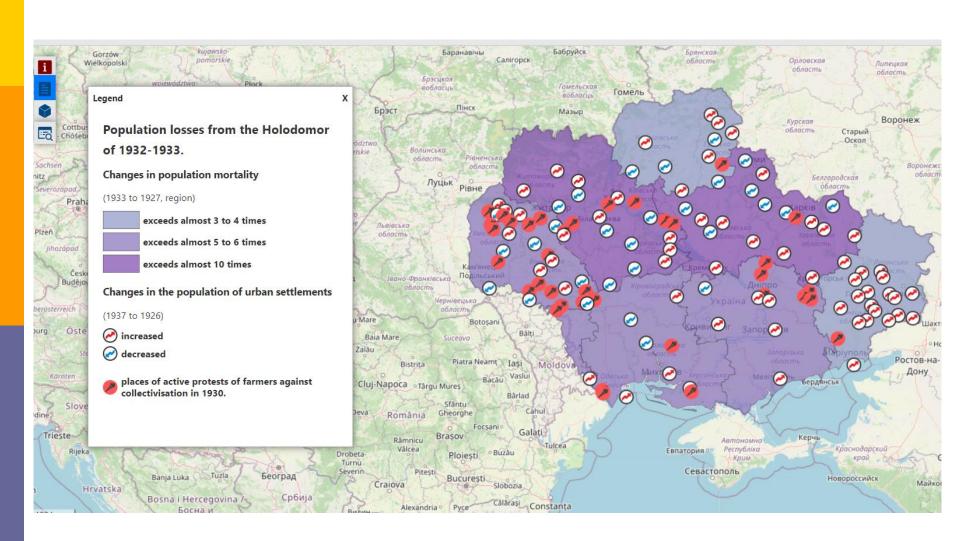


Examples of maps

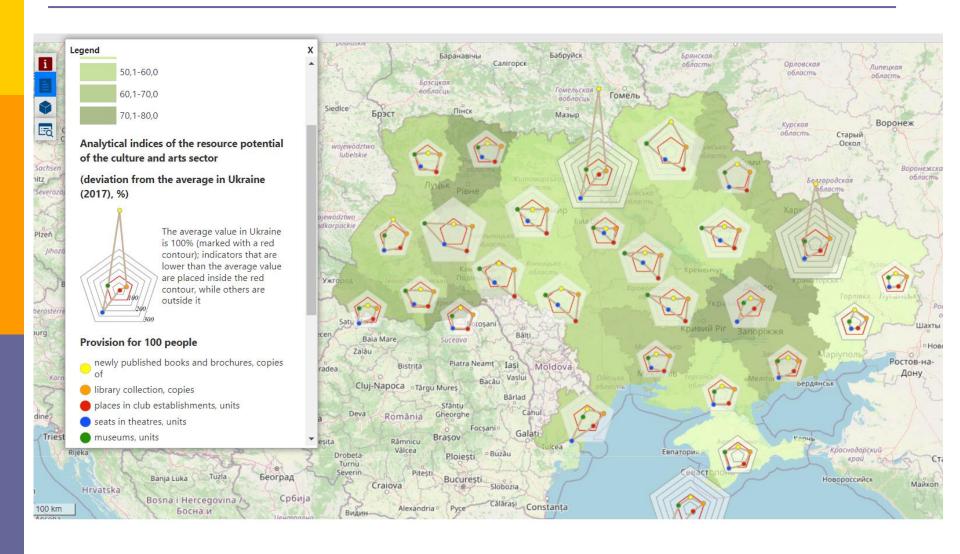
The Ukrainian Church in the second half of the 17th and in 18th centuries.



Examples of maps Population losses due to the Holodomor of 1932-1933



Examples of maps Culture in the XXI century



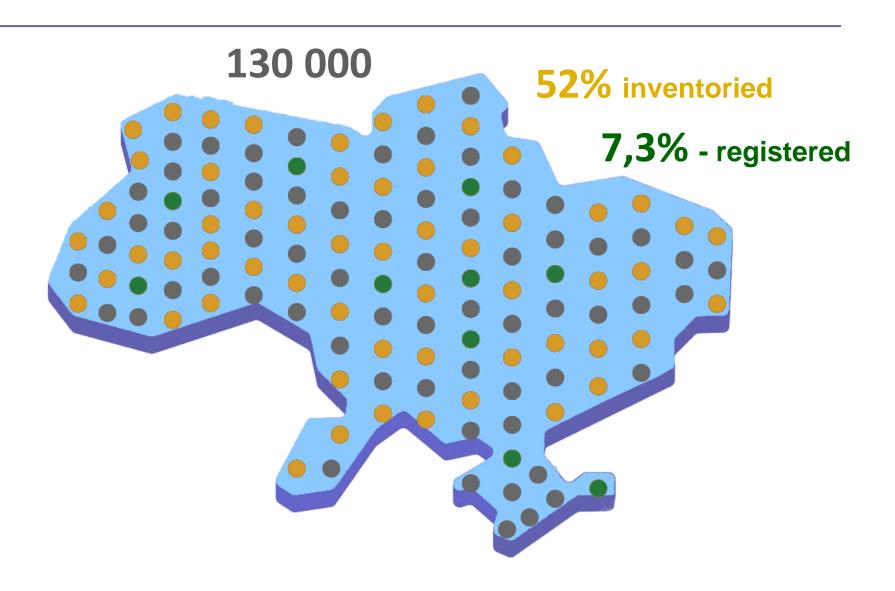
The thematic block "Natural and Cultural Heritage" of the Atlas consists of several sections and opens with an introductory part "Ukraine's place in world heritage" (4 maps) containing a series of maps presenting the most prominent cultural and natural monuments of Ukraine.

The section "Natural heritage of Ukraine" (5 maps), the mapping of which is a method of its detailed study and, consequently, its preservation, is represented by individual territories and protected areas, natural and cultural landscapes and elements of the natural environment.

The section "Cultural heritage of Ukraine" (19 maps) covers many topics and contains a considerable number of maps of territories and objects of the tangible, immovable and intangible cultural heritage. The section was developed on the basis of historical (according to the time of creation of the heritage) and cultural (according to the type of the heritage) approaches.

The Atlas has significantly expanded the composition of functional groups of cultural heritage sites, as is done in a number of initiatives and programmes of UNESCO, ICOMOS and other international organisations. The result of the research and relevant information work on the integration of a wide range of cultural and natural, tangible and intangible, movable and immovable heritage sites in separate research areas and their subsequent mapping was the mapping of ethnographic, religious, scientific and technical heritage.

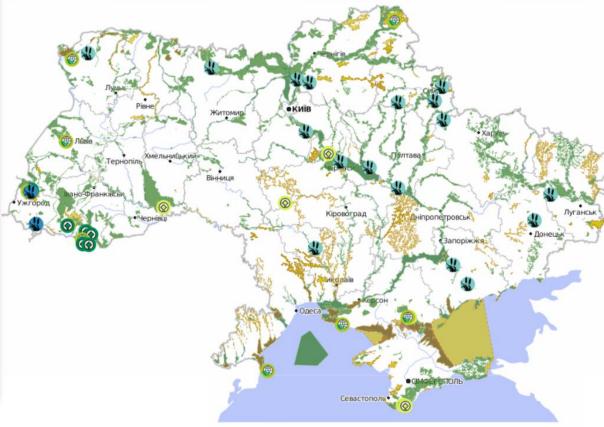
The current state of registration of monuments of cultural heritage of Ukraine



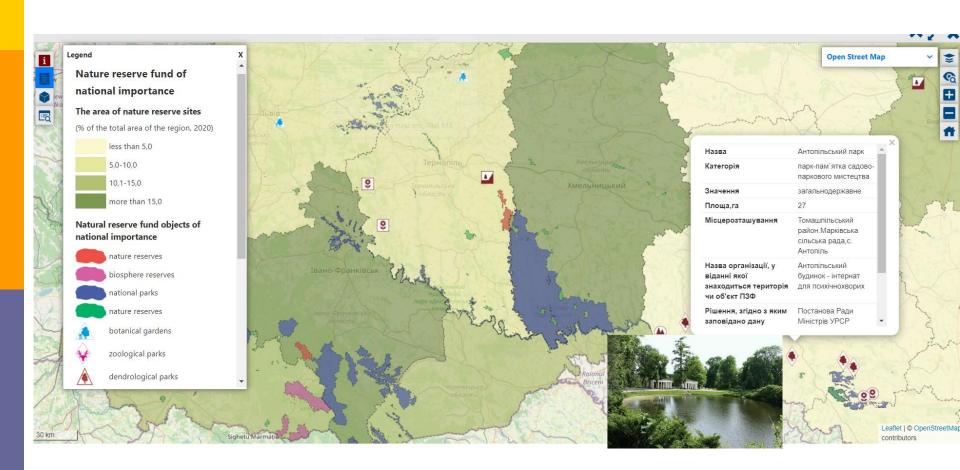
Examples of maps Protected areas of international significance



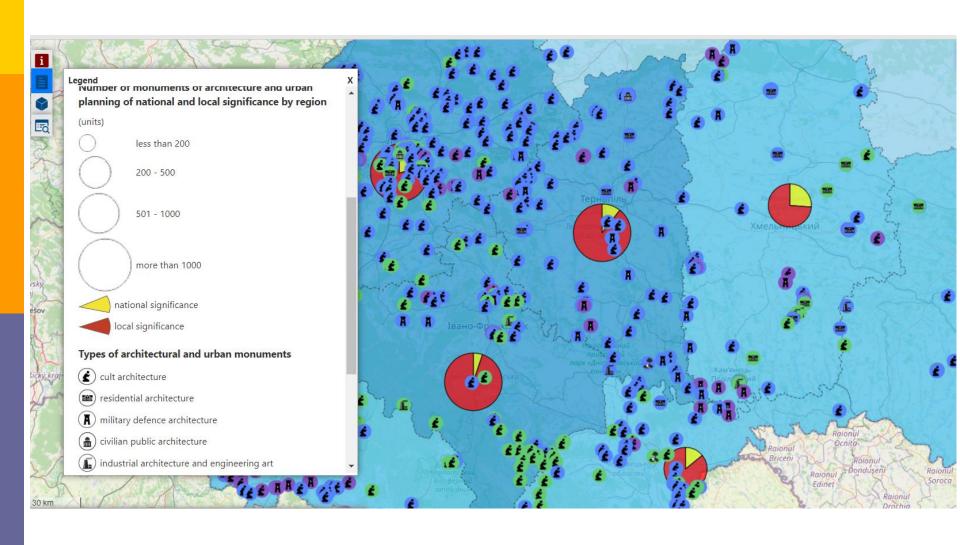




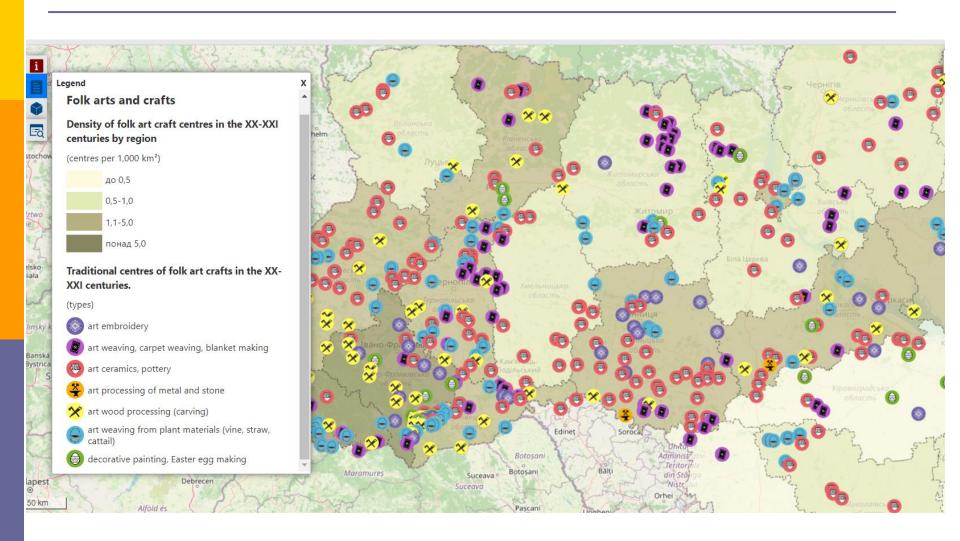
Examples of maps Nature reserve fund of national significance



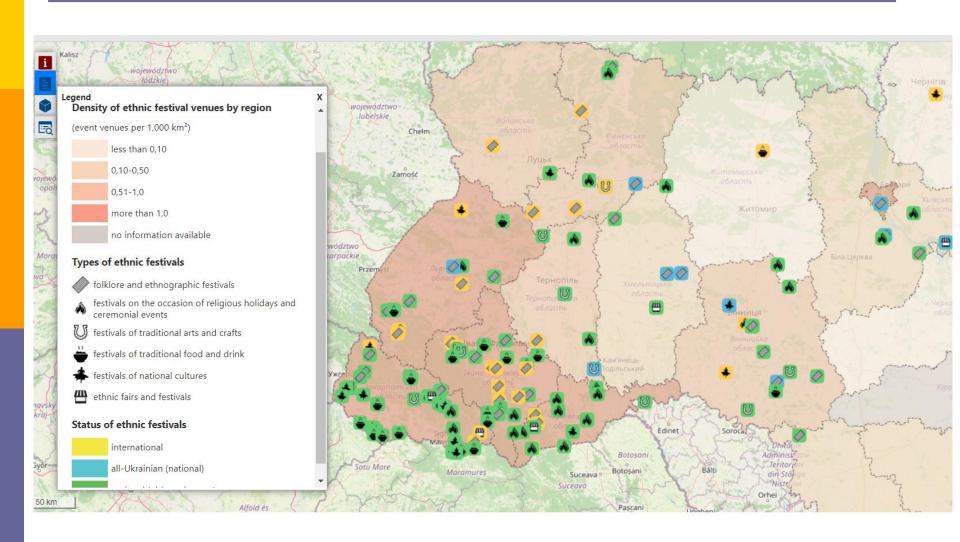
Examples of maps Architectural and urban planning monuments



Examples of maps Folk arts and crafts



Examples of maps Ethnic festivals and fairs

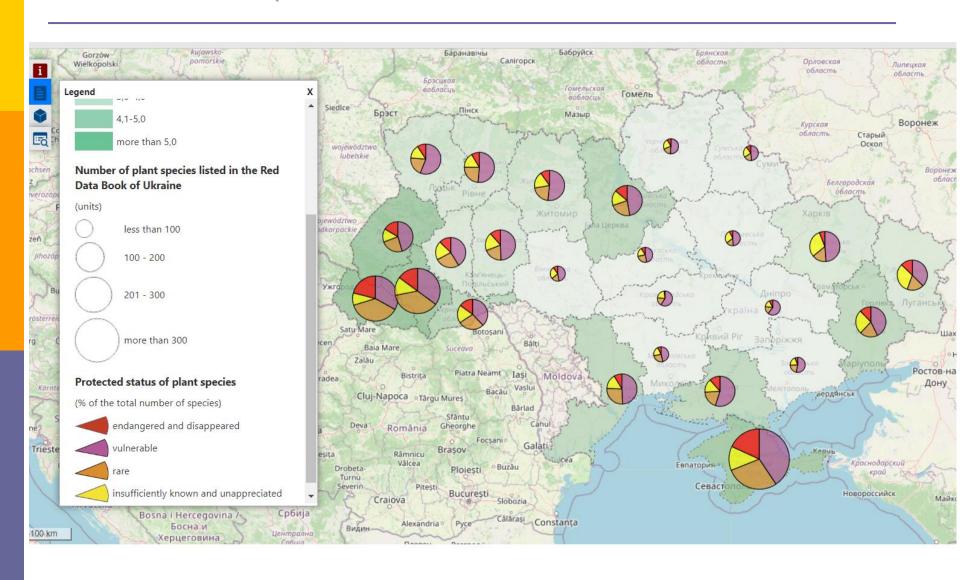


The final section of the Atlas is the thematic block on "Protection, conservation, restoration and use of natural and cultural heritage". The information in this section makes it possible to identify and evaluate the effectiveness of national and regional heritage policies, methods and means of heritage protection.

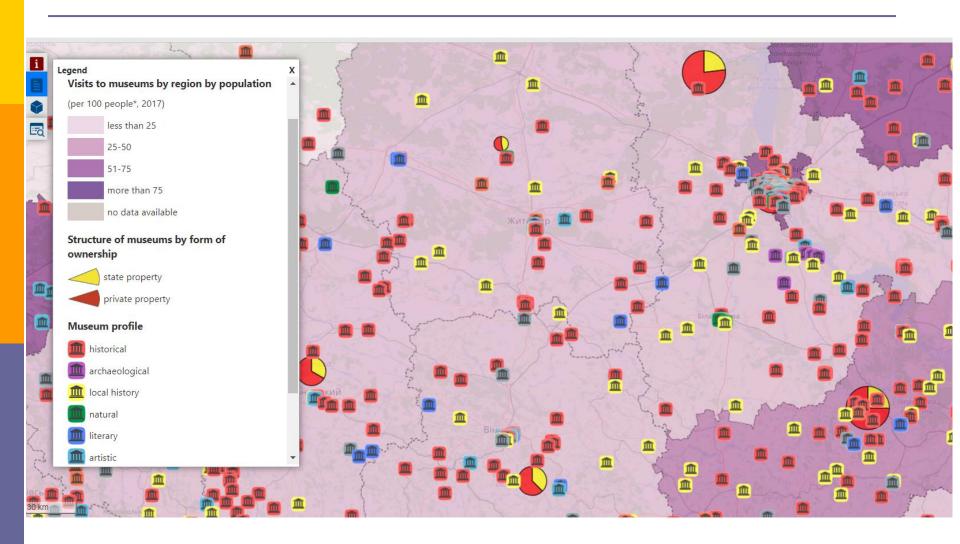
It includes three subsections:

- "Measures to protect natural heritage" (contains maps: "Development of the system of nature reserves" and "Species of plants and animals listed in the Red Data Book of Ukraine"),
- "Measures to protect cultural heritage" (contains maps: "Legal, Organisational, Research and Other Measures" and "Repair and Restoration Works on Cultural Heritage Monuments"),
- □ "Forms of preservation and promotion of cultural heritage", which includes maps describing the forms (institutions) of preservation of cultural values, their actualisation, promotion and transmission to the next generation of the most valuable part of the cultural and natural heritage museums, libraries, archives.

Examples of maps Plant species listed in the Red Data Book of Ukraine



Examples of maps Museums



Atlas "Population of Ukraine and its natural and cultural heritage"



Significance of the product developed

- Informational support of plans for economic and social development at the state and regional levels has to be based on the Atlas developed which is a resource of important information about Ukraine. Its use will help to maintain the balance in the direction of society's humanisation
- The social significance of the Atlas is its informational support for the development of society and its interaction with the natural and cultural environment. Indirectly, through the development of tourism and other types of recreational activities, the Atlas may promote the creation of new jobs in the regions. The Atlas is a source of knowledge for the population and provides methodological and information content for the study of social and natural sciences in educational institutions
- The Atlas' influence on **territorial identity preservation** is important as this is the modern policy of many countries over the world. In the conditions of war which lead to significant damage to heritage sites this study is also the basis for further expert evaluations and preservation of information regarding the losses suffered by different regions as a result of russia's aggression

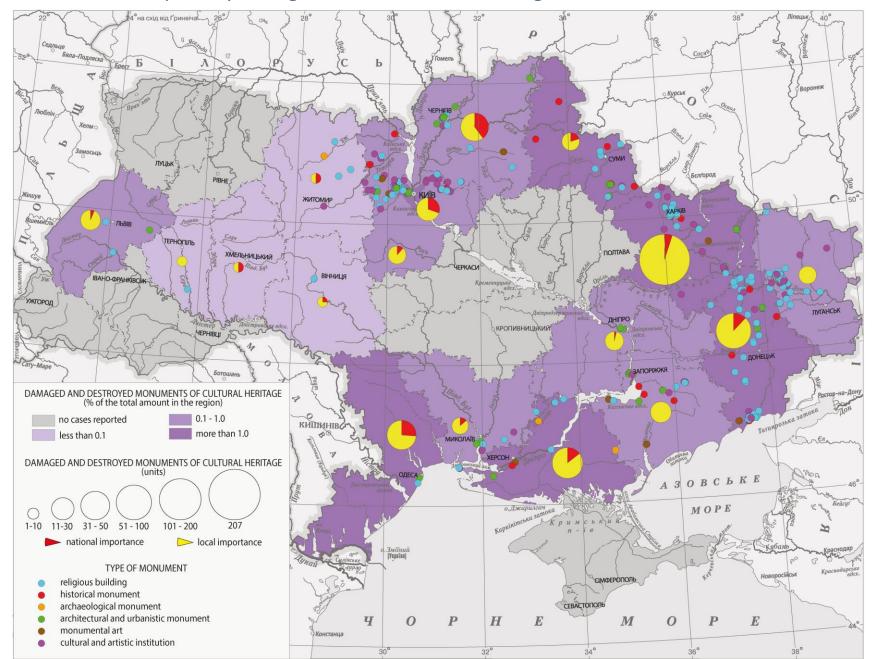
Losses of Ukrainian heritage as a result of russian aggression

- Since 24 February 2022, russia's armed aggression from Crimea and parts of the Donetsk and Luhansk regions, occupied in 2014, has spread to the entire territory of Ukraine, causing thousands of military and civilian deaths, vast destruction and ecocide, and forcing millions to flee their homes
- Natural heritage of Ukraine is in danger: about 20% of the area of all nature conservation areas, 17 Ramsar sites, 160 territories of the Emerald Network, and 4 biosphere reserves remain under threat of destruction.
- Due to russian aggression in Ukraine (the period from 24/02/2022 – 25/07/2023), 763 cultural heritage sites have been damaged/destroyed





Since the beginning of the full-scale invasion, **23** sites have been completely destroyed, **625** sites have been partially damaged, and the extent of damage to **115** sites remains unknown



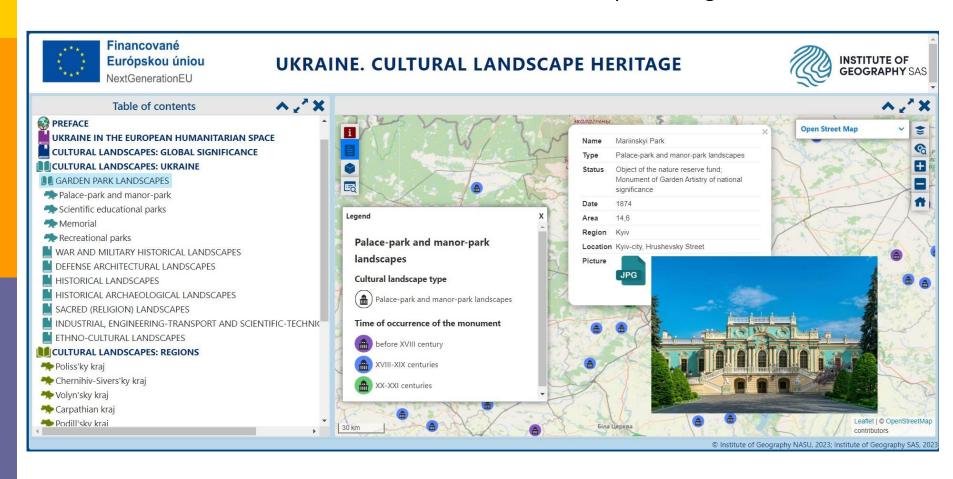
What's next?

At present, a large number of potential map themes are still in progress, lacking proper conceptual, methodological and cartographic development or insufficient source material. These are the maps:

- Assessing the landscape and biocoenotic representativeness and conservational effectiveness of the existing protected area system.
- Historical Cultural Framework and Natural Framework of Ukraine
- Cultural heritage of the Ukrainian diaspora
- Memorable Places of Life and Activity of Outstanding people of Ukraine and the world
- Religious heritage of Ukraine
- Ethnocultural heritage of Ukraine
- Scientific and technical (industrial) heritage of Ukraine
- Artistic heritage of Ukraine
- Archaeological heritage of Ukraine
- Maritime and river heritage of Ukraine
- Cultural landscape heritage of Ukraine, etc.

What's next?

An electronic atlas "Ukraine. Cultural Landscape Heritage"







Thank You for Attention!

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