



Ministry of the Environment
of the Czech Republic



REPORT

in the frame of Project Conservation of Natural Heritage
for Life in Ukraine, acronym ConNaturLIFE Ukraine,
(101148569 — LIFE23-PRE-CZ-ConNaturLIFE Ukraine)

Authors:

Oleksii Marushchak
Anna Kuzemko

Work Package number:

WP2

Work Package name:

Common legislative space for Ukraine and the EU for
nature protection

Action number and name:

T.2.3 Legal and practical adjustment of species
protection

Intermediate result
number and name:

D2.15 Analysis and proposal for adding species into the
annexes of the Nature Directives (species protection)

Date:

February 2025

TABLE OF CONTENTS

1. INTRODUCTION	4
2. METHODOLOGY FOR SPECIES SELECTION	6
3. CRITERIA PROPOSED TO BE CONSIDERED WHEN CHOOSING THE SPECIES FOR INCLUSION TO THE ANNEXES OF THE HABITATS AND BIRDS DIRECTIVES	8
4. RESULTS	10
5. CONCLUSIONS	13
6. ANNEXES	13

1 INTRODUCTION

This report was elaborated within the EU LIFE project Conservation of Natural Heritage for Life in Ukraine, Work Package 2 Common legislative space for Ukraine and the EU for nature protection. The main goal of this report is to prepare proposals for adding species into the Annexes IV and V of the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) and Annexes II and III of the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (Birds Directive).

The aforementioned annexes to the Habitats and Birds Directives relate to the following requirements:

Annex IV of the Habitats Directive “Animal and Plant species of Community Interest in Need of Strict Protection” (over 400, including many Annex II species): a strict protection regime must be applied across their entire natural range within the EU, both within and outside Natura 2000 sites.

Annex V of the Habitats Directive “Animal and Plant Species of Community Interest whose Taking in the Wild and Exploitation may be Subject to Management Measures” (over 90 species): Member States must ensure that their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status¹.

Annex II of the Birds Directive includes species of birds that may be hunted under the national legislation of the member states of EU. But these activities must take into account the species population level, geographical distribution and reproductive rate throughout the European territory and in accordance with the norms of European legislation related to hunting practices. It should be strictly emphasized that hunting of these species should not jeopardise conservation efforts in their distribution area. The annex has two subsections: Part A - species, that “may be hunted in the geographical sea and land area where this Directive applies” and Part B - species, that “may be hunted only in the Member States in respect of which they are indicated”. This annex has a species list organised in the form of a table to illustrate, which species is allowed to be hunted according to the annex in which member state.

Annex III of the Birds Directive also has two parts. Generally according to Article I of the Birds Directive, it relates to conservation of all species of naturally occurring birds in the wild state in the European territory of the Member States and covers the protection, management and control of these species and lays down rules for their exploitation (which applies to birds, their eggs, nests and habitats). It means, that for all the bird species referred in Annex I, “the sale, transport for sale, keeping for sale and the offering for sale of live or dead birds and of any readily recognizable parts or derivatives of such birds” should be prohibited. Part A of the Annex III indicates species, for which such activities can be allowed “provided that the birds have been legally killed or captured or otherwise legally acquired”. And Part B of the Annex III indicates the species, for which „member

¹ [Species Protection under Habitats Directive](#)

states can allow within their territory the activities referred to above, making provision for certain restrictions, provided that the birds have been legally killed or captured or otherwise legally acquired”.

Below is the number of species listed in the annexes to the EU Habitats and Birds Directives and their presence within Ukraine.

Table 1. Number of species within the Habitats and Birds Directives for EU and those of them confirmed for Ukrainian territory.

Annex	Annex IV, Habitats Directive	Annex V, Habitats Directive	Annex II, Birds Directive	Annex III, Birds Directive
Number of species (total)	≈400	≈90	84	26
Number of species (UA)	168	39	76	21

Ukraine is the biggest country in Europe with an area of 603 628 km² (5,7% of the territory of Europe), being situated in 4 biogeographical regions (Pannonic, Continental, Steppic and Alpine). Unique geographical position has led to a great variety of biodiversity and number of species, including endemic ones. For example, the national red list (Red Data Book of Ukraine) consists of 687 animal and 857 plant, fungi and algae species.

Ukraine as a new member of the European Union will greatly enrich the EU biodiversity with a number of unique, often endemic, species of wild fauna and flora, as well as natural habitat types.

This is a standard practice, when a new country, joining the EU, submits additions to the annexes of the Habitats and Birds Directives with representatives of its fauna and flora that meet the necessary criteria for inclusion to these documents and had not been previously presented within the former set of EU countries or were not the target species for protection.

Quite a big number of species listed in the national red list of Ukraine (Red Data Book of Ukraine)^{2,3}, are not listed neither in the annexes/resolutions of the Convention on the conservation of European wildlife and natural habitats (Bern Convention), nor in the annexes of the Habitats and Birds Directives. Taking into account that this set of species includes a lot of endemic ones and those requiring special conservation measures in Ukraine, along with their compliance with the criteria of the species listed in the above resolutions and annexes, it was assumed that they are potentially suitable or at least worth checking on their suitability for the including to the annexes of the Habitats and Birds Directives.

The above prompted us to analyze the rare endemic fauna and flora of Ukraine, as well as its endemic habitats, for their compliance with the criteria of the Habitats and Birds Directives in order to prepare proposals for their inclusion in the mentioned annexes.

² [On approval of lists of animal species included in the Red Book of Ukraine \(fauna\) and animal species excluded from the Red Book of Ukraine \(fauna\). 2021. \[In Ukrainian\].](#)

³ [Ministry of Environmental Protection and Natural Resources of Ukraine. \(2021\). On approval of the lists of plant and mushroom species included in the Red Book of Ukraine \(plant life\), and plant and mushroom species excluded from the Red Book of Ukraine \(plant life\). Order of the Ministry of Environmental Protection and Natural Resources of Ukraine No. 111 of 02/15/2021. \[In Ukrainian\].](#)

2 METHODOLOGY FOR SPECIES SELECTION

The selection methodology was developed as a general approach for analyzing all annexes of the Habitats and Birds Directives. Therefore, the information below includes all annexes of the Habitats and Birds Directives that contain species of fauna and flora, as well as types of natural habitats.

STEP #1

When analyzing species of fauna and flora, we followed a set of logical conclusions and algorithms. The general idea was, that first of all we have to pick up those species that ARE listed in Annex I, II and III of the Bern Convention and NOT listed in Annexes II, IV and V of the Habitats Directive and Annexes I, II and III of the Birds Directive. This was made by pairwise comparison of lists.

Current situation of species numbers is as follows:

1. Annex IV of the Habitats Directive present in Ukraine: 161 species;
2. Annex V of the Habitats Directive present in Ukraine: 24 species;
3. Annex II of the Birds Directive present in Ukraine: 72 species;
4. Annex III of the Birds Directive present in Ukraine: 21 species.

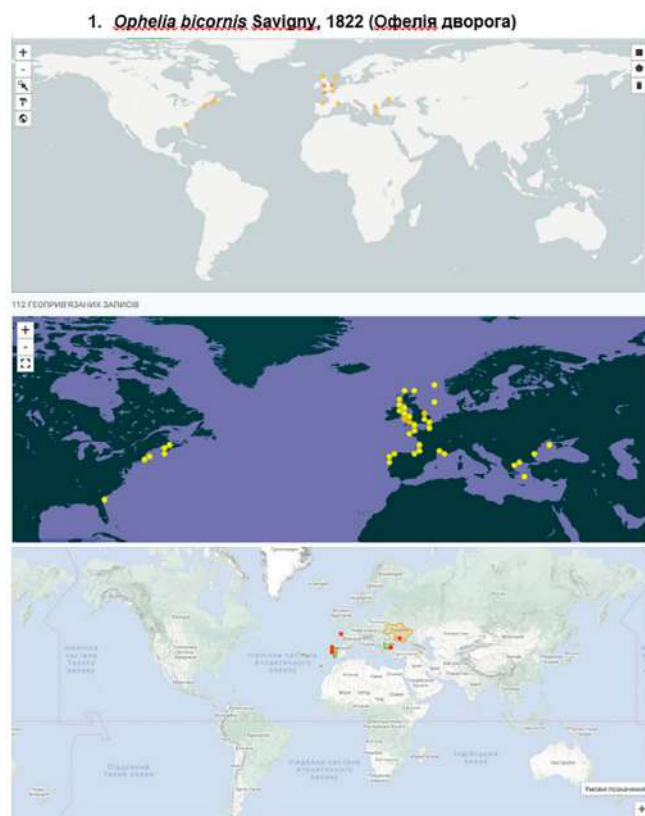


Figure 1. Checking of the geographical distribution of species, chosen at Step #1 (wild fauna species).

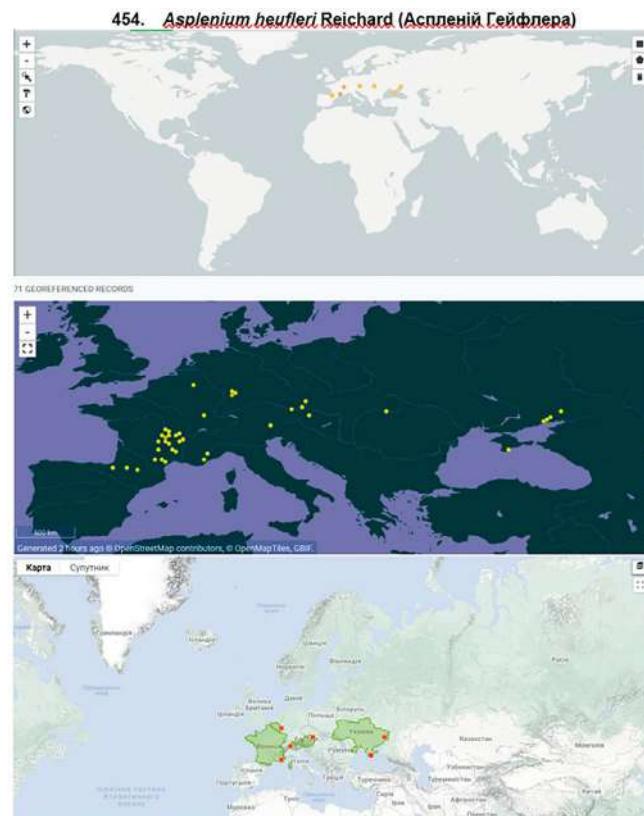


Figure 2. Checking of the geographical distribution of species, chosen at Step #1 (wild flora species).

After comparing the mentioned lists (Bern Convention and the Directives), for the chosen species distribution maps were built based on the available bases of records of wildlife: [GBIF](#), [UkrBin](#), [iNaturalist](#) etc. Those species, that are widespread across Europe, were also excluded from the list of chosen species. Those species, presented in several European countries, were left in the list at this stage. Example of such a quick check study is shown below (Figure 1, 2).

STEP #2

At this step we applied the same algorithm of choosing species as we did for the step #1. This time, by comparing the protective lists, we picked up those species that ARE listed in Resolution 6 and habitats in Resolution 4 of the Bern Convention and NOT listed in Annexes I, II, IV and V of the Habitats Directive and Annexes I, II and III of the Birds Directive. This was made by pairwise comparison of lists. As a result, a certain list of species that are listed in either Annexes I, II or III of the Bern Convention or in Resolution 6 of the Bern Convention and 4 natural habitat types newly proposed and adopted specifically for Ukraine, was formed.

STEP #3

At this stage, we apply the same algorithm as for the Step #1 and Step #2, but this time the species listed in the Red Data Book of Ukraine and regional red lists of administrative regions of Ukraine and not listed in Annexes II, IV and V of the Habitats Directive, Annexes I, II and III of the Birds Directive, Resolution 6 and Annexes I, II and III of the Bern Convention, were chosen by pairwise comparison of the lists. For the chosen species distribution maps were built based on the available bases of records of wildlife (GBIF, UkrBin, iNaturalist etc.). Those species, that are widespread across Europe, were also excluded from the list of chosen species. Those species, presented in several European countries, were left in the list at this stage.

Therefore, in the period of April-May 2024 an analysis and proposal for the possible inclusion of species and habitats that are relevant and important for Ukraine from the Resolutions 4 and 6 of the Bern Convention to the annexes to the Habitats and Birds Directives, if they are absent in the EU and are not covered by the current version of the Directives, were made. Filling in the completed forms (their draft versions) on proposed species and habitats to the annexes to the Habitats and Birds Directives in accordance with EU requirements was completed. During this work the following actions took place:

- 1)** conducting an analysis of the geographical distribution of wild fauna and flora species from Resolution 6 of the Bern Convention that are not included in Annexes II and IV of the Habitats Directive according to the data of the electronic resources GBIF and iNaturalist;
- 2)** conducting an analysis of species listed in the Red Data Book of Ukraine that are not included in Resolution 6 of the Bern Convention, as well as Annexes IV and V of the Habitats and Annexes II and III of the Birds Directives;
- 3)** conducting an analysis of species from the lists of regionally rare species of

administrative regions of Ukraine regarding their compliance with the criteria of Resolution 6 of the Bern Convention, as well as Annexes IV and V of the Habitats and Annexes II and III of the Birds Directives.

As a result, lists of species, maps of species distribution and justification for the compliance of species with the criteria of the specified annexes were made.

Since all the avian species inhabiting Ukraine are widespread and already included in the annexes of the Birds Directive, no additional avian species were proposed.

We have analyzed the list of species currently included in Annex V of the Habitats Directive and according to the results we have received, we do not see the need to add new species, as the level of conservation provided under Annexes II and IV already covers their basic requirements to reach this goal.

After the 3 mentioned steps we obtained a list of 391 wild fauna and flora species that potentially can be proposed for inclusion to the annexes of the Habitats Directive. It is important to note that in this species list no bird species appeared.

After receiving such a big list of species potentially suitable for inclusion to the Habitats Directive, we applied the following set of criteria that would help to narrow the list, giving priority to those species that really need protection and practical realization of the future conservation measures.

3 CRITERIA PROPOSED TO BE CONSIDERED WHEN CHOOSING THE SPECIES FOR INCLUSION TO THE ANNEXES OF THE HABITATS AND BIRDS DIRECTIVES

The main criteria for including species and types of natural habitats in the annexes to the Habitats Directive are defined in Article 1, namely:

«**(g)** Species of Community interest means species which, within the territory referred to in Article 2, are:

- i)** endangered, except those species whose natural range is marginal in that territory and which are not endangered or vulnerable in the western palearctic region; or
- ii)** vulnerable, i.e. believed likely to move into the endangered category in the near future if the causal factors continue operating; or
- iii)** rare, i.e. with small populations that are not at present endangered or vulnerable, but are at risk. The species are located within restricted geographical areas or are thinly scattered over a more extensive range; or
- iv)** endemic and requiring particular attention by reason of the specific nature of

their habitat and/or the potential impact of their exploitation on their habitat and/or the potential impact of their exploitation on their conservation status.

(c) Natural habitat types of Community interest means those which, within the territory referred to in Article 2:

- i)** are in danger of disappearance in their natural range; or
- ii)** have a small natural range following their regression or by reason of their intrinsically restricted area; or
- iii)** present outstanding examples of typical characteristics of one or more of the nine following biogeographical regions: Alpine, Atlantic, Black Sea, Boreal, Continental, Macaronesian, Mediterranean, Pannonian and Steppic.»

In addition to the main criteria, we have proposed the following criteria for inclusion:

- 1.** Is the species recognizable? The species should be well-identified visually, without the need to provide complicated molecular-genetic studies for its correct identification and not misidentifying with close relative species with similar physical appearance.
- 2.** Is the species appropriate for territorial / strict protection? The species should benefit from the tools provided by the Habitats and Birds Directives and the defined conservation measures can be practically implemented.
- 3.** The species should not be too common to be able to protect it.
- 4.** The species should not be data deficient because of long-term lack of experts and monitoring capacities, as the designation of the sites and practical protection would be quite hard.
- 5.** The species should have sufficient data about the state of its populations in Ukraine and preferably (if possible) several (sufficient amounts to study the population(s) and collect relevant data about it(them)) experienced experts.
- 6.** The decision has to be made whether the species is to be added into Annex IV and which to Annex II and which to both of them.
- 7.** Ukraine needs to be able to fulfill reporting obligations (on SDF and Article 17 of the Habitats Directive on conservation status). Also, we need to consider capacities of the experts for the species that are also necessary for practical implementation issues — management, appropriate assessment etc. (esp. for monitoring).
- 8.** The information if the species is present only in Ukraine or also in other member states of the European Union (MS). If the species is present in other MS, it does not automatically disqualify it. Nevertheless, it is something for consideration — it might hinder future approval, as it would impose new requirements of the MS. But some MS might on the other hand welcome the addition of such species.
- 9.** Also, the future obligations need to be considered: if Ukraine will be able to secure protection of the proposed number of species. It comes with administrative burden — derogations, management planning, appropriate assessment, reporting.

10. The species ideally should act as a flagship species and facilitate the protection of habitats.

At this step, the relevant experts (botanists, teriologists, malacologists, entomologists, herpetologists etc.) that work with the species (chosen at steps #1-#3) were included in the work, having addressed the criteria mentioned above. Following their advice and conclusions, the list of species was greatly reduced.

4 RESULTS

In the list of activities using the criteria listed above had been conducted, the list was narrowed to 51 species of wild fauna and flora species (Table 2). Statistics on the species characteristics in terms of their application is shown in the figures below (Figure 3-5).

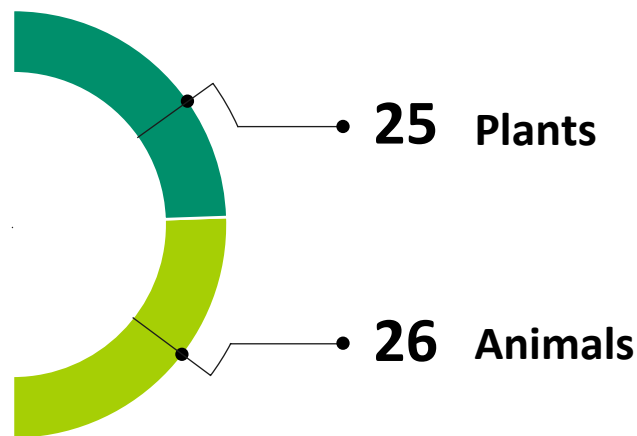


Figure 3. Number of species (by group) proposed for inclusion to the Annex IV of the Habitats Directive.

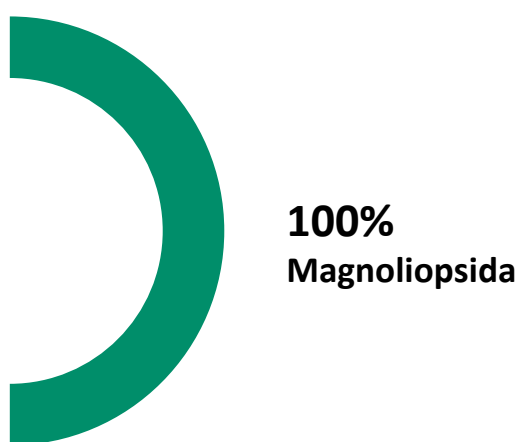


Figure 4. % of higher taxonomic groups (classes) proposed for inclusion to the Annex IV of the Habitats Directive (wild flora species).

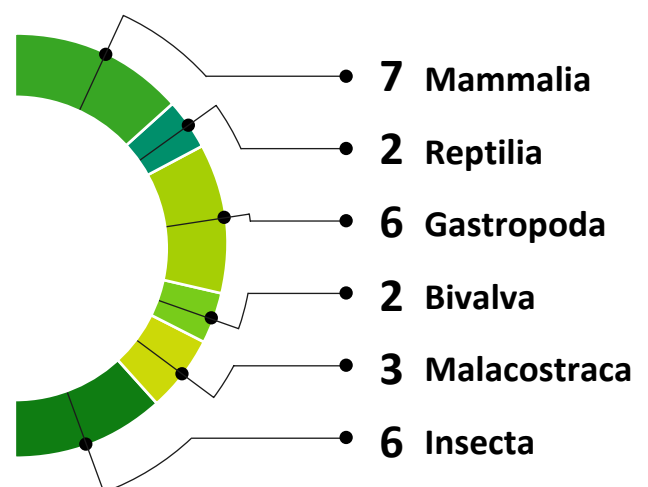


Figure 5. % of higher taxonomic groups (classes) proposed for inclusion to the Annex IV of the Habitats Directive (wild fauna species).

Table 2. Species proposed to be included to the Annex IV of the Habitats Directive

N	Species	Kingdom	Class	Vernacular Name	* Res.6	* BC	* RBU	* Annex	UA expert
1	<i>Desmana moschata</i> (Linnaeus, 1758)	Animalia	Mammalia	Хохуля руська	+	+		II, IV	Rusin M.
2	<i>Spalax graecus</i> Nehring, 1898	Animalia	Mammalia	Сліпак буковинський	+	+		II, IV	Rusin M.
3	<i>Steveniella satyrioides</i> (Spreng.) Schltr.	Plantae	Magnoliopsida	Стевеніела сатириєподібна	+	+		II, IV	Kuzemko A.
4	<i>Achillea glaberrima</i> Klokov	Plantae	Magnoliopsida	Деревій голий	+	+		II, IV	Kuzemko A.
5	<i>Crepis purpurea</i> (Willd.) M. Bieb.	Plantae	Magnoliopsida	Скереда пурпурова	+	+		II, IV	Didukh Y.
6	<i>Crambe koktebelica</i> (Junge) N.Busch	Plantae	Magnoliopsida	Катран коктебельський	+	+		II, IV	Didukh Y.
7	<i>Moehringia hypanica</i> Grynj & Klokov	Plantae	Magnoliopsida	Мерингія бузька	+	+		II, IV	Shynder O.
8	<i>Silene cretacea</i> Fisch. ex Spreng.	Plantae	Magnoliopsida	Смілка крейдова	+	+		II, IV	Bondarenko G.
9	<i>Astragalus setosulus</i> Gontsch.	Plantae	Magnoliopsida	Астрагал щетинистий	+	+		II, IV	Didukh Y.
10	<i>Genista tetragona</i> Besser	Plantae	Magnoliopsida	Дрік чотиригранний	+	+		II, IV	Moysiyenko I.
11	<i>Darevskia lindholmi</i> (Szczerbak, 1962)	Animalia	Reptilia	Ящірка Ліндгольма		+		II, IV	Nekrasova O.
12	<i>Eremias arguta</i> (Pallas, 1773)	Animalia	Reptilia	Ящурка різнобарвна		+		II, IV	Nekrasova O.
13	<i>Laevicaspia lincta</i> (Milaschewitsch, 1908)	Animalia	Gastropoda	Вежка льодяникова			+	II, IV	Son M.
14	<i>Lymnaea taurica</i> (Clessin, 1880)	Animalia	Gastropoda	Петрик таврійський			+	II, IV	Son M.
15	<i>Peristoma merduenianum</i> Krynicky, 1833	Animalia	Gastropoda	Круглозубка ущелинна			+	II, IV	Balashov I.
16	<i>Serrulina serrulata</i> (Pfeiffer, 1847)	Animalia	Gastropoda	Серуліна зубчата			+	II, IV	Balashov I.
17	<i>Vitrea nadejdae</i> Lindholm, 1926	Animalia	Gastropoda	Кристалівка кримська			+	II, IV	Balashov I.
18	<i>Prostenomphalia carpathica</i> Baidashnikov, 1985	Animalia	Gastropoda	Простеномфалія карпатська			+	II, IV	Balashov I.
19	<i>Hypanis laeviuscula</i> (Eichwald, 1829)	Animalia	Bivalvia	Бужанка гладенька			+	II, IV	Son M.
20	<i>Hypanis plicata</i> (Eichwald, 1829)	Animalia	Bivalvia	Бужанка складчаста			+	II, IV	Son M.



N	Species	Kingdom	Class	Vernacular Name	*Res.6	*BC	*RBU	*Annex	UA expert
21	<i>Iphigenella shablensis</i> Carausu, 1943	Animalia	Malacostraca	Іфігенела шаблінська			+	II, IV	Son M.
22	<i>Iphigenella andrussowi</i> Sars, 1894	Animalia	Malacostraca	Іфігенела Андрусова			+	II, IV	Son M.
23	<i>Astacus pachypus</i> Rathke, 1837	Animalia	Malacostraca	Рак товстопалий			+	II, IV	Son M.
24	<i>Poecilimon pliginskii</i> Miram, 1929	Animalia	Insecta	Пилкохвіст Плігінського			+	II, IV	Kavurka V.
25	<i>Anadrymadusa retowskii</i> (Adelung, 1907)	Animalia	Insecta	Анадримадуза Ретовського			+	II, IV	Kavurka V.
26	<i>Cephalota besseri</i> (Dejean, 1826)	Animalia	Insecta	Стрибун Бессера			+	II, IV	Kavurka V.
27	<i>Pseudochazara euxina</i> (Kusnezov, 1909)	Animalia	Insecta	Сатир евксинський			+	II, IV	Kavurka V.
28	<i>Tapinoma kinburni</i> Karawajew, 1937	Animalia	Insecta	Тапінома кінбурнська			+	II, IV	Kavurka V.
29	<i>Urophora dzieduszyckii</i> Frauenfeld, 1867	Animalia	Insecta	Урофора Дідушицького			+	II, IV	Kavurka V.
30	<i>Spermophilus pygmaeus</i> (Pallas, 1779)	Animalia	Mammalia	Ховрах малий			+	II, IV	Rusin M.
31	<i>Spalax zemni</i> (Erxleben, 1777)	Animalia	Mammalia	Сліпак подільський			+	II, IV	Rusin M.
32	<i>Spalax arenarius</i> Reshetnik, 1939	Animalia	Mammalia	Сліпак піщаний			+	II, IV	Rusin M.
33	<i>Stylodipus telum</i> (Lichtenstein, 1823)	Animalia	Mammalia	Ємуранчик звичайний			+	II, IV	Rusin M.
34	<i>Nothocricetulus migratorius</i> (Pallas, 1773)	Animalia	Mammalia	Хом'ячок сірий			+	II, IV	Rusin M.
35	<i>Nigritella carpatica</i> (Zapal.) Teppner, Klein & Zagulski	Plantae	Magnoliopsida	Чорнянка карпатська			+	II, IV	Chorney I.
36	<i>Heracleum ligusticifolium</i> M.Bieb.	Plantae	Magnoliopsida	Борщівник лігустиколистий			+	II, IV	Didukh Y.
37	<i>Centaurea breviceps</i> Iljin	Plantae	Magnoliopsida	Волошка короткоголова			+	II, IV	Didenko V.
38	<i>Centaurea margaritacea</i> Ten.	Plantae	Magnoliopsida	Волошка перлиста			+	II, IV	Didenko V.
39	<i>Saussurea porcii</i> Degen	Plantae	Magnoliopsida	Соссюрея Порціуса			+	II, IV	Kobiv Y.
40	<i>Sobolewskia sibirica</i> (Willd.) P.W.Ball	Plantae	Magnoliopsida	Соболевськія сибірська			+	II, IV	Didukh Y.

N	Species	Kingdom	Class	Vernacular Name	*Res.6	*BC	*RBU	*Annex	UA expert
41	<i>Eremogone cephalotes</i> (M.Bieb.) Fenzl	Plantae	Magnoliopsida	Пустельниця головчаста			+	II, IV	Moysiyenko I.
42	<i>Erodium beketowii</i> Schmalh.	Plantae	Magnoliopsida	Грабельки Бекетова			+	II, IV	Bronskova O.
43	<i>Daphne sophia</i> Kalen.	Plantae	Magnoliopsida	Вовче лико Софії			+	II, IV	Bondarenko G.
44	<i>Daphne taurica</i> Kotov	Plantae	Magnoliopsida	Вовче лико кримське			+	II, IV	Didukh Y.
45	<i>Rhaponticoides taliewii</i> (Kleopow) M.V.Agab. & Greuter	Plantae	Magnoliopsida	Волошка Талієва				II, IV	Bronskova O.
46	<i>Erysimum ucranicum</i> J.Gay	Plantae	Magnoliopsida	Жовтушник український				II, IV	Bondarenko G.
47	<i>Centaurea konkae</i> Klokov	Plantae	Magnoliopsida	Волошка Конки				II, IV	Didenko V.
48	<i>Centaurea appendicata</i> Klokov	Plantae	Magnoliopsida	Волошка великопридаткова				II, IV	Didenko V.
49	<i>Hedysarum ucrainicum</i> Kaschm.	Plantae	Magnoliopsida	Солодушка українська				II, IV	Borovyk L.
50	<i>Silene jailensis</i> N.I. Rubtzov	Plantae	Magnoliopsida	Смілка яйлинська				II, IV	Didukh Y.
51	<i>Sedum borissovae</i> Balk.	Plantae	Magnoliopsida	Очиток Борисової				II, IV	Shynder O.

* Res.6 — species already included in Resolution 6 of the Bern Convention, BC — species already included in Appendices I, II or III of the Bern Convention, RBU — species already included in the Red Data Book of Ukraine, Annex — the number of the annex of the Habitats Directive in which the species is proposed to be included.

All detailed suggestions on the species and habitats proposed to be included in the annexes of the Habitats Directive, organized on the basis of the standard form provided for including of new species to the Bern Convention, are provided as supplementary files.

5 CONCLUSIONS

In terms of this activity a set of 51 wild fauna and flora species proposed to be included in the Annex IV of the Habitats Directive was prepared.

6 ANNEXES

The report is accompanied with 51 standard forms for inclusion of new wild fauna and flora species to the Annex IV of the Habitats Directive (each form is provided twice: in English and in Ukrainian).