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OGÓLNOPOLSKIE TOWARZYSTWO OCHRONY PTAKÓW

Natura 2000 Shadow List in Poland

*Detailed Analysis of Habitat Directive
Implementation*

*Synthetic Approach to Bird Directive
Implementation*



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Agnieszka Szubert, Paweł Olaf Sidło**

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Overflow-arms of Radew river © WWF/Zbigniew Osadowski

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Part I

DETAILED ANALYSIS OF HABITAT DIRECTIVE IMPLEMENTATION

1. Introduction

1.1 INTRODUCTION

In accordance with the Habitat Directive, Natura 2000 is a coherent European ecological network, which was established for the protection of natural habitat types and species important for the European Union. The natural habitat types and species, thus protected, are listed in corresponding Annexes to the Habitat Directive and the Bird Directive. The Natura 2000 network consists of two types of site:

- Special Areas of Conservation established on the basis of the Habitat Directive in order to preserve:
 - natural habitat types
 - plant and animal species' habitats,
- Special Protection Areas established on the basis of the Bird Directive in order to preserve birds' habitats.

According to the Habitat Directive, wherever possible, these sites should be connected by features of landscape in a way that enables migration, dispersal and genetic exchange of wild species.

The first part of this report concerns the designation of proposed Sites of Community Importance (pSCIs) in Poland. The synthetic approach to the Bird Directive implementation in Poland is presented in the second part of this report.

The subject of the report is an assessment of the governmental proposal of Natura 2000 network sent by the Polish Ministry of Environment to the European Commission (EC) in May 2004. As a result of the analysis that has been carried out, we suggest significant corrections to the governmental proposal. We provide evidence that such corrections are necessary if the Natura 2000 network in Poland is to fulfil the intended purpose.

Beside the analysis of the group of proposed sites, this report also indicates problems concerning the future implementation of Natura 2000 sites. Amongst other issues, we present an analysis of the current transposition of the Habitat Directive provisions to the Polish legislation

We thank all those specialists working on particular natural habitat types and species, who have contributed to the creation of this report. These persons are listed as co-operants on the editor's page of this elaboration.

1.2. GENERAL RULE FOR ESTABLISHING PROPOSED SITES OF COMMUNITY IMPORTANCE OF NATURA 2000 NETWORK

Each country prepares the network proposal for its own territory. The list of suggested pSCIs should be created on the basis of the criteria found in Annex III to the Habitat Directive. It is important that these criteria are of ecological nature – thus the assessment concerns the state of the site, threats, degree of isolation, value for the preservation of a species or habitat type on a global scale, etc. Therefore, economic issues cannot be seen as crucial, as the need to protect nature has been regarded superior.

The European Commission, in agreement with the countries concerned, establishes the final list of Sites of Community Importance from the Habitat Directive, which will be later included in the network as Special Areas of Conservation. Proposed SCIs of particular countries, are discussed during so-called bio-geographic seminars, during which an analysis is made to see if particular species and natural habitat types are sufficiently represented by the governmental proposal within specific bio-geographical regions. Most of the Polish territory belongs to the Continental region (CONT), except for Carpathians that are a part of the Alpine region (ALP).

If a country does not suggest the inclusion of sites that are necessary to provide the favourable conservation status of particular species or natural habitat types, European Union legislation has a procedure of executing compliance to the Bird and Habitat Directives. The European Commission may appeal to a EU Member State to supplement the proposal or, in exceptional cases, in regard to a particular site, the EC can establish this site as SCI without the consent of the particular government.

In order for this procedure to be implemented, the European Commission must receive arguments and information concerning gaps in lists proposed by particular governments.

1.3. HISTORY OF WORK CONCERNING POLISH GOVERNMENTAL PROPOSAL REGARDING PROPOSED SITES OF COMMUNITY IMPORTANCE WITHIN NATURA 2000 NETWORK

On a wider scale, work concerning the designation of the Natura 2000 network in respect of pSCIs started in year 2000. National Foundation for Environmental Protection (NFEP) elaborated the preliminary concept of sites for Natura 2000 network based on existing protected areas and areas from the CORINE database. Some new proposed sites for Natura 2000 were prepared by the non-governmental organisations (WWF Poland – sites from Wisła and Odra river valleys, BIOS Association, Lower Silesian Foundation for Sustainable Development, Naturalist Club).

The greatest workload was in period 2002-2003. The work was coordinated by the Institute of Nature Conservation (INC), Polish Academy of Sciences in Cracow and the National Foundation for Environmental Protection (NFEP). About 200 of Polish naturalists, organised in working teams (Voivodeship Realisation Teams) were involved into the preparation of the proposal. Other naturalists from the scientific community and non-governmental organisations had also important contribution in the work of these groups.

Designation of the Polish Natura 2000 network involved identification and description of sites that meet the criteria of the Habitat Directive. Here past reports had been used, such as the concept of the national environmental network ECONET-Poland and the database CORINE, as well as new analyses, in certain cases supported by additional field studies. Thus, in the beginning of 2003 a list was created, containing 279 of pSCIs important for natural habitat types from Annex I and species from Annex II to the Habitat Directive in their current form. The total surface area of these sites equalled 32 500 km², i.e. about 10.2% of Polish territory. This list is further referred to as the “proposal of NFEP and INC (2003)”.

Then a public debate started and resulted in correction of borders and more detailed descriptions of particular sites. As in other countries, the debate also revealed numerous doubts and reservations regarding the Natura 2000 concept held by local authorities, foresters and water management institutions. As the characteristic of Polish Natura 2000 designation process, the proposed sites were rarely criticized by private land owners, slightly more – by local administration bodies and the main opposition came from national institutions and economic organisations, mainly the national administration for water management and the State Forests agency. Both these entities are subordinate to the Minister of Environment who, according to the Polish law, submits the official proposal of the Natura 2000 network to the European Commission.

In relation to changes that had been made to Annexes I and II of the Habitat Directive due to the enlargement of the European Union, as well as those to the *Interpretation Manual of European Habitats*, in summer of 2003, the Institute of Nature Conservation prepared an additional list of 44 key areas, vital to the newly added habitat types and species. This list is further referred to as the “additional concept of INC (2003)”

As only a short period of time was available, the work of Voivodeship Realisation Teams was mainly based on various sources that had already existed (natural inventories,

fragmentary scientific data and personal knowledge of team members), and in many cases it was the starting point to improve the state of knowledge concerning species and natural habitat types listed in Annexes to the Habitat Directive. In many parts of Poland, such investigations were carried out in 2003 on the initiative of non-governmental organisations (such as the Polish Ecological Club, Naturalists Club, The Polish Society for Nature Protection "Salamandra", Agreement for the Protection of Bats – the union of several NGOs working for the protection of bats) as well as individual naturalists. As the result, by September 2003 around 50 new sites had been suggested as requiring addition to the list.

In 2004, WWF Poland elaborated further Standard Data Forms for 20 river valleys in Poland and 13 raised peat bogs in the north-eastern part of the country, which constituted another significant step towards a more precise understanding of the Polish natural habitat types and species' resources significant at the European Union scale.

In May 2004, the Polish Minister of Environment, with the whole Polish Government's consent, submitted to the European Commission the list that proposed 184 pSCIs, covering hardly 11 716 km², i.e. about 3.7% of the country's area (see Fig. 1). The list was thrown open for public consultations for the period of 5 days. However, none of the numerous comments to this list was taken into account.

Implementation process of Natura 2000 network has being carried out at the same time as the designation process. Within the framework of the N2000 implementation process, monographic reports were prepared in 2004 for particular species and natural habitat types, including guidelines for their conservation (HERBICH J. ed. Podręcznik ochrony typów siedlisk przyrodniczych (Natural habitat types' conservation manual), WERBLAN-JAKUBIEC & SUDNIK-WÓJCIKOWSKA eds. Podręcznik ochrony gatunków roślin ... (Plant species' protection manual), BERESZYŃSKI A., KEPEL A. eds. Podręcznik ochrony gatunków zwierząt ... (Animal species' protection manual). That report, which is currently being prepared for publishing, is the result of work carried out by over 100 best specialists in Poland.

1.4. ASSESSMENT OF GOVERNMENTAL PROPOSAL

The criteria for selecting sites for the governmental proposal have never been announced and are not clear. According to the declaration of the Nature Conservation Department at the Polish Ministry of Environment, the European Commission was provided with a list of those sites that had not raised objections from the Polish State Forests agency or the Water Management Department of the Ministry of Environment, which is responsible for regulation of rivers. However, our analysis reveals that proposal does not include sites that do not give rise to any controversy and are sometimes absolutely crucial for the protection of species from Annex II of the Habitat Directive (including last sites of endemic Polish species that had been included in Annexes as the result of Polish request).

The report presented hereby reviews the governmental proposal to check how all plant and animal species from Annex II and natural habitats types from Annex I to the Habitat Directive are represented and protected by it.

The general assessment of the representativeness of Polish natural resources of a given species or habitat type has been made on the basis of criteria presented in Annex III to the Habitat Directive. This assessment is not automatic. A wide group of scientist specialized in particular natural habitat types or plant and animal species had been invited to make the evaluation. In total, more than 70 Polish specialists participated in analysing of the governmental proposal and in preparation of the "Shadow List".

As a result, the hereby provided assessment of the representativeness of particular species and habitat types in the governmental proposal concerns:

- Analysis' results, which answer the question - which part of Polish natural resources of species and habitats had been included in proposed sites from the governmental proposal;
- the character of the species' or habitat's occurrence – e.g. for those species and habitats that are more common in Poland and are dispersed, the representation of as little as 10-20% of their resources in the governmental proposal may be sufficient, whereas for those that occur in just two areas in the country, the inclusion of 50% of their occurrence in the governmental proposal is not sufficient;
- the need of including the natural resources of a species or habitats in respect to both bio-geographic regions in Poland: continental (CONT) and alpine (ALP);
- in the case of natural habitats types, which are clearly diversified into ecologically differing subtypes (e.g. 91E0 – it includes both willow riparian forests in big river valleys and alder riparian forests in small river surroundings), the need to include all subtypes in a representative way.
- the necessity to preserve the full diversity of particular habitat types in Poland – including habitats' areas that are considered as the best formed or best preserved in the country, as well as those that are exceptional in terms of biodiversity;
- the necessity of including the resources of a species or habitat in all of its geographic range in Poland, including border sites of species and habitats that are important from the bio-geographic region point of view.

Hence, different methods were used during the analysis, depending on the state of knowledge, the species or habitat's distribution in Poland, its numbers, threats and ecological properties. Monographic descriptions of particular species and natural habitat types, that had been prepared in 2004 while working on the implementation of the Natura 2000 network (see above) were used here and the majority of authors of those descriptions had been invited to co-operate in the preparation of this report.

For certain groups of organisms, it was necessary to perform a separate analysis for different habitats that these organisms use in different seasons. First of all it regarded the case of bats. For them, the Agreement for the Protection of Bats (an association of organisations and institutions that deal with bat research and protection in Poland) designed and accepted in period 2002-2003 a special point system that allows the identification of the minimum representative group of summer and winter bats' habitats which must be included in the Natura 2000 network in order to protect these species properly. This system was used while this report was being prepared. It has been discussed in detail in the chapter 2.2.1. of this report.

The result of the work is the review of all species from Annex II and natural habitat types from Annex I of the Habitat Directive, which occur in Poland. The review consists of:

- the synthesis of the available data on occurrence of species / habitats in Poland. The data on the geographical distribution has been illustrated on maps for some plant species and natural habitat types. The maps show, which places of occurrence and species' populations are in the governmental proposals and which ones have been omitted.
- the assessment of the representativeness of Polish natural resources of species or natural habitat types in Polish governmental proposal and the estimation, in which degree the pSCIs in the governmental proposal would allow to protect the Polish natural resources (according to the method and symbols described above).
- the proposed completion of Natura 2000 network, which are necessary to provide the relevant protection of the species and habitat in Poland. The presented „Shadow List” consists of proposed new sites and sites from the governmental proposal, modified if needed.

Symbols used for the synthetic assessment of the degree to which particular species and habitats have been sufficiently covered by the governmental proposal	
☺	satisfying representativeness – species or habitat is sufficiently represented by the governmental proposal (Polish natural resources of this species or habitat are sufficiently covered);
☹	doubtful representativeness – generally allowing the protection of core part of Polish natural resources, but it is not sufficient for maintaining the favourable conservation status for them. E.g. a representation of species or habitat in the governmental proposal does not allow the preservation of the whole diversity of species or habitat. It does not include all important sites for this species or habitat in view of the bio-geographic region.
⊗	insufficient representativeness – does not allow the efficient protection even of the core part of Polish natural resources, which can result in extinction of the species or habitat. It also doesn't cover certain subtypes of natural habitat types, which would lead to their disappearance.
⊗!	critically insufficient representativeness – making it completely impossible to protect efficiently the species or habitat eg. governmental proposal ignores all Polish resources of the species or habitat;
†	no resources – according to the current state of knowledge, the species or habitat does not currently occur in Poland (e.g. the species is extinct) and there are no measures undertaken to reintroduce it.
??	no data – the current state of knowledge concerning the occurrence and situation of the species or habitat in Poland is insufficient to make an assessment.

The summary of assessment concerning the representation of species and natural habitat types occurring in Poland in the governmental proposal of the Natura 2000 network is presented in the table below:

Representativeness in the governmental proposal	Species						Natural habitat types	
	plants		animals		Species in total		number	%
symbol	number	%	number	%	number	%		
☺	12	26,1	37	41,6	49	36,3	20	26,3
☹	4	8,7	21	23,6	25	18,5	22	28,9
⊗	8	17,4	18	20,2	26	19,3	23	30,3
⊗!	10	21,7	6	6,7	16	11,9	3	3,9
†	6	13,0	4	4,5	10	7,4	0	0,0
??	6	13,0	3	3,4	9	6,7	8	10,5
Total:	46	100	89	100	135	100	76	100

In our opinion, merely one out of three of species that occur in Poland and one out of four of natural habitat types, which are listed in Annexes of the Habitat Directive, is sufficiently represented in the governmental proposal of the Polish Natura 2000 network. The whole Polish resources for 16 species and 3 natural habitat types or the major part of them have been omitted in the governmental proposal.

1.5 SUGGESTED AMENDMENTS TO NATURA 2000 GOVERNMENTAL PROPOSAL

Demonstrating in this report, that for certain species or natural habitat types the governmental proposal is insufficient, we also suggest necessary amendments to the official Polish proposal. We indicate sites, which inclusion in the Polish Natura 2000 network proposal is necessary and will provide the favourable conservation status for species and habitats in Polish resources. In several cases we suggest the required corrections of borders of sites that have been proposed by the government.

The proposed sites come mainly from the list of sites proposed earlier but not included in the governmental proposal. In many cases, however, during the course of work on this report, earlier documentation has been corrected, completed and made more precise, their borders have been corrected. The evident gaps that have appeared during the verification of the previous proposals have resulted in elaboration of **37 completely new sites** for the purpose of this report. These have been documented in the form of Standard Data Forms (SDFs) and maps.

All modifications, corrections and amendments, coming out during the report's preparation, have been included in revised SDFs and cartographic material, which will be sent as the annex to the report.

According to our analysis, in order to amend the governmental proposal so that it fulfils the purpose of the Habitat Directive, **it is necessary to add at least 152 sites**. 150 of them are situated on land territory of Poland, and 2 of them are the marine areas of the Baltic Sea. The total area of proposed land sites is about 17 329 km², which is about 5.54% of the Polish territory, and the area of marine sites is 5942 km².

It is also necessary to correct the borders of 15 sites proposed by the government. The enlargement of the area of pSCI by about 573 km² is suggested (including 356 km² of land area and 217 km² of marine area). The localisations of two sites designated for bats in the governmental proposal are wrong and need to be changed.

To sum up, the proposal of pSCI sites in this report (including sites from the governmental proposal for the current state of knowledge **includes 336 pSCIs, which cover 29 400 km² of the Polish land territory (i.e. 9.4% of the country) and 6159.7 km² of marine area of the Baltic Sea**. These sites are presented on the synthetic map (Fig. 2) and are listed in the table in chapter 3 of this report.

In our opinion, all pSCIs from this report are necessary for the good functioning of the Natura 2000 network in Poland, it means that they will allow to maintain the favourable conservation status of species and habitats from the Habitat Directive Annexes, which are present in Polish resources. Each of these pSCIs (presented in the table in chapter 3) is essential for the protection of at least one species or one natural habitat type existing in Poland.

We emphasise the fact that the list does not include all potential sites for Natura 2000 network in Poland. The state of knowledge concerning national resources of natural habitat types and species included in Annexes to the Habitat Directive is still not sufficient. In many sites in Poland there are natural habitat types or species of European Union interest, but the current state of knowledge on these sites was not sufficient to assess whether they are important for the Natura 2000 network.

However, certainly some more sites will be proposed as far as the state of scientific data on these sites ameliorates.

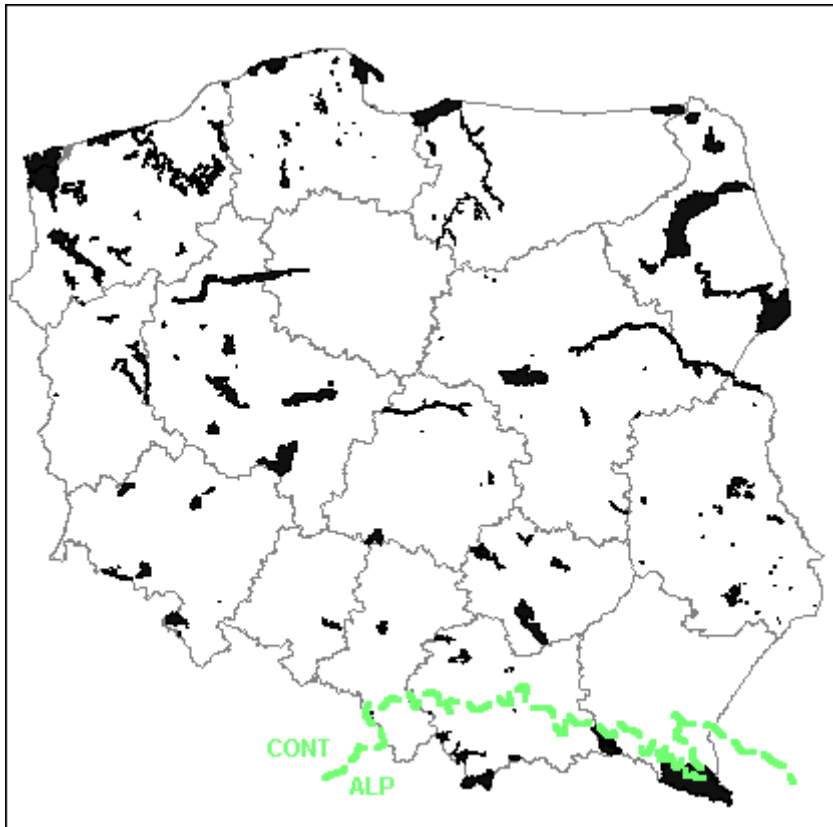


Fig 1. Governmental proposal of pSCIs for Natura 2000 network in Poland sent to the European Commission in May 2004.

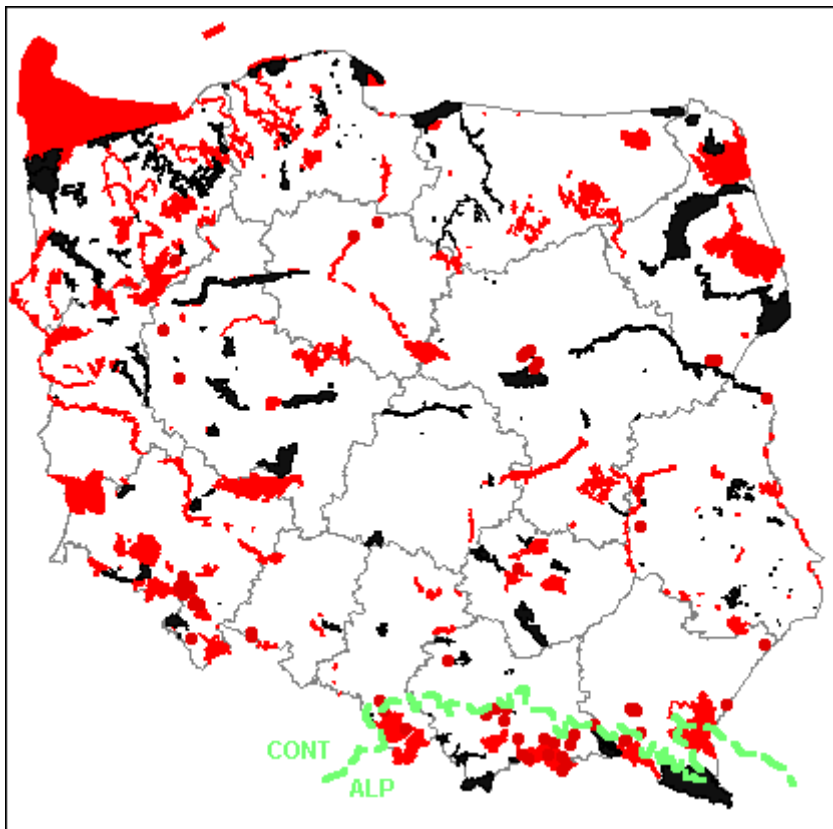


Fig. 2. Proposal of pSCIs necessary for the good functioning of Natura 2000 network in Poland, (localisation of particular sites are on the maps in chapter 3).

Proposed list of pSCIs, which should be added to the governmental proposal (more detailed information is included in the table and on the maps in chapter 3) :

- Bagienna Dolina Drwęcy
- Beskid Śląski
- Beskid Żywiecki
- Bieńkowo
- Buczyzna Szprotawsko-Piotrowicka
- Buczyny Łagowsko-Sulęcińskie
- Budwity
- Bystrzyca Jakubowicka
- Cyprianka
- Cytadela Grudziądz
- Czarne Urwisko k. Lutyni
- Dobromierz
- Dobromyśl
- Dobużek
- Dolina Białej Łądeckiej
- Dolina Bobru
- Dolina Ilanki
- Dolina Łupawy
- Dolina Pilicy
- Dolina Pliszki
- Dolina Radwi, Chotli i Chocieli
- Dolina Regi
- Dolina Rurzycy
- Dolina Rzeki Wel k. Kopaniarzy
- Dolina Słupi
- Dolina Stropnej
- Dolina Środkowej Pilicy
- Dolina Wełny
- Dolina Widawy
- Dolina Wieprzy i Studnicy
- Dolna Odra
- Dolna Wisła
- Dolny Wieprz
- Dom Dziecka w Puławach
- Dybowska Dolina Wisły
- Dzięzy Las i Dolina Tywy
- Fort Salis Soglio
- Forty Modlińskie
- Gązwa
- Gogolice – Kosa
- Góry Białskie i Grupa Śnieżnika
- Góry i Pogórze Kaczawskie
- Góry Kamiene
- Góry Opawskie
- Góry Słonne
- Góry Sowie i Bardzkie
- Graniczny Meander Odry
- Grądy w Dolinie Odry
- Grodczyn i Homole k. Dusznik
- Izbicki Przełom Wieprza
- Jelonka
- Jeziora Czaplineckie
- Jeziora Raduńsko-Ostrzyckie
- Jeziora Wdzydzkie
- Jezioro Bobęcińskie
- Jezioro Brenno
- Jezioro Bukowo
- Jezioro Gopło
- Jezioro Krasne
- Jezioro Lubie i Dolina Drawy
- Jezioro Śniadowo
- Kamień Śląski
- Kargowskie Zakola Odry
- Klasztor w Czernej
- Klasztor w Horyńcu Zdroju
- Kołacznia
- Kościół w Górkach Wielkich
- Kościół w Radziechowach
- Krośnieńska Dolina Odry
- Las k. Tworkowa
- Lasy Barucickie
- Lasy Bierzwnickie
- Lasy Cisowsko-Orłowińskie
- Lasy Gostynińsko-Włocławskie
- Lasy Sobiborskie
- Lasy Suchedniowskie
- Lasy Żerkowsko-Czeszewskie
- Liceum Ogólnokształcące w Opolu Lubelskim
- Ławica Słupska
- Łebskie Bagna
- Łęgi Odrzańskie
- Łęgi Słubickie
- Masyw Ślęży
- Miasteczkie Jeziora Lobeliowe
- Mirosławiec
- Młosino
- Młyn w Pierścću
- Nieszawska Dolina Wisły
- Nowa Wieś
- Nowosolska Dolina Odry
- Opolska Dolina Odry

- Ostoja Augustowska
- Ostoja Borecka
- Ostoja Gorczańska
- Ostoja Jaśliska
- Ostoja Knyszyńska
- Ostoja Lidzbarska
- Ostoja nad Baryczą
- Ostoja Napiwodzko-Ramucka
- Ostoja Olsztyńsko-Mirowska
- Ostoja Parczewska
- Ostoja Piska
- Ostoja Popradzka
- Ostoja Przemyska
- Ostoja Sławniowicko-Burgrabicka
- Ostoja Środkowojurajska
- Ostoja Złotopotocka
- Ostoje Nietoperzy Beskidu Wyspowego
- Ostoje Nietoperzy Powiatu Gorlickiego
- Ostrzyca Proboszczowska
- Pakosław
- Parazyńskie Buczyny
- Pasma Krowiarki
- Pojezierze Gnieźnieńskie
- Pojezierze Ińskie
- Pojezierze Sejneńskie
- Poleska Dolina Bugu
- Przełom Nysy k. Morzyszowa
- Przełom Wisły w Małopolsce
- Przełomy Pełcznicy pod Książem
- Puszcza Barlinecka
- Puszcza Kozienicka
- Puszcza Zgorzelecko-Osiecznicka
- Schrony Brzeskiego Rejonu Umocnionego
- Solecka Dolina Wisły
- Stawy Łęczok
- Stawy Sobieszowskie
- Stawy w Borowej
- Strzaliny koło Tuczna
- Suchy Młyn
- Sztolnia w Młotach
- Sztolnie w Węglówce
- Torfowisko Rzecińskie
- Twierdza Terespol
- Ujście Ilanki
- Ujście Warty
- Ujście Wisły
- Uroczyska Lasów Janowskich
- Uroczyska Puszczy Drawskiej
- Uroczyska Puszczy Solskiej
- Warnie Bagno
- Wąwóz Złotego Potoku k. Złotego Stoku
- Wisła Środkowa
- Włocławska Dolina Wisły
- Wrzosowiska Bornego-Sulinowa i Okonka
- Wysoczyzna Elbląska
- Wzgórza Chęcińsko-Kieleckie
- Wzgórza Kieleczyńskie
- Zachodniowołyńska Dolina Bugu
- Zamek Świecie
- Zatoka Pomorska
- Żwirownia w Starej Olesznej

The following pSCIs need to have their borders corrected: Karkonosze, Diabie Skąły, Pieniny, Wały, Magurska Refuge, Sarbska Spit, Piaśnickie Meadows, Słowińskie Coast, Pucka Bay and Hel Peninsula, Drwęca Valley, Noteć Valley, Kopanki, Sieraków, Western Krzywińskie Coast, Oder Mouth and Szczecin Lagoon, Wolin and Uznam.

The list of pSCIs in this report is complementary to the Special Protection Areas proposed by the Polish Society for the Protection of Birds – Birdlife Poland in a similar way and presented in part II of this report. These two elements combined make up the complete Natura 2000 Shadow List.

1.6. PROBLEMS CONCERNING IMPLEMENTATION OF NATURA 2000 NETWORK – HABITAT DIRECTIVE AND POLISH LAW

Detailed legal solutions concerning the creation and protection of the network of areas within Natura 2000 in Poland have been introduced by the Act on Nature Conservation published on April the 16th, 2004. This Act came into force in the moment of Polish accession on May 1st, 2004. The Act introduces “Natura 2000 site” as a new, separate form of nature protection, although Natura 2000 site may partially or wholly overlap other legal forms of nature protection in Poland.

The provisions of the Bird and Habitat Directives are quite well transposed into Polish legislation. In some cases, national legislation goes even farther than the provisions in the Bird and Habitat Directives. (e.g. in Poland it has been decided that for all Natura 2000 sites the management plans need to be prepared within 5 consecutive years starting from the moment of the sites’ establishment by Polish national authorities).

The Act on Nature Conservation has introduced a complicated and unclear system of responsibility concerning Natura 2000 sites. For example, it recognises four different levels of responsibility: “supervising the functioning of the Natura 2000 sites”, “coordinating the functioning of Natura 2000 sites”, “carrying out supervision over a Natura 2000 site” and “fulfilling tasks concerning nature protection within a Natura 2000 site”. It is not clear which level of responsibility concerns the execution of management measures, which one concerns the monitoring of a Natura 2000 site and which one concerns providing the funding. The mutual relations between the levels of responsibility have not been clearly defined. However, these issues are not normalised by the European Union legislation, which results in incoherent regulations in national legislation are not in conflict with the international law.

Once Natura 2000 network starts to function in Poland, everyday practice will force the situation, where legislation will have to be promptly amended and responsibility to be clearly divided – particularly with respect to financing.

Certain doubts have raised the Article 29, item 2 of the Act on Nature Conservation, which states that the preparation of management plans for a Natura 2000 site should be carried out in accordance with appropriate local authority - “*gmina*”. The provision is the compromise made during the preparation on this Act. The municipal lobby has agreed to withdraw the postulation to agree with the list of Natura 2000 sites presented by the Polish government, in return assuring their right to decide on the way, how the management of Natura 2000 sites will be executed. However, this regulation is also not against the EU legislation. Practice will show us if local authorities will use their right to increase the efficiency of protecting the unique natural

heritage they are entrusted with or if they abuse it to warrant immediate economic interests at the cost of nature.

More serious contradictions between the Habitat Directive and national legislation (in respect to Natura 2000 sites) concern Article 6 of this Directive. According to the item 3 of this article, all plans or projects that may have significant effect on Natura 2000 site must be subject to appropriate assessment. The Act on Nature Conservation (Article 33, item 3) warrants making such assessment, but the preparation of this assessment should be based on provisions from Act on 27th April, 2001 - Law on Environmental Protection (Title 1 of Section 6). However, the Law on Environmental Protection does not even mention the existence of the Natura 2000 network, so the statements of the Habitat Directive are not transposed into this act. According to the Law on Environmental Protection the list of projects, which should be submitted to the assessment is very limited. Even if we assume that the Act on Nature Conservation implements *lex specialis* and expands this list to all plans and projects that may influence a Natura 2000 site, it is still not clear who and how will decide on if the project, which is omitted from the list in Law on Environmental Protection, should be assessed. Moreover, the assessment criteria included in the Law on Environmental Protection do not foresee the necessity to analyse the impact of the project on management of Natura 2000 site.

The Polish government has prepared and accepted a draft of amendments to the act - "Law on Environmental Protection", including the new provisions on impact assessment of plans and projects on Natura 2000 sites. If these amendments were accepted by the Parliament in its proposed form, Polish legislation would be well adjusted to the European one in this respect.

Article 6, item 3 of the Habitat Directive provides also for taking the opinion of the general public on the project or plan which have effect on Natura 2000 site. The Act on Nature Conservation does not include such possibility. In the Article 33, item 6 of this act there is only the obligation to obtain an opinion from local authorities - locally appropriate commune councils. Apparently, it has been assumed that the municipal organs have the right to give an opinion in the name of local communities, which is not right. It seems that for the full accordance with the spirit of the regulations in the Habitat Directive, a possibility should be given for individual citizens and non-governmental organisations to present their opinions, e.g. in the process of preparation of spatial management plans and strategies. However, since Polish law provides in general the procedure of announcing and carrying out so called public referenda, it may be assumed that the public consultations can be undertaken, so the national law do not clearly disagree with the Habitat Directive in this respect.

The most dangerous contradiction between Article 4, item 5 of the Habitat Directive and Article 33 item 2 from the Act on Nature Conservation has been observed. According to national legislation, it is prohibited to carry out activities that may have negative significant impact on habitats and species. These provisions also apply to the governmental proposed list of Natura 2000 sites, but only until the moment, when this list is accepted or refused by the European Commission. It means, that from the moment of designation by the European Commission of SCIs till the moment of the designation of Special Areas of Conservation by Poland (according to Article 4, item 4 of the Habitat Directive this may last even 6 years), the sites are not protected in any way! Meanwhile, according to Article 4, item 5 of the Habitat Directive, rules established in Article 6, items 2-4 of this Directive, should be already applied to SCIs, i.e. both the prohibition to carry out projects that can have negative effect on protected species and habitats, as well as the whole procedure concerning the compensatory measures and assessment of any plans and projects. The Article 33, item 2 of the Act on Nature Conservation, does not implement the provisions from Article 5 item 4 of the Habitat Directive on the sites in the consultation period.

Hence we have a case, where the local legislation does not clearly transpose the statements of the Habitat Directive concerning the preservation of natural values, for which the procedure of establishing them as Natura 2000 sites on the national level has not been completed. This legislative gap should be amended immediately. Otherwise, the situation may occur, where the proposed sites for Natura 2000 are devastated before they are legally protected on the national level.

When this report was being prepared (September 2004), the Ministry of Environment was working on the amendment of the Act on Nature Conservation, including the transposition of Article 4, item 5 of the Habitat Directive. Unfortunately, according to that proposed amendment 1, the currently existing provision on the prohibition to carry out activities that are harmful to sites from the governmental proposal submitted to the European Commission but not yet confirmed as SCIs, has been crossed out. In this respect, the amendment can be considered as the step backward. The amendment does not account for the provisions from Article 5, item 4, of the Habitat Directive, either.

2. Representation of species and habitats from Annexes of Habitat Directive in governmental proposal

2.1. SPECIES OF PLANTS FROM ANNEX II OF HABITAT DIRECTIVE IN POLISH GOVERNMENTAL PROPOSAL OF NATURA 2000 NETWORK

1. **Latin name:** *Aconitum firmum* ssp. *Moravicum*

Aconitum firmum subsp. *moravicum*

2. **Polish / English name:** tojad morawski / Moravian monkshood

3. **Systematic position:** *Angiospermae*, *Ranunculaceae*

4. **Distribution, Polish resources:** It occurs in Poland only in the alpine belt, in 5 populations grouped in 3 regions (Babia Góra Mt., Beskid Żywiecki Mts. and Beskid Śląski Mts.). There is only one locality on Mt. Babia Góra; in the Beskid Żywiecki Mountains the species has three localities: in the massif of Pilsko, under the peak of Mt. Rysianka and on Mt. Wielka Racza; in the Beskid Śląski Mts. it grows on Mt. Barania Góra and Mt. Klimczok, and in the past it was also noted in the massif of Skrzyczne (this locality should be confirmed). In the known localities *Aconitum firmum* ssp. *moravicum* occurs in mixed populations with *A. firmum* subsp. *firmum*.



5. **To what extent does the governmental proposal cover the national resources of the species?** ☹ It covers only one region and one population on Mt. Babia Góra, which has already been protected in the national park. The other 4 populations, approximately 80% of the whole Polish resources of the species, which are much more endangered, have not been included in the national list of pSCIs.

6. **Suggestions to supplement the Natura 2000 governmental proposal:** The site of Beskid Żywiecki Mts. and site of Beskid Śląski Mts. should be included - within its boundaries there are 5 populations of *Aconitum firmum* subsp. *moravicum*. As a result, the network would cover all Polish resources.

1. **Latin name:** *Adenophora lilifolia*

2. **Polish / English name:** dzwonecznik wonny / lilyleaf ladybell

3. **Systematic position:** *Angiospermae*, *Campanulaceae*

4. **Distribution, Polish resources:** In the past, the species was reported from approximately 100 dispersed localities, situated mainly in central and north-eastern Poland and in the uplands (CONT). The north-western limit of its geographical range runs through Pomerania, Wielkopolska and Silesia. In many localities and in the whole regions the species, however, has

become extinct. The present resources of the species in Poland are not known, but it is almost certain that it occurs in a few localities.

5. To what extent does the governmental proposal cover the national resources of the species? ?? It is difficult to estimate the state of protection as there is no current data concerning localities of the species and it is disappearing rapidly. The governmental proposal encompasses 3 sites with the species (one of them is Dąbrowa Grotnicka where the species is still present). The other four sites, suggested as pSCIs in the experts' proposal, have not been included. Among them there were two areas indicated as the most important for the species in Poland: Wzgórza Chęcińsko-Kieleckie (Chęciny-Kielce Hills) and Ostoja Knyszyńska (Site of Knyszyńska Forest).

6. Suggestions to supplement the Natura 2000 governmental proposal: It is difficult to suggest any supplements to the list as there is no reliable data on current localities of the species. An inventory of its resources is needed.

1. Latin name: *Agrimonia pilosa*

2. Polish / English name: rzepik szczeciniasty / Chinese agrimony

3. Systematic position: *Angiospermae, Rosaceae*

4. Distribution, Polish resources: It is a species with a wide Eurasian geographic range, which reaches the western limit of its distribution in the eastern part of Europe, including the north-eastern part of Poland. Therefore it is pretty rare there but not particularly endangered. It is dispersed at wood fringes in north-eastern Poland (CONT). It is probably an expansive species; there have been reported new localities in man-made habitats in the Bieszczady Mountains (ALP), far from the main distribution range (probably it was brought on sheep's coat from Romania?). An exact number of localities is unknown.

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The proposal encompasses 5 sites of the species. The broadest proposal suggested by Polish naturalists comprised 8 sites with *Agrimonia pilosa*. There are no reliable data on the abundance of its Polish population, hence it is difficult to assess what percentage of the whole population is included in the project. However, taking into consideration the character of its habitats, as well as a tendency to expand, its broader protection is not necessary.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Aldrovanda vesiculosa*

2. Polish / English name: aldrowanda pęcherzykowata / waterwheel plant

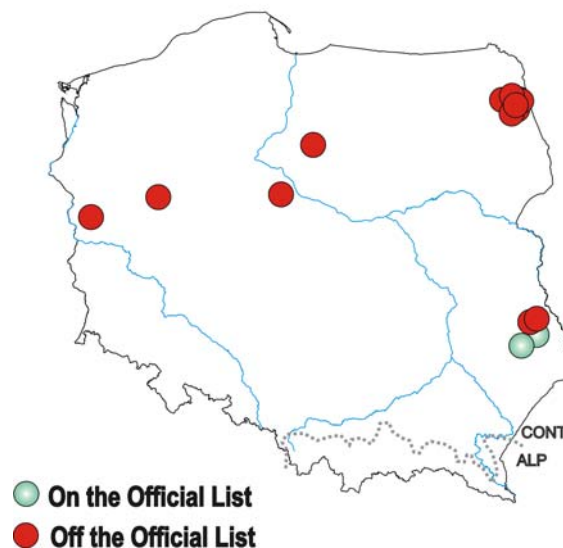
3. Systematic position: *Angiospermae*, *Droseraceae*

4. Distribution, Polish resources: There are a dozen or so localities (exclusively CONT), most of which assembled in the two biggest sites: Puszcza Augustowska (Augustowska Forest) and Poleski National Park. In the past a concentration of localities was also noted in Pojezierze Gnieźnieńskie (Gniezno Lake District) but there is no data on their present state. There are also some scattered localities in the central part of Poland.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The national list of pSCIs comprises only one site, Ostoja Poleska (Site of Polesie - Poleski National Park), where the species grows abundantly in Łukie and Moszne lakes. Nevertheless these populations constitute no more than 20% of the Polish resources. Ostoja Augustowska (Site of Augustowska Forest), the most important site for conservation of *A. vesiculosa* in Poland, was disregarded in the governmental proposal. The Augustowska Forest hosts three out of the four natural and stable populations of *A. vesiculosa* in Kruglak Lake, Miklaszówek Lake, and in the overflow arm of the Augustów Canal near Miklaszewo Sluice in the Augustów Lake District, as well as some other populations regarded as “developing” (in Płotycze and Krzywulek lakes, as well as in the Augustów Canal), which host several thousand individuals each. A significant population from Żółwiowe Błota in the eastern part of Lasy Sobiborskie (Sobiborskie Forests) was neglected in the governmental proposal, as well. Further populations which are not included in the national list are those from western Poland (Obierznie Lake near Pniewy in Międzyrzecze-Sieraków Lake District, localities from Notecka Forest and Gniezno Lake District; these are not so important as they are small or disappearing populations.

6. Suggestions to supplement the Natura 2000 governmental proposal: Ostoja Augustowska (Site of Augustowska Forest) and Lasy Sobiborskie (Sobiborskie Forests), should obligatorily be included in the network; both sites are also important for conservation of other species and habitat types. Inclusion of Pojezierze Sejneńskie (Sejny Lake District) would improve the situation even more.

Aldrovanda vesiculosa



1. Latin name: *Angelica palustris* (*Ostericum palustre*)

2. Polish / English name: starodub łąkowy / marsh angelica

3. Systematic position: *Angiospermae*, *Apiaceae*

4. Distribution, Polish resources:

In the past, the species was reported from approximately 100 localities concentrated in the belt running through the central part of the country (CONT). The highest aggregations of localities are observed in Wielkopolska Lake District, Kujawy Lake District and Lublin Upland.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal encompasses localities situated on the Bug River, in the Polesie region, as well as the population of Pyzdry on the Warta River and populations on the Noteć River. Not included are populations from the region of Dalewo and Dolsko in the eastern part of Krzywino Lake District), believed to be one of the most numerous in Poland, as well as many populations from the Pałuki region.. There is no quantitative data on the national resources of the species and current distribution of its localities. However, it has been estimated that the national list comprises 30–40 % of the national resources.

6. Suggestions to supplement the Natura 2000 governmental proposal: Further research is needed. Perhaps, the inclusion of abundant populations between Dalewo and Dolsko in the eastern part of Krzywino Lake District), an abundant population from Bujaty in central Poland and populations from the Pałuki region should be considered. It is difficult, however, to indicate specific sites as there is no data on the present resources of the species in Poland.

1. Latin name: *Apium repens*

2. Polish / English name: selery błotne / Creeping marshwort

3. Systematic position: *Angiospermae*, *Apiaceae*

4. Distribution, Polish resources: During the last 15 years the species was observed at 9 localities in Gniezno Lake District and 2 localities in Leszno Lake District (exclusively CONT). The largest population is situated on Brenno Lake in Leszno Lake District. It consists of several hundreds of flowering and producing fruits individuals. A systematic observation proves that the population is stable. At the other locality in the Leszno Lake District the species has probably become extinct. A size of 9 closely situated populations in Gniezno Lake District varies from several to several dozen individuals.

Apium repens



5. To what extent does the governmental proposal cover the national resources of the species? ☹! None of the localities has been included in the national list of pSCIs.

6. Suggestions to supplement the Natura 2000 governmental proposal: The site of Pojezierze Gnieźnieńskie (Gniezno Lake District) (important also for conservation of other species and natural habitat types), as well as Jezioro Brenno (Brenno Lake), specially for *Apium repens*, should be included.

1. Latin name: *Asplenium adulterinum*

2. Polish / English name: zanokcica serpentynowa / Corrupt Spleenwort

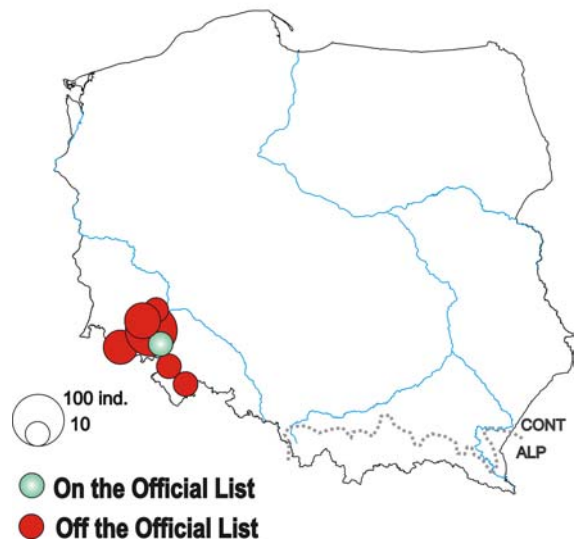
3. Systematic position: *Pteridiophyta*

4. Distribution, Polish resources: There are 7 localities in Lower Silesia (CONT): Popiel Hill near Janowice Wielkie (27 individuals), Kamionki and Przygórze in the Góry Sowie Mountains (35 and 14 individuals), Żmijowiec in the Śnieżnik Range (14 individuals) and Wzgórza Kiełczyńskie (Kiełczyn Hills) (3 populations: 14, 11 and 100 individuals).

5. To what extent does the governmental proposal cover the national resources of the species? ☹! Only one population in Kamionka, which constitutes 16% of the Polish resources, is included in the governmental proposal. What is more, this population is shrinking.

6. Suggestions to supplement the Natura 2000 governmental proposal: Wzgórza Kiełczyńskie (Kiełczyn Hills), hosting 60% of the Polish resources of the species, should be obligatory included in the network. If also Góry Bialskie i Grupa Śnieżnika (Bialskie Mountains and Śnieżnik Massif), Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills) and Góry Sowie i Bardzkie (Sowie & Bardzkie Mts) will be included, all population will be covered.

Asplenium adulterinum



1. Latin name: *Botrychium simplex*

2. Polish / English name: podejźrzon pojedynczy / Least grape fern

3. Systematic position: *Pteridiophyta*

4. Distribution, Polish resources: There were approximately 25 known localities of the species in the past (all of them in the CONT), and only two of them survived till the 1980s.: on Wierzchowo Lake near Szczecinek and on Kiedrowickie Lake near Lipnica in Bory Tucholskie (Tucholskie Forests). Both localities have extensively been searched during the last 20 years but the species has not been found. The least grape fern should be considered as a probably extinct species in Poland.

5. To what extent does the governmental proposal cover the national resources of the species? † The species probably no longer occurs in Poland. Of the two last historical localities, one is situated within the boundaries of Jeziora Szczecineckie (Szczecineckie Lakes), a pSCI listed in the governmental proposal, important for conservation of other species and natural habitat types.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Buxbaumia viridis*

2. Polish / English name: bezlist okrywowy / green shield-moss

3. Systematic position: *Bryophyta*

4. Distribution, Polish resources: The current state of the population is unknown. The species was reported from several tens of localities, mainly in the 19th century. Despite its wide geographic range, it occurs on scattered localities in small numbers. It was reported from the Tatra Mts., the Western Beskidy Mts. and the Western Carpathians (ALP), as well as in the Sudety Mts. and the Sudety foothills (CONT). In addition, it has scattered localities in the uplands of southern Poland, especially in the Roztocze region, and in the west and north of Poland as far as the Ełk Lake District in the east (CONT). It is a boreal-mountain species with apparently disjunctive distribution and evident continental preferences.

5. To what extent does the governmental proposal cover the national resources of the species? ?? Only two out of at least five sites where the species was not long ago reported from are included in the network: the Tatra Mts. (ALP) and Roztocze Środkowe (Central Roztocze) (CONT)

6. Suggestions to supplement the Natura 2000 governmental proposal:

We suggest to include all sites where the occurrence of the species was recently confirmed, i.e.:

- Ostoja Popradzka / Site on Poprad River (ALP)
- Góry i Pogórze Kaczawskie / Kaczawa Hills and Foothills (CONT)
- Góry Bialskie i Grupa Śnieżnika / Bialskie Mountains and Śnieżnik Massif (CONT)
- Grupa Śnieżnika / Massif of Śnieżnik (CONT)
- If the presence of *Buxbaumia viridis* is confirmed in localities situated in the north-eastern part of Poland, they should be included, as well. However, at present there are no sufficient data.

1. Latin name: *Caldesia parnassifolia*

2. Polish / English name: kaldeżja dziewięciornikowata / parnassius-leaved water plantain

3. Systematic position: *Angiospermae, Alismataceae*

4. Distribution, Polish resources: There were only 6 localities of the species in Poland (all in CONT) in the past; one of them, in Nietopersko Lake near Międzyrzecze, was still in existence in the 1980s. Nonetheless, the species has not been observed there since 1986. *Caldesia parnassifolia* should be considered as a probably extinct species in Poland.

5. To what extent does the governmental proposal cover the national resources of the species? † The species probably does not occur in Poland at present. The last known locality is situated within the boundaries of Dolina Leniwej Obry (Leniwa Obra River Valley), a pSCI which is important for conservation of other species and natural habitat types.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Campanula bohemica**

2. Polish / English name: dzwonek karkonoski / Bohemian bellflower

3. Systematic position: *Angiospermae, Campanulaceae*

4. Distribution, Polish resources: It occurs exclusively in the Karkonosze Mountains, in the Karkonosze National Park (CONT).

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The whole Polish population of the species is situated within Karkonosze, a pSCI which covers the area of the Karkonosze National Park.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Campanula serrata*

2. Polish / English name: dzwonek piłkowany

3. Systematic position: *Angiospermae, Campanulaceae*

4. Distribution, Polish resources: There are a dozen or so localities in the Western Tatra Mountains (some of them very abundant) and in the Bieszczady Mountains (abundant); the species was also reported from single isolated localities in the Beskid Żywiecki Mountains (Mt. Wielka Racza) and the Gorce Mountains (exclusively ALP)

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The official proposal encompasses the most numerous populations from the Tatra Mts. and Bieszczady Mts. Disregarded localities from the Gorce Mts. and Beskid Żywiecki Mts., if still exist, are not very important for the species.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Carlina onopordifolia*

2. Polish / English name: dziewięciśl popłocholistny / carline

3. Systematic position: *Angiospermae, Asteraceae*

4. Distribution, Polish resources: The species occurs in Poland at 5 localities (CONT): on Garb Pińczowski (between Pińczów and Skowronno and near Pasturka - approximately 1 thousand individuals), in the vicinity of Miechów (Wały Nature Reserve and its neighbourhood – approximately 14 thousand individuals), Dąbie Nature Reserve near Klonowo (artificially introduced population), Stawska Góra near Chełm (approximately 2 thousand individuals) and the Rogów Nature Reserve near Zamość (a dozen or so individuals).

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The governmental proposal encompasses 3 out of the 5 localities of the species, disregarding only the small and insignificant population from Rogów near Zamość and the small, introduced population in the Dąbie Nature Reserve near Klonowo. The boundaries of the site of Wały encompass only the Wały Nature Reserve without its neighbourhood, where the major part

of the most numerous Polish population of the species occurs (extension of the Reserve by 3 ha is suggested).

6. Suggestions to supplement the Natura 2000 governmental proposal: The site of Wały should be enlarged accordingly to nature reserve projected enlargement (from 5 to 8,5 ha); in this way the most abundant population of the species will be included as a whole.

1. Latin name: *Cochlearia polonica*

2. Polish / English name: warzucha polska / Polish scurvy-grass

3. Systematic position: *Angiospermae, Brassicaceae*

4. Distribution, Polish resources: An endemic species to Poland. It has become extinct at the only natural locality, in the waterheads of the Biała Przemsza River in Pustynia Błędowska (Błędów Desert). However, as the result of successful transplantation, supplementary localities have been established (all in CONT). Of the three existing localities, only one, in the Centuria River head springs, is supposed to persist. The population consists of several thousands individuals; plants are in a good health and pass through a full generative cycle. The other two localities: in one of the head springs of the Wiercica River and in one of the head springs of the Rajecznicza River (tributary to Żebrówka) between Prądle and Szczekociny host weak populations consisting of several dozen individuals in a poor health, mainly because of overshadowing.

5. To what extent does the governmental proposal cover the national resources of the species? ☹! The national list does not include any of those localities despite the fact that it is an endemic species to Poland and listed in Annex II of the Habitat Directive as the Polish proposal.

6. Suggestions to supplement the Natura 2000 governmental proposal: Ostoja Środkowojurajska (Site of Central Jura Upland), important also for conservation of other species and natural habitat types, covering the population from the Centuria River head springs, should be included in the network.

1. Latin name: *Cochlearia tatrae*

2. Polish / English name: warzucha tatrzańska / Tatra scurvy-grass

3. Systematic position: *Angiospermae, Brassicaceae*

4. Distribution, Polish resources: The whole Polish population totalling no more than several dozen individuals concentrates in the massif of Mięguszowiecki Szczyt in the High Tatra Mountains (ALP).

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The whole Polish population is situated within the boundaries of Tatry (Tatra Mountains), listed in the national list of pSCIs.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Coleanthus subtilis*

2. Polish / English name: koleantus delikatny / moss grass

3. Systematic position: *Angiospermae, Poaceae*

4. Distribution, Polish resources: There is one locality in Poland, newly discovered, in the complex of Borowa fish ponds (between the villages of Borowa, Bielawa and Raków), 20 km to the east of Wrocław. The locality encompasses 4 ponds with a total area of 15 ha. The occurrence of species is connected with the cycle of fish ponds management; it occurs on the bottom of emptied ponds. It appears in masses at a density of 500 individuals per 1 m². The population size fluctuates according to the cycle of fish ponds management. The maintenance of present, extensive fish farming is a prerequisite to the site persistence.

5. To what extent does the governmental proposal cover the national resources of the species? ☹! The only locality of the species is not included in the network.

6. Suggestions to supplement the Natura 2000 governmental proposal: The site of Stawy w Borowej (Ponds in Borowa) should be included in the network.

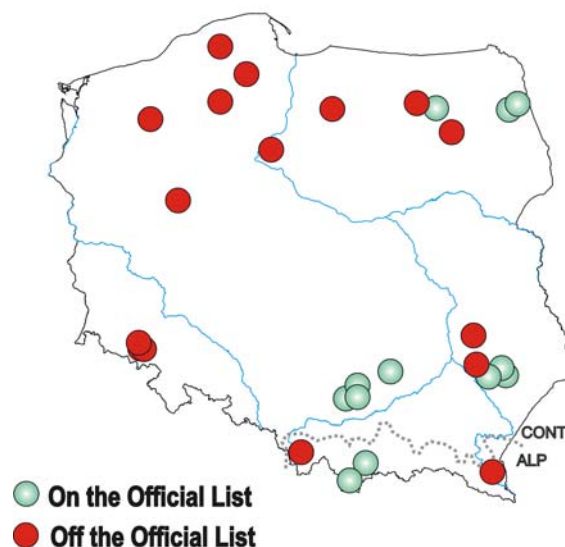
1. Latin name: *Cypripedium calceolus*

2. Polish / English name: obuwik popolicy / lady's slipper orchid

3. Systematic position: *Angiospermae, Orchidaceae*

4. Distribution, Polish resources: The species was reported from over 200 localities scattered in the Polish lowlands (CONT); however, most of them, especially in western Poland, are only historical. At present it occurs at several tens of scattered localities, more numerous in the Kraków-Częstochowa Jura Upland, the Lublin Upland, Roztocze region and the Biebrza River Valley. In the Carpathians (ALP) it is known at present from the Tatra Mts., the Pieniny Mts. and the Słonne Mts.; in all mountain localities the populations are small.

Cypripedium calceolus



5. To what extent does the governmental proposal cover the national resources of the species? ☺ The governmental proposal encompasses probably some 50% of the national resources of the species in the Continental biogeographical region, including its numerous populations in the Biebrza River Valley, Central Roztocze, Żurawce Nature Reserve, as well as the Michałowice and Sterczów-Ścianka Nature Reserves in the Kraków-Częstochowa Jura Upland. Nevertheless, the national list disregards localities from western Poland, including exclusively populations in the east and south of the country. The proposal comprises populations from the Tatra Mts, and the Pieniny Mts. representing the Alpine biogeographical region but

populations from the Słonne Mts.; as data on a size of these populations is lacking, it is difficult to assess the percentage included in the network.

6. Suggestions to supplement the Natura 2000 governmental proposal: In order to ensure conservation of the species in its whole geographical range in Poland, it is essential to include populations from western Poland in the Continental biogeographical region, i.e. the populations from the Sudety Mts.: Pasma Krowiarki (Krowiarki Range) and from Góry and Pogórze Kaczawskie (Kaczawa Hills and Foothills) and from the lowlands of north-western and northern Poland: Dolina Radwi, Chocieli and Chotli (Radew, Chociel and Chotla River Valley) and Jeziora Raduńsko-Ostrzyckie (Radunia-Ostrzyca Lakes). In the alpine biogeographic region, in view of the small resources of the species, we suggest protection of all its localities; therefore the site of Słonne Mts. should be included in the network. Also including Grodziec Hill with lady's slipper locality should enlarge the Site of Beskid Żywiecki Mts. All these sites, which are indicated as important for conservation of lady's slipper are also important for other plant species and habitat types.

1. Latin name: *Dianthus nitidus*

2. Polish / English name: goździk lśniący / -

3. Systematic position: *Angiospermae, Caryophyllaceae*

4. Distribution, Polish resources: Recorded in Pieniny in XIX century, later never observed.

5. To what extent does the governmental proposal cover the national resources of the species? † The species most probably does not occur in Poland at present.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Dichelyma capillaceum*

2. Polish / English name: żaglik włosowaty / *Dichelyma* moss

3. Systematic position: *Bryophyta*

4. Distribution, Polish resources: On the turn of the 19th century it was known from several localities in West Pomerania, and in the vicinity of Częstochowa and Żagań (CONT). Nonetheless, for nearly 100 years it has not been observed in Poland. *Dichelyma capillaceum* should be considered as a probably extinct species in Poland.

5. To what extent does the governmental proposal cover the national resources of the species? † The species most probably does not occur in Poland at present.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Dicranum viride*

2. Polish / English name: widłoząb zielony

3. Systematic position: *Bryophyta*

4. Distribution, Polish resources: There were over 50 localities of the species reported in Poland; 25% of these localities were noted before 1900, 19% were confirmed or discovered in the years 1901-1950, 31% in 1951-1990, while 25% were reported after 1990. It occurs mainly in the Carpathians in the lower mountain forest belt, and in the remaining part of Poland there are only some scattered localities.

5. To what extent does the governmental proposal cover the national resources of the species? ?? In the Standard Data Forms included in the experts' project of pSCIs the species was indicated only in one site, Pojezierze Drawskie (Drawsko Lake District) in Western Pomerania (CONT), which was finally excluded from the national list of pSCIs. The species probably occurs in some Carpathian pSCIs (ALP) included in the governmental proposal, though not mentioned in the respective SDFs.

6. Suggestions to supplement the Natura 2000 governmental proposal: There is no sufficient data.

1. Latin name: *Echium russicum*

2. Polish / English name: żmijowiec czerwony / Viper's Bugloss

3. Systematic position: *Angiospermae, Boraginaceae*

4. Distribution, Polish resources: The species has two localities: Dobużek near Łaszczów and Czumów on the Bug River (CONT). There are just a few individuals in Dobużek. In Czumów the situation was similar but the population was enriched by specimens grown in the Botanical Garden in Lublin. As a result, there are now approximately 100 individuals.

5. To what extent does the governmental proposal cover the national resources of the species? ☹! The governmental proposal does not include any of the localities of the species.

6. Suggestions to supplement the Natura 2000 governmental proposal: Two sites: Zachodniowołyńska Dolina Bugu (West Volhynian Bug River Valley), encompassing the population in Czumów (important also for other species and natural habitat types) and Dobużek (created specially for *Echium russicum*) should be included in the network.

1. Latin name: *Eleocharis carniolica*

2. Polish / English name: ponikło kraińskie / -

3. Systematic position: *Angiospermae, Cyperaceae*

4. Distribution, Polish resources: The species reported from 3 localities in Poland: one near Jaślińska (ALP) and two in the Sandomierz Basin (CONT)

5. To what extent does the governmental proposal cover the national resources of the species? ?? The governmental proposal does not encompass any of the three known localities. It is not certain, however, whether the presence of those populations is of permanent character.

6. Suggestions to supplement the Natura 2000 governmental proposal: Further research is needed to explain whether the populations are permanent and their protection is possible. If the answer is positive it would be necessary to designate small sites in the areas of occurrence of the species for its protection. Current data is insufficient.

1. Latin name: *Erysimum pieninicum**

2. Polish / English name: pszonak pieniąski / Pieniny wallflower

3. Systematic position: *Angiospermae, Brassicaceae*

4. Distribution, Polish resources: It occurs exclusively in the Pieniny Mountains within the boundaries of the Pieniny National Park (ALP).

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The whole Polish population of the species, with several hundred individuals, is situated within Pieniny, a pSCI, which covers the area of the Pieniny National Park.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Galium cracoviense**

2. Polish / English name: przytulia małopolska / Cracow bedstraw

3. Systematic position: *Angiospermae, Rubiaceae*

4. Distribution, Polish resources: An endemic species to Poland. There are several closely situated localities near Olsztyn in Kraków-Częstochowa Jura Upland (CONT). The population comprises a dozen or so thousands of individuals.

5. To what extent does the governmental proposal cover the national resources of the species? ☹! The governmental proposal does not include any site for this species, despite the fact that it is an endemic species to Poland and listed in Annex II of the Habitat Directive on the initiative of our country.

6. Suggestions to supplement the Natura 2000 governmental proposal: Obszar Olsztyn–Mirów (Olsztyn–Mirów Site), encompassing the whole Polish population, should be included in the network.

Galium cracoviense



1. Latin name: *Galium sudeticum* *

2. Polish / English name: przytulia sudecka / Sudeten bedstraw

3. Systematic position: *Angiospermae, Rubiaceae*

4. Distribution, Polish resources: It occurs exclusively in the Karkonosze Mountains within the boundaries of the Karkonosze National Park (CONT).

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The whole Polish population of the species is situated within Karkonosze, a pSCI which covers the area of the Karkonosze National Park.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Gentianella bohemica**

2. Polish / English name: goryczka (goryczuszka) czeska / Bohemian gentian

3. Systematic position: *Angiospermae, Gentianaceae*

4. Distribution, Polish resources: In the past, the species was reported from approximately 30 localities concentrated mainly in the Pieniny Mts., the Małe Pieniny Mts., the Beskid Wyspowy Mts. and Beskid Sądecki Mts., the Gorce Mts., the Bieszczady Mts. (ALP) and in the Sudety Mts. (Stołowe Mts., Sowie Mts., massif of Ślęza, vicinity of Świdnica) and in the Kraków-Częstochowa Jura Upland (CONT); an isolated locality was reported also in Białowieża Forest (CONT). The present status of most of these localities and the size of Polish population of Bohemian gentian are not known. Up-to-date information is scarce; we know for instance that the plant occurs at 2 localities in the Stołowe Mts. The species is probably in decline and threatened with extinction.

5. To what extent does the governmental proposal cover the national resources of the species? ?? It is difficult to assess, as there is no present data about the species. The species is not listed in the SDFs for the proposed SCIs because until 2004 it was mistakenly disregarded in work on the Natura 2000 network in Poland.

6. Suggestions to supplement the Natura 2000 governmental proposal: Further research is required. It is difficult to suggest additional sites, as there is no current data on the status of the previously reported localities. As confirmation of the presence of the species is very probable, the inclusion of some its sites that are also important for other species and habitat types, such as Masyw Ślęzy (Massif of Ślęza) and Ostoja Popradzka (Site on Poprad River), is recommended; in addition, the site of Pieniny should be enlarged so as to include the Małe Pieniny Mts.. If the occurrence of the species is confirmed in other sites, further additions to the list of pSCIs will be necessary.

1. Latin name: *Gladiolus paluster*

2. Polish / English name: mieczyk błotny / marsh gladiolus

3. Systematic position: *Angiospermae, Iridaceae*

4. Distribution, Polish resources: The only two localities from which the species has been known till 2004 are: the Łąka Sulistrowicka (Sulistrowice Meadow) Nature Reserve in the massif of Ślęza and in the vicinity of Konradów in Kaczawa Hills (CONT). On the Sulistrowice Meadow in the year 2000 there were approximately 20 individuals. In 2003 the species was not found there, it seems to be extinct, but fortunately in 2004 ca 20 individuals have been found in the Sulistrowice Meadow Site. The status of Konradów population is unknown.

Gladiolus paluster



5. To what extent does the governmental proposal cover the national resources of the species? ☹! All localities are not included in the national list of pSCIs.

6. Suggestions to supplement the Natura 2000 governmental proposal: Masyw Ślęży / Ślęza Massif, Góry i Pogórze Kaczawskie / Kaczawa Hills and Foothills should be included in the network.

1. Latin name: *Hamatocaulis vernicosus = Drepanocladus vernicosus*

2. Polish / English name: haczykowiec błyszczący / slender green feather-moss

3. Systematic position: *Bryophyta*

4. Distribution, Polish resources: The species is considered more common in the lowlands (especially in the northern part; CONT) and more rare in the mountains, where it occurs in the Tatras and in the Western Bieszczady Mts. (ALP). However, knowledge of the existing localities of the species is insufficient and most data on its distribution is only historical.

5. To what extent does the governmental proposal cover the national resources of the species? ?? It is difficult to estimate, as there is no data on the resources of the species. Information on the species in the SDF's for the listed pSCIs is random and does not make a reliable picture of its distribution.

6. Suggestions to supplement the Natura 2000 governmental proposal: Further research is required. It is difficult to make suggestions, as there is no reliable data on the current localities of the species.

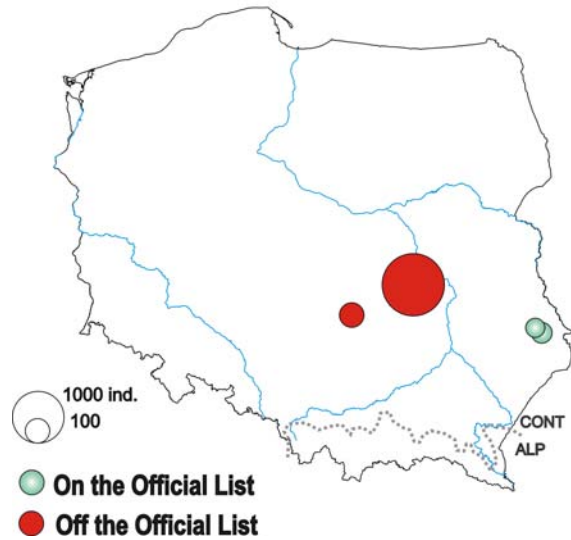
1. Latin name: *Ligularia sibirica*

2. Polish / English name: języczka syberyjska / Siberian ligularia

3. Systematic position: *Angiospermae, Asteraceae*

4. Distribution, Polish resources: There are four localities in Poland (exclusively CONT): Pakosław near Ilża, Suchy Młyn near Szczekociny in the Pilica River Valley, Sobowice peat bog and Bagno Serebryjskie marsh near Chełm. The population of Pakosław is most numerous (over 1100 individuals); it is a strong population and the number of individuals is increasing. It is probably the strongest population in the whole Europe, except for Russia. The locality is seriously endangered as the result of man-made changes in the bog habitat and overgrowing with shrubs. There is a need for its immediate protection. In Suchy Młyn there are several dozen individuals and near Chełm only a dozen or so individuals.

Ligularia sibirica



5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal includes two localities but the least numerous ones, encompassing only 3% of the Polish resources of the species. The largest population of Pakosław (90% of the Polish resources) and the second largest population in Suchy Młyn have been neglected.

6. Suggestions to supplement the Natura 2000 governmental proposal: Two sites: Pakosław and Suchy Młyn should be included in the network.

1. Latin name: *Linaria loeselii* (*Linaria odora*)

2. Polish / English name: Inica wonna / Baltic toadflax

3. Systematic position: *Angiospermae, Scrophulariaceae*

4. Distribution, Polish resources: The species occurs only on coastal dunes of the south-eastern coastline of the Baltic Sea. In Poland it grows only in the eastern part of the coastline (CONT), to the west of Unieść. The most abundant sites, with several thousand individuals in total, are on the dunes of Mierzeja Wiślana (Vistula Spit) and Pobrzeże Słowińskie (Słowińskie Coastland; Słowiński National Park). The marginal westernmost locality is on the sand-bar of Lake Jamno near Unieść.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal encompasses the most abundant localities of the species, Mierzeja Wiślana (Vistula Spit) and Pobrzeże Słowińskie (Słowińskie Coastland), comprising altogether 70–80 % of the Polish resources of Baltic toadflax. Nevertheless, the proposal does not cover localities on the sand-bars of Jamno and Bukowo lakes, constituting the western limit of

the species geographical range, whose conservation is important from the point of view of biogeography.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The site of Jezioro Bukowo (Lake Bukowo), covering marginal localities of the species, should be included in the network. The site is important also for conservation of other species and habitat types.

1. Latin name: *Liparis loeselii*

2. Polish / English name: lipiennik Loesela / fen orchid

3. Systematic position: *Angiospermae, Orchidaceae*

4. Distribution, Polish resources: There were approximately 200 localities of the species reported from Poland so far, most of them are, however, only historical. After the year 1980, the species was observed in 50 scattered localities in lowland Poland (CONT), especially in young-glacial lakeland areas. The most abundant populations of the species occur in the peatlands of Augustowska Forest and Sejny Lake District. There is also an important aggregation of localities in Gniezno Lake District.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal encompasses 25 localities concentrated in 16 areas but it does not cover the most important site – Puszcza Augustowska (Augustowska Forest), as well as other very important sites: Pojezierze Sejneńskie (Sejny Lake District) and Pojezierze Gnieźnieńskie (Gniezno Lake District). Important population on Sernetki fen is adjoined to Wigry Site but not included. Even though the proposal includes over 50% of the present localities, it does not cover more than 25% of the national resources of the species.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Ostoja Augustowska / Augustowska Forest
 - Pojezierze Sejneńskie / Sejny Lake District
 - Pojezierze Gnieźnieńskie / Gniezno Lake District
-

Luronium natans

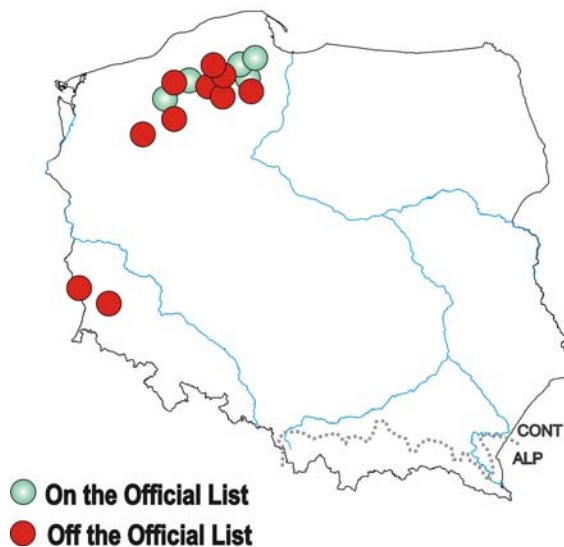
1. Latin name: *Luronium natans*

2. Polish / English name: Elizma wodna / floating water plantain

3. Systematic position: *Angiospermae, Alismataceae*

4. Distribution, Polish resources:

In the past the species occurred in more than 100 localities, now it inhabits no more than several tens of lakes in Pomeranian Lake District (CONT), mainly lobelia lakes. Two



isolated localities was recorded in 2004 on Lower Silesia, in Żwirownia w Starej Olesznej (Gravel Pit in Stara Oleszna) and in Starorzecze Potok (Old River-bed Potok) in Nysa Łużycka River Valley, and in Zgorzelec-Osiecznica Forest.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal encompasses only 4 sites covering no more than 20–30% of the national resources of the species. Some strong populations, very important for the species, such as the populations in Jeziora Wdzydzkie (Wdzydze Lakes), in lobelia lakes near Bobęcino, in Jezioro Krasne (Lake Krasne), and in Puszcza Drawska (Drawska Forest) are not covered. Silesian localities are also completely omitted.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Jeziora Wdzydzkie / Wdzydze Lakes
- Jezioro Bobęcińskie / Lake Bobęcino
- Jezioro Krasne / Lake Krasne
- Uroczyska Puszczy Drawskiej (Drawska Forest Ranges); important also for habitat type 3110, oligotrophic waters containing very few minerals of sandy plains, and others)
- Żwirownia w Starej Olesznej (Stara Oleszna Gravel Pit) and Puszcza Zgorzelecko-Osiecznica (Zgorzelec - Osiecznica Forest), for covering isolated Silesian localities.

1. Latin name: *Marsilea quadrifolia*

2. Polish / English name: marsylia czterolistna / European water clover, water sharmock

3. Systematic position: *Pteridiophyta*

4. Distribution, Polish resources: The species has become extinct in its natural habitats in Poland. The last group of plants from the Goczałkowice water reservoir was transplanted to botanical garden, grown and propagated. The originating population was successfully introduced to a sand-pit reservoir in the Wieprz river valley near Puławy (CONT)

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The network doesn't cover the only existing population, originating from introduction.

6. Suggestions to supplement the Natura 2000 governmental proposal: The site of Dolny Wieprz (Lower Wieprz River) where the reintroduced population occurs should be included.

1. Latin name: *Meesia longiseta*

2. Polish / English name: parzęchlin długoszczecinowy / Meesia moss

3. Systematic position: *Bryophyta*

4. Distribution, Polish resources: A very rare species reported from just a few localities in the northern and western parts of Poland (CONT). These records are, however, from the 19th century and the species has most probably become extinct in that part of Poland. The only existing locality of *M. longiseta* is in the Tatra Mountains near Toporowy Staw Wyżni at an altitude of 1125 m a.s.l.

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The only known locality is included in the national list of pSCIs.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Najas flexilis*

2. Polish / English name: jeziorza giętka

3. Systematic position: *Najadaceae*

4. Distribution, Polish resources: Recorded from 3 localities in 19th century.

5. To what extent does the governmental proposal cover the national resources of the species? † Probably extinct in Poland.

6. Suggestions to supplement the Natura 2000 governmental proposal: None.

1. Latin name: *Orthotrichum rogeri*

2. Polish / English name: szurpek Rogera / Roger's Brstle moss

3. Systematic position: *Bryophyta*

4. Distribution, Polish resources: Reported from Poland only once in 1930, in Śnieżne Kotły in the Karkonosze Mountains (CONT); since then not observed.

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The only locality where the species was collected 70 years ago is included in the national list of pSCIs.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Pedicularis sudetica**

2. Polish / English name: gnidosz sudecki / Sudetic lousewort

3. Systematic position: *Angiospermae, Scrophulariaceae*

4. Distribution, Polish resources: It occurs exclusively in the Karkonosze Mountains within the boundaries of the Karkonosze National Park (CONT).

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The whole Polish population of the species is situated within Karkonosze, a pSCI which covers the area of the Karkonosze National Park.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Plagiomnium drummondii*

2. Polish / English name: płaskomerzyk orzęsiony / Wavy-leaf moss

3. Systematic position: *Bryophyta*

4. Distribution, Polish resources: Reported to occur in Poland only once in 1869, in the Stobrawa River Valley in Silesia, near Opole (CONT). Verification of the herbarium material showed that the identification was incorrect. Therefore, the species should not be regarded as a component of the Polish flora.

5. To what extent does the governmental proposal cover the national resources of the species? † There is no reliable data on the occurrence of this species in Poland.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Pulsatilla patens*

2. Polish / English name: sasanka otwarta / spreading pasque flower

3. Systematic position: *Angiospermae, Ranunculaceae*

4. Distribution, Polish resources:

The species occurs exclusively in the lowland area of eastern Poland (CONT). It is relatively common in the north-eastern part of the country, with many localities in particular forest areas and rather numerous populations. There are also some scattered localities in Wyżyna Krakowsko-Częstochowska (Kraków-Częstochowa Jura Upland), Puszcza Kozińska (Koziniec Forest) and Bory Tucholskie (Tucholskie Forests); while in western Poland the species has become extinct. Many records of its occurrence are now of historical importance only. It seems that the species is rapidly disappearing, especially in the western part of its geographical range.

5. To what extent does the governmental proposal cover the national resources of the species? ⊗ The proposal includes 6 sites, indicated as important for conservation of the species, but 3 of them have appeared to be only historical; its presence was confirmed in Sandr Brdy (Sandr of Brda River), Puszcza Białowieska (Białowieża Forest) and Ostoja Wigierska (Site on Lake Wigry). Not covered are many other localities with numerous populations of *Pulsatilla patens*, e.g. the strongest populations of eastern Poland in Puszcza Augustowska (Augustowska Forest) and Puszcza Knyszyńska (Knyszyńska Forest). As a result, the governmental proposal encompasses not more than 10–20% of the national resources of the species.

6. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network:

- Ostoja Augustowska / Site of Augustowska Forest
- Ostoja Knyszyńska / Site of Knyszyńska Forest
- Ostoja Lidzbarska / Lidzbark Site
- Puszcza Kozińska / Site of Kozińska Forest

1. Latin name: *Pulsatilla slavica*

2. Polish / English name: sasanka słowacka / Slovak pasque flower

3. Systematic position: *Angiospermae, Ranunculaceae*

4. Distribution, Polish resources: It occurs exclusively in the Koryciska Wielkie gorge in the Western Tatra Mountains (ALP).

5. To what extent does the governmental proposal cover the national resources of the species: The only locality of the species is situated within the boundaries of Tatry (Tatra Mountains), listed in the national list of pSCIs.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Rhododendron luteum*

2. Polish / English name: różanecznik żółty (azalia pontyjska) / Honeysuckle azalea

3. Systematic position: *Angiospermae, Ericaceae*

4. Distribution, Polish resources: In Poland the only natural locality of the species is situated in Kołacznia Nature Reserve (Wola Żarczyczka near Leżajsk; CONT) where a dense shrubbery cover several ares. In addition, the species occurs at several artificial localities.

5. To what extent does the governmental proposal cover the national resources of the species? ☹! The only natural locality of the species is not included in the national list of pSCIs.

6. Suggestions to supplement the Natura 2000 governmental proposal: Kołacznia, the only locality regarded as a natural one, should be included in the network.

1. Latin name: *Saxifraga hirculus*

2. Polish / English name: skalnica torfowiskowa / marsh saxifrage

3. Systematic position: *Angiospermae, Saxifragaceae*

4. Distribution, Polish resources: In the past there were approximately 50 localities of the species in Poland, at present there are not more than a dozen or so situated in north of Poland (CONT). The main concentration of localities is in the Puszcza Augustowska (Augustowska Forest) where there are at least several thousand individuals, with the most abundant population in the Rospuda River valley (now directly endangered by road construction). Other populations are situated in peatlands: Wiłkokuk, Marycha near Giby, Krejwelanek and near the village of Sernetki. The remaining localities of the species are scattered over the north of Poland; the best known are those in peatlands near Zarzewie in the Radew River valley in Pomorze Zachodnie (Western Pomerania) and in the vicinity of Kalisz and Przytarnia (Wdzydze Lakes). There is also a rich population in the Wel Landscape Park with approximately 200 individuals (neglected in the proposal).

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal encompasses 5 sites, which according to information given in the SDFs, protect significant populations of the species, but most probably only 2 of them (Ostoja Wigierska / Site on Lake Wigry and Dolina Biebrzy / Biebrza River Valley) host the existing populations of *S. hirculus*. The localities in the pSCIs of Sandr Brdy / Sandr of Brda River, Puszcza Białowieska / Białowieża Forest and Orla are probably historical. The proposal does not cover the most abundant population in Poland, in peatlands of Augustowska Forest, as well as the population from peatland near Sernetki which is adjacent to the pSCI of Ostoja Wigierska / Site on Lake Wigry. The populations from the Wel Landscape Park, the Radew River valley and the area of Wdzydze Lakes are also not included. As a result, the national list covers not more than 20–30% of the national resources of *S. hirculus*, neglecting the most important populations of the species in Poland.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Ostoja Augustowska / Site of Augustowska Forest
- Jeziora Wdzydzkie / Wdzydze Lakes
- Dolina Radwi, Chocieli and Chotli / Radew, Chociel and Chotla River Valley, important also for other species and habitat types
- Dolina Rzeki Wel k. Kopaniarzy / Wel River Valley near Kopaniarze

1. Latin name: *Serratula lycopifolia*

2. Polish / English name: sierpik różnolistny / heterophyllous sawwort

3. Systematic position: *Angiospermae, Asteraceae*

4. Distribution, Polish resources: There is one stable population in the Skorocice Nature Reserve near Busko Zdrój (CONT). The population totals several dozen individuals, the age structure suggests stability of the population.

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The only population is within the boundaries of Ostoja Nidziańska (Site on Nida River), a pSCI listed in the governmental proposal.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Thesium ebracteatum*

2. Polish / English name: leniec bezpodkwiatkowy / bastard toadflax

3. Systematic position: *Angiospermae, Santalaceae*

4. Distribution, Polish resources: There are approximately 100 localities of the species known in Poland (all CONT), many of them are probably historical. The present situation of the species is difficult to describe as data concerning its occurrence is scarce. It seems that *T. ebracteatum* is often unnoticed by naturalists. There are some known localities in such sites as Ostoja Wigierska

(Site on Wigry Lake), Puszcza Augustowska (Augustowska Forest), Puszcza Knyszyńska (Knyszyńska Forest), Górznieńsko-Lidzbarski Park Krajobrazowy (Górzno-Lidzbark Landscape Park), Dolina Biebrzy (Biebrza River Valley) and probably Puszcza Białowieska (Białowieża Forest). It is possible that other localities will be discovered.

5. To what extent does the governmental proposal cover the national resources of the species: ☹ The governmental proposal encompasses populations from Puszcza Białowieska (Białowieża Forest), Puszcza Kampinowska (Kampinowska Forest), Ostoja Nadbużańska (Site on Bug River), Ostoja Wigierska (Site on Lake Wigry) and Ostoja Biebrzańska (Site on Biebrza River). As there is no data on the present resources of the species, it is difficult to assess what percentage of the Polish population is included in the network. A rough estimate is 20–30%.

6. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network:

- Ostoja Augustowska / Site of Augustowska Forest
- Ostoja Knyszyńska / Site of Knyszyńska Forest
- Ostoja Lidzbarska / Lidzbark Site

1. Latin name: *Tozzia carpathica* (*Tozzia alpina* subsp. *carpathica*)

2. Polish / English name: tocja karpacka / carpathian tozzia

3. Systematic position: *Angiospermae, Scrophulariaceae*

4. Distribution, Polish resources:

The species occurs on Mt. Babia Góra and in the Bieszczady Mts., smaller populations are reported from the Beskid Śląski Mts. and Beskid Żywiecki Mts. (ALP).

5. To what extent does the governmental proposal cover the national resources of the species: ☺ The governmental proposal encompasses the two strongest populations from Mt. Babia Góra and the Bieszczady Mts. comprising 60–80% of the Polish resources of the species.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

Trichomanes speciosum

1. Latin name: *Trichomanes speciosum*

2. Polish / English name: włosocień cienisty / Killarney fern

3. Systematic position: *Pteridiophyta*

4. Distribution, Polish resources: Till the end of the 20th century, the species was unnoticed. Some years ago it was found at 2 localities: in Paniańskie Skały near Lwówek Śląski and in Góry Kaczawskie (Kaczawa Hills) (CONT). In both localities there are just a few individuals. There is a high probability of discovering new localities in the Kaczawskie Hills.



- On the Official List
- Off the Official List

5. To what extent does the governmental proposal cover the national resources of the species? ☹! The national list of pSCIs covers only one out of the two known localities. Because of the rarity of the species, both localities should be included.

6. Suggestions to supplement the Natura 2000 governmental proposal: The site of Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills) which is important also for many other species and natural habitat types, should be included. It will ensure protection of the other known locality as well as for other localities probably existing there.

2.2. SPECIES OF ANIMALS FROM ANNEX II OF HABITAT DIRECTIVE IN POLISH GOVERNMENTAL PROPOSAL OF NATURA 2000 NETWORK

MAMMALIA

1. Latin name: *Barbastella barbastellus*

2. Polish / English name: mopek / barbastelle bat

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The species occurs in the north of Africa and Europe (from the Iberian Peninsula to the Caucasus). In the northern part of its range it reaches as far as Ireland, England, southern Scandinavia and Latvia. In Poland it is noted in the whole of the country with fewer localities in the Carpathians and Pomerania.

Though the species breeds in Poland, we do not know colonies whose permanent protection will be important for its conservation. The absence of data on the distribution of breeding colonies is not only connected with the fact that the barbastelle is a species of a hidden mode of life but also that particular colonies are not persistent and probably individuals are more dispersed during the breeding season. The situation is different in winter. As resources of suitable wintering places are limited, they are systematically used by a large number of individuals. The largest wintering places are: Międzyrzecki Rejon Umocniony (Międzyrzecz Fortified Region), Mamerki, Forty Modlińskie (Modlin Forts) and Jaskinia Szachownica (Szachownica Cave).

The main threats to wintering aggregations of individuals are excessive exploration of their shelters by people, destruction of shelters and disturbance to and killing of animals.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal covers only half of the significant wintering sites. One of the most numerous wintering grounds, such as Forty Modlińskie (Modlin Forts) has been neglected.

6. Suggestions to supplement the Natura 2000 governmental proposal:

Some new Natura 2000 sites should be proposed so as the wintering grounds of national importance would be covered:

- Forty Modlińskie (Modlin Forts; 50 points for the species and 12 for the site)
- Schrony Brzeskiego Rejonu Umocnionego (Shelters of Brzesko Fortified Area; 20 points for the species and 40 for the site)
- Zamek Świecie (Świecie Castle; 24 points for the species and 24 for the site);
- Sztolnia w Młotach (Gallery in Młoty; 16 points for the species and 16 for the site);
- Fort „Salis Soglio” (“Salis Soglio” Fort; 16 points for the species and 16 for the site);

- Twierdza Terespol (Terespol Fortress; 12 points for the species and 12 for the site);
 - Sztolnie w Węglówce (Galleries in Węglówka; 7 points for the species and 11 for the site).
 - In addition, we propose correction of the boundaries of the pSCI of Nietoperek PLH080003 (80 points for the species and 416 for the site), so as it would cover the whole area of the “Uroczyska MRU” Nature – Landscape Complex, enabling protection of the autumn and spring feeding grounds of bats (in the area where almost 30,000 bats are wintering, the proper management of landscape within a radius of several kilometers from the shelters is extremely important). Moreover, this correction would enable the inclusion of several valuable (also for the barbastelle) shelters which are not connected with the main system of chambers.
-

1.Latin name: *Bison bonasus*

2.Polish / English name: żubr / European bison

3.Systematic position: *Mammalia*

4.Distribution, Polish resources: In early historic times the species inhabited the western, central and south-eastern parts of Europe. In the wild the species became extinct totally (the last individuals vanished at the beginning of the 20th century). It survived only in captivity and it was reintroduced in several countries. At present, the wild herds inhabit Poland, Belarus, Russia, Ukraine and the Caucasus. In Poland there are 5 wild herds in the Białowieża Forest, Knyszyńska Forest, Borecka Forest, Bieszczady Mountains and the Wałeckie Forests, as well as several captive breeding centres. There are 500–600 individuals in Poland. The population is threatened with extinction mainly because of a drastically poor gene pool.

5.To what extent does the governmental proposal cover the national resources of the species: ☹ Only two sites out of the five where the European bison lives in the wild are included in the governmental proposal. In view of the extremely low population size of the species as well as a poor gene pool, the remaining 3 sites with free-living herds should be included in the network.

6.Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Puszcza Borecka / The Borecka Forest,
 - Puszcza Knyszyńska/ The Knyszyńska Forest
 - Mirosławiec
-

1.Latin name: *Castor fiber*

2.Polish / English name: bóbr europejski / European beaver

3.Systematic position: *Mammalia*

4.Distribution, Polish resources: At present the European beaver occurs almost in the whole of the country. The species is most numerous in the north-eastern part of Poland, in the Podlasie and Warmia-Mazury provinces. Strong populations have also developed in other regions. The Polish population of the species is not endangered at present. A certain threat is posed by poaching. In addition, people kill beavers causing damage, burn their lodges and demolish dams. The potential threat for beaver populations is the degradation of their habitats (regulation of rivers, the wetlands

dessication), poaching and conflicts with local communities as the result of damages caused by beavers.

5.To what extent does the governmental proposal cover the national resources of the species: ☺

6.Suggestions to supplement the Natura 2000 governmental proposal: None

1.Latin name: *Canis lupus*

2.Polish / English name: wilk / wolf

3.Systematic position: *Mammalia*

4.Distribution, Polish resources: In Eurasia the western limit of the wolf's continuous geographic range goes through Finland, Central-Eastern Europe and the Balkan Peninsula. In Western Europe the species occurs in Italy, Spain and Portugal. In Poland the main sites of the species are situated in the Carpathians (from the Beskid Śląski Mts. to the Bieszczady Mts.) and in the eastern part of the country: in the Roztocze and Polesie Lubelskie regions, in the Białowieża Forest, Knyszyńska Forest, Augustowska Forest, Borecka Forest, Piska Forest, Biebrza River Valley and some other localities. Some isolated wolf packs occur in the west of Poland. It has been estimated that in Poland there are 110 – 120 wolf packs (approximately 450 – 550 individuals). The main threats to the species are: habitat fragmentation, hostile attitude of farmers, as wolves prey on live-stock, poaching, human disturbance and tourism development, as well as endeavours of some groups of interest at getting the species off the list of protected species.

5.To what extent does the governmental proposal cover the national resources of the species? ☹. The governmental proposal encompasses mere 8, which means than only slightly more than 25% of the Polish population of wolf would be protected in the network. Therefore, it is essential to include some other sites inhabited by over half of the Polish population of the species.

6.Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Beskid Śląski (Beskid Śląski Mountains),
- Beskid Żywiecki (Beskid Żywiecki Mountains),
- Góry Słonne (Słonne Mountains),
- Lasy Sobiborskie (Sobiborskie Forests),
- Ostoja Augustowska (Site of Augustowska Forest),
- Ostoja Borecka (Site of Borecka Forest),
- Ostoja Gorczańska (Site of Gorce Mountains),
- Ostoja Jaśliska (Jaśliska Site),
- Ostoja Knyszyńska (Site of Knyszyńska Forest),
- Ostoja Napiwodzko-Ramucka (Site of Napiwoda-Ramuki Forest),
- Ostoja Parczewska (Site of Parczew Forest),
- Ostoja Piska (Site of Piska Forest),
- Ostoja Popradzka (Site on Poprad River),
- Ostoja Przemyska (Przemysł Site),
- Uroczyska Lasów Janowskich (Janowskie Forests Ranges),
- Uroczyska Puszczy Solskiej (Solska Forest Ranges).

1. Latin name: *Halichoerus grypus*

2. Polish / English name: foka szara / grey seal

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: In Europe, the grey seal occurs along the coastline from the Kolsk Peninsula to Bretagne, around the British Isles and Iceland. The Baltic population of the species is estimated at approximately 10000 individuals, but most of them inhabit the northern part of the sea. In the southern part neither breeding nor colonies of the species are recorded. The major threats to the species are such as: catching in fishing nets, chemical contamination of sea waters, motorboat tourism development, military activities as well as converting their habitats into recreational areas. The population of the southern part of the Baltic is also threatened due to its isolation.

5. To what extent does the governmental proposal cover the national resources of the species: ☹ The governmental proposal includes all major sites of the grey seal. The only suggestion concerns the site of Pobrzeże Słowińskie (Słowińskie Coastland), which comprises only land habitats and should be enlarged to include the coastal waters zone.

6. Suggestions to supplement the Natura 2000 governmental proposal:

Enlargement of the site of Pobrzeże Słowińskie (Słowińskie Coastland) is suggested.

1. Latin name: *Lutra lutra*

2. Polish/English name: wydra / river otter

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The otter lives throughout almost all of Europe and in most parts of Asia. It occurs practically throughout Poland and is currently quite common (most numerous in the Masurian Lake District, Pomeranian Lake District, Wielkopolska-Kujawy Lowland and in eastern Poland) and not threatened. Anthropogenic threats to the otter are mainly connected with road-kills, entanglement in fishing nets and poachery.

5. To what extent does the governmental proposal cover the national resources of the species?: ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Lynx lynx*

2. Polish / English name: ryś / Eurasian lynx

3. Systematic position: *Mammalia*

4. Distribution, Polish resources:

The geographical range of the Eurasian lynx stretches from Central Europe and Scandinavia to the eastern boundaries of the Eurasian continent. It has been reintroduced in Switzerland, Germany, Czech Republic, Slovenia, Italy and France. In Poland there are two separated populations: a lowland population inhabiting north-eastern Poland, mainly the Białowieża Forest, Borecka Forest and Knyszyńska Forest, and the Carpathian population inhabiting the Tatra Mts., Gorce Mts., Pieniny Mts. and the eastern part of the Polish Beskidy Mts. Small, reintroduced groups live in the Kampinoski Forest and the Gostynin-Włocławek Forests. The Polish

population of *L. lynx* has been estimated at approximately 200 individuals. The main threats to the species are poaching, habitat loss and fragmentation (by the urbanization, road infrastructure and other constructions' development) and the isolation of populations due to lack of migration possibilities between large forest complexes. Several individuals are killed on roads each year.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal includes only 11 sites out of the 21 significant for the species. Taking into consideration the extremely low number of individuals in Poland as well as their discontinuous distribution, we suggest that all sites of the permanent residence of this carnivore species should be included in the network.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Beskid Żywiecki (Beskid Żywiecki Mountains)
- Lasy Gostynińsko-Włocławskie (Gostynin-Włocławek Forests),
- Ostoja Augustowska (Augustowska Forest),
- Ostoja Borecka (Borecka Forest),
- Ostoja Gorczańska (Site of Gorce Mountains),
- Ostoja Jaśliska (Jaśliska Site),
- Ostoja Piska Site of (Piska Forest),
- Ostoja Knyszyńska (Site of Knyszyńska Forest),
- Ostoja Popradzka (Site on Poprad River),
- Ostoja Przemyska (Przemysl Site).

1. Latin name: *Marmota marmota latirostris*

2. Polish / English name: świstak tatrzański / Tatra marmot

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: A high mountain species, at the moment occurring only in the Alps and in the Tatra Mountains (Alpine biogeographical region). In Poland it occurs in the High Tatra Mountains and the West Tatra Mountains, where the *Marmota marmota. latirostris* subspecies lives. It lives at the altitude of 1380 - 2050 m.a.s.l. The Tatra Mountains population is very small. The total number of marmots living in the Tatras has been estimated at 700 – 800 individuals, and 190 of them inhabit the Polish part of the mountains. The main threats to the species are: poaching, excessive tourism pressure, as well as the construction and exploitation of sport facilities within the area of the occurrence of the alpine marmot.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Microtus tatricus*

2. Polish / English name: darniówka tatrzańska / Tatra pine vole

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: It has scattered localities in the Carpathians, from Slovakia through Poland and Ukraine to Romania. It is an endemic species to the Carpathians. In Poland it has three confirmed localities: the Tatras, Mt. Babia Góra and the massif of Pilsko.

A shrinkage of the range of its occurrence has been observed, particularly in the eastern part of the Carpathians. There are no exact data from Poland, but the species is believed to be scarce. The present state of knowledge does not allow one to draw any conclusions as to changes in the population size of the species. The most important potential threat to the species is habitat loss and fragmentation.

5. To what extent does the governmental proposal cover the national resources of the species? ☹. The governmental proposal includes two of three sites where the species exists. Taking into account the very small number of sites in Poland for the Tatra pine vole, the third site should be added to the governmental proposal.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the site of Beskid Żywiecki (Beskid Żywiecki Mountains) should be added.

1. Latin name: *Mustela eversmanni*

2. Polish/English name: tchórz stepowy / steppe polecat

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The more or less continuous range of this species stretches from Ukraine to the Amur River in Asia. In several European countries (Poland, Czech Republic, Slovakia, Austria and Hungary) it occurs insularly. So far, only a few sites have been found in Poland, in the Zamość region. The size of the Polish population is estimated to be from twenty to several tens of individuals at the utmost. It is not known whether steppe polecats breed in Poland (there was only one breeding record) or if these individuals are only migrants from Ukraine. The main threat to the steppe polecat is the disappearance of xerothermic habitats.

5. To what extent does the governmental proposal cover the national resources of the species? ☺.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Myotis bechsteinii*

2. Polish / English name: nocek Bechsteina / Bechstein's bat

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The distribution area of the Bechstein's bat comprises West Palearctic, from southern England, France and the Iberian Peninsula, to the Caucasus, Transcaucasia, Turkey and northern Iran. In Europe the northern limit of its range runs through southern Sweden, Poland, Lithuania and western Ukraine.

The Bechstein's bat inhabits central and southern part of the country, reaching in Poland the north-eastern border of its range. It is believed a rare species. Its largest wintering shelters are the system of underground depots and corridors of Międzyrzeczki Rejon Umocniony (Międzyrzecz Fortified Region) and the Szachownica Cave. In summer its aggregations are most numerous found in the proposed Dukielskie Ostoje Nietoperzy (Dukla Bat Sites).

Among threats to the Bechstein's bat population there are: felling of hollow-trees, excessive exploration and devastation of its shelters by man, use of pesticides in agriculture, and fragmentation of forest areas.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal covers 19 areas of the occurrence of this species, which is tantamount to 57% of the known localities; however, not one breeding colony is among them.

Some important wintering shelters of the Bechstein bat (e.g. the Mroczna Cave) have also been neglected.

6. Suggestions to supplement the Natura 2000 governmental proposal:

Correction of the borders of:

- pSCI of Nietoperek PLH080003 (20 points for the species and 416 for the site), so as it would cover the whole area of the “Uroczyska MRU” Nature – Landscape Complex, enabling protection of the autumn and spring feeding grounds of bats (in the area where almost 30, 000 bats are wintering, the proper management of landscape within a radius of several kilometers from the shelters is extremely important). Moreover, this correction would enable the inclusion of several valuable shelters that are not connected with the main system of chambers;
- pSCI of Ostoja Magurska (Magura Site) PLH180001, so as to include the Kornuty nature reserve with the Mroczna Cave (14 points for the species and 28 points for the site), which is an important winter shelter of this species.

Addition of new pSCIs:

- Ostoja Jaśliska (Jaśliska Site; comprising summer places of the Bechstein’s bat occurrence, which are important on the scale of the country; 31 points for the species and 139 points for the site).

1. Latin name: *Myotis dasycneme*

2. Polish / English name: nocek łydkowłosy / pond bat

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The pond bat occurs in the whole of Eurasia.

It occurs all over Poland but its distribution is uneven, with greater concentrations of localities in some small northern lake districts and in the Biebrza Basin. Only two summer shelters of breeding colonies of this species are known: in Jeleniewo (Suwałki region) and in Lubnia (Pomerania). To the largest winter shelters belong: Twierdza Osowiec (Osowiec Fortress), Jaskinia Szachownica (Szachownica Cave), some objects of Międzyrzeczki Rejon Umocniony (Międzyrzecz Fortified Region) and Twierdza Wisłoujście (Wisłoujście Fortress).

The most serious threat is repair of buildings which host breeding colonies (use of toxic preservatives of wood, sealing entrance holes). Winter shelters are threatened with destruction and people exploring their hibernacula disturb the hibernating bats. To important threats belongs also organic and chemical water pollution, resulting in overgrowing of water bodies, which are main feeding grounds of the pond bat.

5. To what extent does the governmental proposal cover the national resources of the species? ☺.

6. Suggestions to supplement the Natura 2000 governmental proposal: None.

1. Latin name: *Myotis emarginatus*

2. Polish / English name: nocek orzęsiony / Geoffroy’s bat

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The range of the Geoffroy’s bat covers Southern, South-Eastern and Central Europe, as well as the Crimean Peninsula and the Caucasus. The northern

border of its range runs through the Netherlands, central Germany and southern Poland. It occurs also in North-West Africa and in Asia, from Israel and Lebanon to Central Asia and Afghanistan. In Poland it occurs in the south part of the country: in the Sudety Mts., Beskidy Mts., Pieniny Mts., Tatry Mts., in the Kraków-Częstochowa Upland and in the Bieszczady Mts. The largest of its known hibernating places is Jaskinia Niedźwiedzia (Bear's Cave) in Kletno (in the Eastern Sudety Mts.). The largest breeding colony is in the Cistercian Abbey in Szczyrzyc (Beskid Wyspowy Mountain Range).

5. To what extent does the governmental proposal cover the national resources of the species? ☹! The governmental proposal of the network comprises only one Geoffroy's bat breeding place of little importance. The most numerous breeding colonies of the species, including the Cistercian Abbey in Szczyrzyc with the largest known breeding colony in the country, have been neglected (in our proposal it is included into the Bat Sites of Beskid Wyspowy Range). Important hibernating sites of the Geoffroy's bat, e.g. the Mroczna Cave adjacent to the pSCI of Ostoja Magurska (Magura Site), have not been included as well.

6. Suggestions to supplement the Natura 2000 governmental proposal:

Proposals of new Natura 2000 sites:

- Ostoje Nietoperzy Beskidu Wyspowego (Bat Sites of Beskid Wyspowy Mountain Range) with the largest breeding colony of the species in the country (80 points for the species and 358 points for the site);
- Ostoja Jaślicka (Jaślicka Site); important breeding places; 64 points for the species and 156 points for the site).
- Correction of the borders of the pSCI of Ostoja Magurska (Magura Site; PLH180001) so as to include the Kornuty nature reserve with Jaskinia Mroczna (Mroczna Cave; 11 points for the species and 39 points for the site), which is an important winter shelter.

1. Latin name: *Myotis myotis*

2. Polish / English name: nocek duży / greater mouse-eared bat

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The geographical range of *M. myotis* covers Eurasia and Northern Africa. It occurs in the whole of Europe except for its northern (Iceland, British Islands, Scandinavia and Baltic countries) and eastern parts (countries of the former Soviet Union). In Poland the species has the north-eastern border of its range, running along the line of Przemyśl – Koszalin. Beyond this border only a few localities are known. These are mostly places where single individuals (exceptionally breeding colonies, e.g. in Gdańsk and its surroundings) were recorded.

Threats to this species are connected mostly with human activity: repair work in garrets occupied by breeding colonies, exploration and destruction of hibernating sites, hostile attitude of people to the animals.

5. To what extent does the governmental proposal cover the national resources of the species? ☹. The governmental project comprises 51 areas where the presence of *M. myotis* was found, which makes about 60% of the known localities of this species. Most of them shelter, however, small or difficult to assess numbers of individuals, whose conservation is of little importance for the national population. Of the 12 most important breeding sites, only 4 have been included in the national list. Among the left-out sites there is the largest known breeding colony

of *M. myotis*, with 1000 individuals, in a communal building in Rościszowo and such important hibernating sites as caves in Połom Hill (Kaczawa Hills and Foothills) or Strzalin near Tuczno.

6. Suggestions to supplement the Natura 2000 governmental proposal: It is suggested to add the following new Natura 2000 sites:

- Dolina Bobru (Bóbr River Valley; 65 points for the species and 65 points for the site);
- Góry Sowie i Bardzkie (Sowie Mts. and Bardzkie Mts.), including a communal building in Rościszowo (50 points for the species and 82 points for the site) with one of the largest breeding colonies of the species;
- Ostoje Nietoperzy Beskidu Wyspowego (Bat Sites of Beskid Wyspowy Mountain Range; breeding sites of national importance; 45 points for the species and 358 points for the site);
- Strzalin koło Tuczna (Straliny near Tuczno; one of the larger hibernating sites of this species; 20 points for the species and 42 points for the site);
- Dom Dziecka w Puławach (Orphanage in Puławy; important breeding site; 17 points for the species and 45 points for the site);
- Liceum Ogólnokształcące w Opolu Lubelskim (Secondary School in Opole Lubelskie; important breeding site; 14 points for the species and 45 points for the site);
- Góry Bialskie i Grupa Śnieżnika (Bialskie Mts. and Śnieżnik Massif; important hibernating sites; 13 points for the species and 78 points for the site);
- Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills; important hibernating sites; 11 points for the species and 40 points for the site);
- Cytadela Grudziądz (Grudziądz Citadel; important hibernating site; 11 points for the species and 24 points for the site);
- Ostoja Jaślicka (Jaślicka Site; breeding and hibernating sites of national importance; 10 points for the species and 156 points for the site);
- The SDF of the pSCI of Ujście Warty (Mouth of Warta River; PLH080001) should be completed with data concerning bats occurring in Twierdza Kostrzyn (Kostrzyn Fortress; important winter shelter for bats in Ziemia Lubuska region; 2 points for the species and 8 points for the site, more than 500 hibernating bats).
- The borders of the pSCI of Nietoperek PLH080003 (93 points for the species and 416 for the site) should be corrected, so as to cover the whole area of the “Uroczyska MRU” Nature – Landscape Complex, enabling protection of the autumn and spring feeding grounds of bats (in the area where almost 30,000 bats are wintering, the proper management of landscape within a radius of several kilometers from the shelters is extremely important). Moreover, this correction would enable the inclusion of several valuable shelters, which are not connected with the main system of chambers.

1. Latin name: *Mustela lutreola*.

2. Polish/English name: norka europejska / European mink.

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: Current geographical range of the European mink **consists of only a few** isolated areas in Spain, France, Estonia, Romania, Russia, Belarus, Ukraine. This species is probably extinct in Poland. The last information about the species comes from the beginning of the XX century. The reasons for the extinction are not fully known.

5. To what extent does the governmental proposal cover the national resources of the species? †

6. Suggestions to supplement the Natura 2000 governmental proposal: None.

1. Latin name: *Phoca hispida bottnica*

2. Polish/English name: foka obrączkowana, nerpa / ringed seal

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: A species with Arctic distribution range; it occurs mainly in circumpolar waters. One of its subspecies, *P. h. bottnica*, lives in the Baltic Sea, mainly in the Bottnic Bay. Sometimes it is observed at the Polish Baltic coast, mainly in the Gdańsk Bay area. The whole Baltic population has been estimated at around 6,000 individuals. The principal threat to this species is posed by hunting, accidental catches in fishing nets, chemical pollution and human disturbance.

5. To what extent does the governmental proposal cover the national resources of the species? ?? The majority of areas, where ringed seals occur, will be protected by the governmental sites proposed in regard to the presence of harbour porpoise and grey seal. Currently there is no need for the designation of new sites particularly for ringed seal protection.

6. Suggestions to supplement the Natura 2000 governmental proposal: None.

1. Latin name: *Phoca vitulina*

2. Polish/English name: foka pospolita / common seal

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: This species lives along the western and northern coasts of Europe (including Iceland), as well as in the Arctic. Single individuals are very rarely observed on the Polish coast. The Baltic population currently amounts to several hundred individuals at the most. Major threats to this species include accidental catches in fishing nets, food contamination, disturbance and outbreaks of seal distemper.

5. To what extent does the governmental proposal cover the national resources of the species? ?? The majority of sites, where common seal can be observed, are included in the governmental proposal for the protection of grey seal and harbour porpoise. Currently there is no need for the designation of new sites particularly for ringed seal protection.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Phocoena phocoena*

2. Polish / English name: morświn / harbour porpoise

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: It occurs along the north and west coastlines of Europe, in waters surrounding the Great Britain, in the southern part of the Baltic Sea and in the western part of the Mediterranean Sea. In the Polish zone of the Baltic Sea there are no reliable data concerning the population size, however, the species is very rare and extremely threatened. There are at the maximum several observations per year. The numbers of the species in the Polish Zone of the Baltic Sea are roughly estimated at several tens of individuals.

The main threats to the species are such as: catching in fishing nets, chemical contamination of waters, motor-boat traffic, hydrotechnical works as well as diminishing of food supply as the result of intensive catching of some fish species.

5. To what extent does the governmental proposal cover the national resources of the species? ☹. Of the five significant areas where harbour porpoises occur, the governmental proposal mentions only four. However, in one of those, porpoises have not been taken into account as the site has been established for other species and it does not cover the water zone. We also postulate that the fifth, unmentioned site should be included – the Pomorska Bay. The number of porpoise sightings in that area indicates its great importance for these mammals.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the site Pomorska Bay should be established. The surface area of the Pucka Bay and Hel Peninsula site should be enlarged by at least ¼. The Pobrzeże Słowińskie site should be considered important for porpoises (the C category in terms of population number assessment). This site is on the list but SFD does not concern porpoises. For the sake of harbour porpoises, this site should be enlarged by the coastal waters of the Słowiński National Park. The Wolin and Uznam sites should be treated as a site of importance for harbour porpoises (in the population numbers assessment it should be given the category B instead of D).

1. Latin name: *Rhinolophus ferrumequinum*

2. Polish / English name: podkowiec duży / greater horseshoe bat

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The greater horseshoe bat has a wide distribution range in Eurasia, reaching as far as China and Japan. In Europe it occurs from Portugal to southern England, and through Germany, Austria, Czech, Slovakia, southern Poland, Ukraine (Transcaucasia, Crimea) to the Caucasus. In the south it ranges as far as Balkan countries and islands of the Mediterranean Sea. It may be also found in the northern part of Africa.

In Poland it was noted a few times, always single individuals. Its breeding has not so far been recorded.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Rhinolophus hipposideros*

2. Polish / English name: podkowiec mały / lesser horseshoe bat

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The range of the lesser horseshoe bat extends from the Iberian Peninsula and Ireland in the west to Kashmir in the east and the north-western and north-eastern Africa. In Poland it occurs only in the southern part of the country. The northernmost localities are in the vicinity of Częstochowa. The species is most numerous in the Polish Carpathians, in the Beskidy mountain ranges, and particularly in Beskid Sądecki, Beskid Wyspowy and Beskid Niski.

Threats to the species include: renovation work in shelters during the breeding period; sealing entrance holes to shelters; reconstruction of garrets; use of toxic preservatives of wood;

destruction and filling-up of winter shelters, and rendering them accessible to excessive numbers of tourists.

5. To what extent does the governmental proposal cover the national resources of the species? ☹! The governmental proposal covers only 35% of the known localities of the lesser horseshoe bat. Of the 14 known important breeding sites, only one has been included in the proposal. The largest and most important summer shelters have been neglected. Important hibernating sites have not been included as well. One can mention here the largest hibernating site of the species in Jaskinia Zbójecka (Zbójecka Cave) in Łopień (Ostoje Nietoperzy Beskidu Wyspowego /Bat Sites of Beskid Wyspowy Mountain Range).

6. Suggestions to supplement the Natura 2000 governmental proposal:

We suggest adding new Natura 2000 sites:

- Ostoje Nietoperzy Beskidu Wyspowego (Bat Sites of Beskid Wyspowy Mountain Range; winter shelter of national importance and shelter of breeding colony; 227 point for the species and 358 points for the site);
- Ostoja Popradzka (Site on Poprad River; very important breeding sites; 141 points for the species and 198 points for the site);
- Ostoja Sławniowicko–Burgrabicka (Sławniowice-Burgrabice Site; important sites of breeding colonies; 76 points for the species and 81 points for the site);
- Ostoja Jaśliska (Jaśliska Site; shelters during the breeding season; 50 points for the species and 156 points for the site);
- Ostoje Nietoperzy Powiatu Gorlickiego (Bat Sites of Gorlice District; important breeding site; 28 points for the species and 28 points for the site);
- Kościół w Radziechowach (Church in Radziechowy; important shelter during the breeding season; 24 points for the species and 24 points for the site);
- Klasztor w Czernej (Cloister in Czerna; important breeding site; 20 points for the species and 20 points for the site);
- Kościół w Górkach Wielkich (Church in Górki Wielkie; important shelter of breeding colony; 13 points for the species and 20 points for the site);
- Młyn w Pierścicu (Mill in Pierściec; important breeding site; 10 points for the species and 10 points for the site).

The name of the pSCI Diable Skały (PLH120003) should be changed on Ostoje Nietoperzy Okolic Bukowca (Bat Sites near Bukowiec) and the borders should be corrected, so as to include the church in Bukowiec (important winter shelters; 37 points for the species and 37 points for the site);

The borders of the pSCI of Ostoja Magurska (Magura Site; PLH180001) should be corrected, so as to include an Orthodox church in Bednarka (11 points for the species and 39 points for the site) with an important breeding colony of this species;

The borders of the pSCI of Pieniny (PLH120013) should be corrected, so as to include church and Villa Maria in Szczawnica and church in Jaworki (123 points for the species and 143 points for the site) with an important breeding colony of this species.

1. Latin name: *Rupicapra rupicapra tatrica*

2. Polish / English name: kozica tatrzańska / Tatra chamois

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: There are a dozen or so isolated localities of the species in Europe at present: the Pyrenees, the Cantabrian Mountains, the Central Massive, the Alps, the Abruzzo-Apennines, the Dynarskie Mountains, the Pindos, mountains of the Balkan Peninsula, the Southern Carpathians, the Tatras, and mountains of Asia Minor to the Caucasus. In Europe the species is confined to the Alpine biogeographical region. The subspecies *R. rupicapra tatrica* occurs exclusively in the Tatra Mts. Its population has been estimated in the Polish part of the Tatra Mts. at approximately 80 individuals. The number of individuals varies largely from year to year and the population cannot be regarded as stable. The most important threats of anthropogenic origin are: strong tourist pressure, use of noisy machinery (ratracks, cable cars, snow mobiles) in the areas of chamois' occurrence and poaching. Isolation of the population also poses a threat to the species persistence.

5. To what extent does the governmental proposal cover the national resources of the species? ☺.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Sicista subtilis*

2. Polish / English name: smużka stepowa / southern birch mouse

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The western limit of the geographical range runs through Central Europe (Poland, Hungary, Romania, Bulgaria). In Poland there is only one known locality situated between Korynie and Machów (Lubelskie voivodeship) where one individual was caught and several ones were found in pellets.

There are no data on the abundance and population trends of the species in Poland. Potential threats to the species are also poorly known. The most important threat is undoubtedly the loss and fragmentation of xerothermic habitats.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None.

1. Latin name: *Spermophilus citellus*

2. Polish/English name: suseł moregowany / European souslik

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The European souslik lives in scattered, ever-shrinking localities in Central and South-Eastern Europe. In general, two populations could be distinguished, i.e. Central European and Balkan populations. In Central Europe, small subpopulations have survived in the Czech Republic, Slovakia and Austria. More numerous colonies are also found in Hungary. The Balkan population lives in Romania, Bulgaria, in other Balkan states and in Ukraine. Separate populations are also found in Turkey. Polish sousliks belonged to the Central European population. They occurred mainly in the Silesian Lowland and Upland, but they were found even near Zielona Góra. Most colonies disappeared between 1939 and 1962. The last certain records came from the Opole region in the 1970s. The principal threat to this species is the disappearance of xerothermic habitats. A re-introduction program for this species in Poland has started.

5. To what extent does the governmental proposal cover the national resources of the species? ☞. The species does not currently occur in Poland in the wild.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest the submission of the pSCI of Kamień Śląski where there are plans to release sousliks within the frame of reintroduction program.

1. Latin name: *Spermophilus suslicus*

2. Polish / English name: suseł perełkowany / spotted souslik

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: It is an East-European species confined to the steppes. It occurs in small steppe areas in Ukraine, Moldavia, Russia and south-eastern Poland. The Polish population of the spotted souslik inhabits the south-eastern part of the Lublin Upland and partly the Roztocze region. It has been estimated at a dozen or so thousand individuals. Only two big colonies are known: in Świdnik near Lublin (approximately 11 thousand specimens) and in the site of Tyszowce – Pastwiska nad Huczwą (Pastures on the Huczwa river in Tyszowce with 1 thousand individuals). Other localities are not abundant. The Polish population of spotted souslik is most probably isolated from the main geographic range of the species in Ukraine and is seriously threatened with extinction. Habitat loss as the result of agriculture intensification, urban development and afforestation of open habitats are the most significant threats to the species.

5. To what extent does the governmental proposal cover the national resources of the species? ☹. The governmental proposal encompasses 6 out of the 7 most important localities of the species. We suggest that one site should be included. The population is not numerous but has persisted there for a long time and a chance of its restoration is very high.

6. Suggestions to supplement the Natura 2000 governmental proposal: The site of Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley) should be included in the network.

1. Latin name: *Ursus arctos*

2. Polish / English name: niedźwiedź brunatny / brown bear

3. Systematic position: *Mammalia*

4. Distribution, Polish resources: The species with insular occurrence in Europe: Scandinavia, the Carpathians, the Pyrenees, the Apennines, the Alps, and the Balkan Peninsula (almost exclusively in the Alpine and Boreal biogeographical regions). Larger areas are occupied by the species in Eastern Europe. In Poland it occurs only in the Carpathians; however, it can migrate for long distances. The population size is estimated at 100 – 130 individuals. For several years the population size has become stabilized and does not show big fluctuations. The main threat to this species is habitat loss and fragmentation as the result of forests' exploitation and development of tourism, as well as the isolation of particular populations.

5. To what extent does the governmental proposal cover the national resources of the species? ☹. The governmental proposal includes 6 pSCI out of 10 important sites of this species. It is suggested to add 4 sites that have been omitted because of the small population of the species, small geographical range, migrations and due to the fact that this is the priority species.

6. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network:

- Beskid Żywiecki (Beskid Żywiecki Mountains)
- Ostoja Gorczańska (Site of Gorce Mountains)
- Ostoja Jaśliska (Jaśliska site)
- Ostoja Popradzka (Site of Poprad River)

In the SDFs for sites PLH 120001 – Babia Góra (Mt. Babia Góra) and PLH 120015 – Na Policy (Mt. Polica) from the experts' proposal the categories of population size should be changed from D to C and the sites should be reconsidered as important for the species.

REPTILIA

1. Latin name: *Emys orbicularis*

2. Polish / English name: żółw błotny / European pond turtle

3. Systematic position: *Reptilia*

4. Distribution, Polish resources: The geographic range of the species encompasses most of Central, Southern and Western Europe, Western Asia and North-West Africa. It occurs almost in the whole Continental biogeographic region. In Poland the strongest population has survived in the Pojezierze Łęczyńsko-Włodawskie (Łęczna-Włodawa Lake District). Single, scattered localities are situated in the lowlands in different parts of the country, especially in western Poland, also in the vicinity of Olsztyn and Radom. There are no precise data on the size of Polish *E. orbicularis* population but it is known that the species is not numerous. The population from the Pojezierze Łęczyńsko-Włodawskie totals several hundred individuals, while other bigger localities have a dozen or so up to several tens of individuals. There is no precise data on the population dynamics. The most important threats to the species are wetland drainage and afforestation of adjacent wasteland where the animals lay eggs.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal encompasses only 10 sites important for the species. It is definitely not enough to provide sufficient protection for the species in our country. The populations in Poland are isolated, therefore it is particularly important to preserve the largest number of populations as possible, regardless of their size. Very important sites have been disregarded in the government proposal: Lasy Sobiborskie (Sobiborskie Forests; the second largest site in Poland), Puszcza Drawska (Drawska Forest), Dolina Ilanki (Ilanka River Valley) and Ujście Ilanki (Mouth of Ilanka River).

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Dolina Ilanki/ (Ilanka River Valley)
- Jezioro Lubie i Dolina Drawy (Lake Lubie and Drawa River Valley)
- Lasy Bierzwnickie (Bierzwnik Forest)
- Lasy Sobiborskie (Sobiborskie Forests)
- Ostoja Napiwodzko-Ramucka (The Site of Napiwoda-Ramuki Forest)
- Ostoja Parczewska (Site of Parczew Forest)
- Ostoja Piska (Site of Piska Forest)
- Przełom Wisły w Małopolsce Vistula River Gorge in Małopolska
- Puszcza Barlinecka Barlinek Forest
- Puszcza Drawska (Drawska Forest)

- Puszcza Kozienska Kozienska Forest
 - Ujście Ilanki/ (Mouth of Ilanka River)
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AMPHIBIA

1. Latin name: *Bombina bombina*

2. Polish / English name: kumak nizinny / fire-bellied toad

3. Systematic position: *Amphibia*

4. Distribution, Polish resources: The species occurs in lowlands from the Ural in the east to the Elbe River valley and central Austria in the west. Southern populations are separated from northern ones by the mountain ranges of the Carpathians and the Sudety Mts. where the species does not occur.

In Europe, the fire-bellied toad is present mainly in the Atlantic biogeographical region. In Poland it occurs presumably in the whole country with the exception of the Carpathians and Sudety Mts. There is no data concerning its population size in our country. The species is not endangered in Poland at present; some local populations however might be threatened with extinction. The main threat to the species is loss of habitats suitable for reproduction and hibernation due to wetlands drainage, disappearance of old river beds and channelization of rivers, filling up of small ponds, adjacent to farmhouses.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Bombina variegata*

2. Polish / English name: kumak górski / yellow-bellied toad

3. Systematic position: *Amphibia*

4. Distribution, Polish resources: The species occurs in the mountains and uplands of most of Europe: mainly in the alpine countries, in the Balkans and the Carpathians. It is confined mainly to the Alpine biogeographic region. In Poland it inhabits the Carpathians and their foothills. Single localities are known from the eastern part of the Sudety Mts. There is no data on the abundance of the Polish population. At present, especially in the south-eastern part of the country, the population is not endangered. Among potential threats there is the loss of breeding places, mainly small, shallow water bodies.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Triturus cristatus*

2. Polish / English name: traszka grzebieniasta / crested newt

3. Systematic position: *Amphibia*

4. Distribution, Polish resources: Its geographical range comprises the northern, central and eastern parts of Europe, to the north of the Alps and the Carpathians. In Poland noted all over the

country, up to an altitude of 800 m a.s.l., but in small numbers. There is no data on the size of the Polish population. The population, as a whole, is not threatened at the moment but some local isolated populations may disappear. The main threat to the species is the loss of breeding places (drainage work, filling up or contamination of small water bodies).

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Triturus montandoni*

2. Polish / English name: traszka karpacka / Carpathian newt

3. Systematic position: *Amphibia*

4. Distribution, Polish resources: The species occurs exclusively in the Carpathians and in the Jeseniki Mts. (eastern part of the Sudety in the Czech Republic). It is confined to the Alpine biogeographical region. In Poland it occurs in the southern parts of the Śląskie, Małopolskie and Podkarpackie voivodeships of, from the foothills up to an altitude of about 1600 m a.s.l. in the Tatras. In the western part of the Polish Carpathians the number of individuals is significantly lower and increases eastwards. The species is most numerous in the Beskid Niski and the Bieszczady mountains. The size of the Polish Montandon's newt population is estimated at several tens of thousand individuals. The Montandon's newt is not endangered in Poland presently. The loss of breeding habitats, small water bodies, is a potential threat.

5. To what extent does the governmental proposal cover the national resources of the species? ☹. The governmental proposal includes only 6 out of 13 sites important for the species. Inclusion of at least 4 additional sites is indispensable to sufficient protection of the population of the Montandon's newt. Each of these sites (except for Ostoja Jaśliska/Jaśliska Site) is inhabited by 2% of the national population of the species.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites from the experts' proposal should be included into the network:

- Beskid Żywiecki (Beskid Żywiecki Mountains),
 - Góry Słonne (Słonne Mountains),
 - Ostoja Gorczańska (Site of Gorce Mountains),
 - Ostoja Jaśliska (Jaśliska Site).
-

PISCES ET CYCLOSTOMATA

1. Latin name: *Acipenser sturio*

2. Polish/English name: jesiotr zachodni / European sea sturgeon

3. Systematic position: *Pisces*

4. Distribution, Polish resources: Originally, this species' range probably covered most coastal seawaters of Europe. For spawning, European sea sturgeons entered larger rivers. Currently it is found locally and in extremely small numbers. No sturgeons have been reported from Poland since the 1960s.

Genetic studies concerning museum specimens from the Baltic Sea indicate that sturgeons living in the Baltic basin belonged to a different species, the North American Atlantic sturgeon

(*Acipenser oxyrinchus*). Therefore it is likely that European sea sturgeons had never lived in Poland.

5. To what extent does the governmental proposal cover the national resources of the species?

6. Suggestions to supplement the Natura 2000 governmental proposal: None.

1. Latin name: *Alosa alosa*

2. Polish / English name: aloza / allis shad

3. Systematic position: *Pisces*

4. Distribution, Polish resources: It inhabits coastal waters of the north Atlantic from the south of Norway to North Africa as well as the western part of the Mediterranean Sea, around Great Britain and south Iceland (mainly the Atlantic and Mediterranean biogeographical regions). Within the whole range the species is rare and extremely endangered.

In Poland it is a critically endangered species. In the later part of the 20th century it was reported only twice. The coastal waters of the Woliński National Park and the Słowiński National Park are regarded as potential localities of the allis shad.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Alosa fallax*

2. Polish / English name: parposz / twaite shad

3. Systematic position: *Pisces*

4. Distribution, Polish resources:

The species occurs in the coastal waters of the north Atlantic from south Norway to North Africa, near the southern coast of Great Britain and in the Baltic Sea (Atlantic biogeographical region). It has several subspecies. The Baltic Sea is inhabited by the nominative subspecies *Alosa fallax fallax*. The species is seriously endangered in many countries. In Poland it occurs in low numbers in the coastal waters of the Baltic Sea, mainly in the area of Pomeranian Bay and Gdańsk Bay, as well as in the Szczecin Lagoon and the Vistula Lagoon. Single individuals are caught in the lower and middle courses of the Vistula River. A population size is unknown. Since the 1950s only single individuals have been being caught.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Aspius aspius*

2. Polish / English name: boleń / asp

3. Systematic position: *Pisces*

4. Distribution, Polish resources: The species occurs in the area covering Central Europe to the Ural, also in southern Scandinavia (mainly the Continental and Boreal biogeographical regions). Locally it can be abundant. In Poland, especially in the lowlands, it is a widespread and relatively

numerous species. The strongest populations are in big lowland rivers (Vistula, Bug, Odra, Warta, Noteć, Pilica, San). It also inhabits some lakes, especially the ones with flow as well as dam reservoirs. A size of the population is unknown, probably there are several hundred of thousand adult individuals. At present it is not an endangered species.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The species is reported from numerous localities (it is still widespread and relatively numerous in the whole country). The government proposal covers 30 % of the sites important for the species. It does not include several most characteristic and best preserved habitats of the asp, situated in the valleys of big, unchanneled lowland rivers.

6. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network:

- Dolina Pilicy (Pilica River Valley)
- Łęgi Odrzańskie (Odra Riverine Forests)
- Ostoja Przemyska (Przemysł Site)
- Wisła Środkowa (Middle Vistula River)
- Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley).

1. Latin name: *Cobitis taenia*

2. Polish / English name: koza / spined loach

3. Systematic position: *Pisces*

4. Distribution, Polish resources: It is a widespread species occurring almost in the whole of Europe, except for the north of Scandinavia and Russia. In the whole of Europe there occur polyploid individuals, which are hybrids of various *Cobitis* species. Cytogenetic research has proved that *Cobitis taenia sensu stricto* occurs in the Baltic Sea basin, in Sweden, France, Germany, Great Britain and in a few rivers of western Russia.

In Poland the species is widespread in the whole of the country. Cytogenetic research on the species from 16 localities showed that only three of them were inhabited by “pure” *Cobitis taenia* populations. In the remaining localities only hybrids were present. The total population size is unknown.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal includes only 40 % of the sites important for the species.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Bagienna dolina Drwęcy (Marshy Drwęca River Valley)
- Dybowska Dolina Wisły (Vistula River Valley near Dybów)
- Nieszawska Dolina Wisły (Vistula River Valley near Nieszawa)
- Grądy w Dolinie Odry (Oak-hornbeam Forests in the Odra River Valley)
- Dolina Pilicy (Pilica River Valley)
- Poleska Dolina Bugu (Polesie Bug River Valley)
- Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley)
- Lasy Sobiborskie (Sobiborskie Forests)

1. Latin name: *Cottus gobio*

2. Polish / English name: głowacz białopłetwy / bullhead

3. Systematic position: *Pisces*

4. Distribution, Polish resources: It is a widespread species occurring from France through Central Europe to the Ural; it also inhabits Great Britain and southern Scandinavia (mainly the Boreal and Continental biogeographical regions, to a lesser degree the atlantic region). Locally, in suitable habitats, it is rather numerous. Sensitive to water pollution, it has become extinct in many regions of Western Europe. In suitable habitats in Poland the species is rather numerous. Most abundant in the coastal rivers and in the basins of upper Odra, Vistula and San rivers. The population size is unknown. Main threats are posed by river and stream regulations, as well as water pollution.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal comprises approximately 50% of the sites important for the species. It does not include several most characteristic and best - preserved habitats of the bullhead, especially in the coastal rivers.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Dolina Radwi, Chotli i Chocieli (Radew, Chotla and Chociel River Valley)
- Jezioro Lubie i Dolina Drawy (Lake Lubie and Drawa River Valley)
- Ostoja Przemyska (Przemysł Site)
- Puszcza Drawska (Drawska Forest)
- Dolina Wieprzy i Studnicy (Wieprza and Studnica River Valley).

1.Latin name: *Eudontomyzon mariae*

2.Polish / English name: minóg ukraiński / Ukrainian brook lamprey

3.Systematic position: *Cyclostomata*

4.Distribution, Polish resources:

The species occurs in the north-western part of the Black Sea basin – in the basins of the Dniestr, Dniepr, Don, and Danube rivers, in the basins of the Adriatic and Aegean Sea (mainly the Steppic and Continental, partly the Pannonian and Alpine biogeographical regions). They are locally rather numerous.

There are approximately 100 localities known from Poland. The most abundant populations occur in the basins of the Narew and the Pilica rivers. In addition, it occurs locally in low numbers in the basins of Upper Vistula and San rivers. A population size is unknown; there are probably several tens of thousand adult individuals. Main threats are hydrotechnical constructions and water pollution.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal provides protection for the species only in the Narew River basin, disregarding a very important metapopulation in the Pilica River basin. The Knyszyńska Forest, which is another important site for the species was also neglected.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Dolina Pilicy (Pilica River Valley)
- Ostoja Knyszyńska (Site of Knyszyńska Forest)

1. Latin name: *Gobio albipinnatus*

2. Polish / English name: kielb białopłetwy / white-finned gudgeon

3. Systematic position: *Pisces*

4. Distribution, Polish resources: The geographic range of the species stretches from Germany through Central Europe to the Ural in the east (mainly the Continental and Steppic biogeographical regions). Locally it is rather numerous. As it is difficult to tell it apart from *Gobio gobio*, the population size is probably underestimated.

In Poland there are known approximately 20 localities. The most important ones are: the Lower Bug, San, Lower Warta, Middle Odra and Vistula rivers. A population size is unknown; probably there are several hundred of thousand adult individuals. Population trends are also unknown. River regulation and water pollution pose main threats.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The state proposal includes only one out of several important sites for the species in Poland, Ostoja Nadbużańska (Site on Bug River).

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Łęgi Odrzańskie (Odra Riverine Forests)
- Grądy w Dolinie Odry (Oak-hornbeam Forests in Odra River Valley)
- Dybowska Dolina Wisły (Vistula River Valley near Dybów)
- Ujście Warty (Mouth of Warta River)
- Ostoja Piska (Site of Piska Forest)

1. Latin name: *Gobio kessleri*

2. Polish / English name: kielb Kesslera / Kessler's gudgeon

3. Systematic position: *Pisces*

4. Distribution, Polish resources: The species occurs in a relatively small area in the basins of the San, Dniestr, and Danube rivers and in the basin of the Vardar River in the Aegean Sea basin. In Poland it occurs in the San River and in its several tributaries (Wisłok, Wiar, Stupnica). These are the northernmost localities of the species in Europe. A population size is unknown; there are probably several hundred of thousand adult individuals.

5. To what extent does the governmental proposal cover the national resources of the species? ☹! The state proposal does not include any of the sites important for the species.

6. Suggestions to supplement the Natura 2000 governmental proposal: The inclusion of the following sites is recommended:

- Ostoja Przemyska (Przemysł Site)
- Góry Słonne (Słonne Mts.)

1. Latin name: *Hucho hucho*

2. Polish / English name: głowacica / Danube salmon, huchen

3. Systematic position: *Pisces*

4. Distribution, Polish resources:

The species occurs mainly in the Danube basin (Continental, Alpine and Pannonian biogeographical regions). As the result of strong human pressure (habitat loss and intensive fishing) its number decreases and it inhabits presently only 50 % of its former range.

In Poland it has become extinct in natural habitats (Czarna Orawa and Czadeczka rivers) in the 1970s. It has been introduced into several other rivers and at present occurs in the Bóbr, Nysa Kłodzka, Gwda, Soła, Skawa, Raba and San rivers. The population size is estimated at approximately 2000 adult individuals.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None.

1. Latin name: *Lampetra fluviatilis*

2. Polish / English name: minóg rzeczny / river lamprey

3. Systematic position: *Cyclostomata*

4. Distribution, Polish resources: The species occurs mainly in basins of the Baltic and North Sea (Boreal, Atlantic and Continental biogeographical regions) as well as in the west of Italy (Mediterranean biogeographical region). In Poland it occurs mostly in the north-western part of Poland. It inhabits mainly coastal rivers. It was also reported from the Noteć River, Lower Vistula River, Middle Odra River, as well as the Szczecin Lagoon and the Vistula Lagoon. The population size is unknown; there are probably several tens of thousand adult individuals. It is threatened mainly by intensive fishing, river regulations and water pollution.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal includes only 30 % of the sites important for the species.

6. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network:

- Dolina Radwi, Chotli i Chocieli (Radew, Chotla and Chociel River Valley)
 - Dolina Słupi (Słupia River Valley)
 - Jezioro Lubie i Dolina Drawy (Lake Lubie and Drawa River Valley)
 - Nieszawska Dolina Wisły (Vistula River Valley near Nieszawa)
 - Puszcza Drawska (Drawska Forest)
-

1. Latin name: *Lampetra planeri*

2. Polish / English name: minóg strumieniowy / brook lamprey

3. Systematic position: *Cyclostomata*

4. Distribution, Polish resources: The species occurs mainly in the basins of the North Sea and the Baltic Sea, also in Great Britain and Ireland (Atlantic, Continental and Boreal biogeographical regions), and locally in the western part of Italy (Mediterranean biogeographical region). In Poland it is still rather numerous. The strongest populations inhabit the basin of the Upper Vistula and Odra rivers, as well as the coastal rivers. It is rarest in the north-eastern part of Poland where is replaced by *Eudontomyzon mariae*. A population size of the species is estimated in Poland at several tens of thousand adult individuals. Water courses channelling and water pollution pose main threats to the brook lamprey..

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The government proposal encompasses only 50 % of the sites important for the species.

6. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network:

- Dolina Bobru (Bóbr River Valley),
- Dolina Pilicy (Pilica River Valley),
- Jezioro Lubie i Dolina Drawy (Lake Lubie and Drawa River Valley),
- Ostoja Przemyska (Przemysł Site),
- Puszcza Drawska The (Drawska Forest),
- Dolina Wieprzy i Studnicy (Studnica and Wieprza River Valley).

The boundaries of the sites encompassing the San River should be modified so as to comprise a valley stretch between Krzemienna and Medyka!

1. Latin name: *Misgurnus fossilis*

2. Polish / English name: piskorz / weatherfish, mud loach

3. Systematic position: *Pisces*

4. Distribution, Polish resources: The geographic range encompasses the north of France, Central Europe, the Danube basin up to the Volga River basin (mainly the Continental biogeographical region, partly the Boreal and Atlantic regions). At present it is extinct in the large part of its former range. In Poland it was a common species up to the 1950s, recently rapidly disappearing. It occurs in the whole of the country. The most abundant populations inhabit the valleys of big lowland rivers and locally large complexes of carp ponds. A population size is unknown; there are probably hundred of thousand adult individuals. Main threats are drainage of wetlands, river regulations and water pollution.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The presence of the species is not confirmed in many sites listed in the governmental proposal (the species is rapidly disappearing; however, it is still spread over the whole country). The governmental proposal encompasses half of the sites important for the species. It does not include several most characteristic and best preserved habitat types of the species, situated mainly in the valleys of big, unregulated lowland rivers.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Dolina Bobru (Bóbr River Valley),
 - Dolina Pilicy (Pilica River Valley),
 - Poleska Dolina Bugu (Bug River Valley in Polesie),
 - Wisła Środkowa (Middle Vistula River),
 - Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley),
 - Ujście Warty (Mouth of the Warta River).
-

1. Latin name: *Pelecus cultratus*

2. Polish / English name: ciosa / Ziege

3. Systematic position: *Pisces*

4. Distribution, Polish resources: The species occurs in the south-eastern part of the Baltic basin and in the northern part of the Black Sea basin (Continental and Boreal biogeographical regions). They are locally relatively numerous. In Poland it is present almost exclusively in the Vistula and Odra estuaries. Most abundant (several hundred of thousand individuals) in the Vistula Lagoon and Szczecin Lagoon. Reported also (in low numbers) from Gdańsk Bay, lower courses of the Odra and Vistula rivers (in low numbers), and from the upper course of the Warta river (single individuals).

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Petromyzon marinus*

2. Polish / English name: minóg morski / sea lamprey

3. Systematic position: *Cyclostomata*

4. Distribution, Polish resources: It is a widespread species in the north of the Atlantic from Iceland through northern Scandinavia to the southern coast of the Iberian Peninsula. It also occurs in the Baltic Sea and the north-western part of the Mediterranean Sea. The most numerous populations occur in the North Sea, Great Britain and France. The species inhabits mainly the Atlantic, and partly the Mediterranean and Boreal biogeographical regions. In the Baltic Sea it is not numerous, occurring mainly in its north-eastern parts.

In Poland it is the most rare lamprey species. Sporadically caught in the Vistula Lagoon, from where it migrates to the Pasłęka River. Its presence was also confirmed in the Motława River in Gdańsk and in Lake Dąbie. The Polish sea lamprey population size is estimated at several tens of adult individuals.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Phoxinus phoxinus* (*Eupallasella phoxinus*)

2. Polish / English name: strzebla błotna (strzebla przekopowa) / lake minnow

3. Systematic position: *Pisces*

4. Distribution, Polish resources: The geographic range of the species is vast but localities are scattered in the area from Central Europe to Japan. It forms usually small and isolated populations (Continental and Boreal biogeographical regions).

In Poland it occurs mainly in the region of Polesie Lubelskie, Kashubian Lake District and locally in the Wielkopolska-Kujawy Lowlands. Polish localities are situated on the western limit of its geographic range. A population size is unknown; there are probably several hundred of thousand adult individuals. Main threats are posed by drainage of wetlands and disappearance of small water bodies as the result of natural succession.

5. To what extent does the governmental proposal cover the national resources of the species? ☺ The governmental proposal disregarded 3 (out of 9) sites, which are ones of the most important for the species in Poland.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network.

- Cyprianka,
- Dobromyśl,
- Lasy Sobiborskie (Sobiborskie Forests).

1. Latin name: *Rhodeus sericeus amarus*

2. Polish / English name: różanka / bitterling

3. Systematic position: *Pisces*

4. Distribution, Polish resources: The geographic range covers the area from France to the basins of the Black Sea and the Caspian Sea. Introduced populations occur locally in Great Britain, Ireland, Iceland, Denmark, Sweden, Finland and Greece.

In Poland it occurs in entire lowland area, usually in low numbers. Locally, in some water reservoirs, it can be abundant. The population size is unknown; there are probably several hundred thousands adult individuals. The species is strictly related to the presence of the molluscs of the *Unionidae* family, sensitive to water pollution.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal encompasses only 50 % of the sites important for the species.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Dolina Bobru (Bóbr River Valley),
- Dolina Pilicy (Pilica River Valley),
- Jezioro Lubie i Dolina Drawy (Lubie and Drawa River Valley)
- Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley).

1. Latin name: *Sabanajewia aurata*

2. Polish / English name: koza złotawa / golden loach

3. Systematic position: *Pisces*

4. Distribution, Polish resources: The species occurs in a relatively small area, in the southern basin of the Baltic Sea and in the Black Sea basin (mainly the Continental biogeographical region). Most abundant populations inhabit the Danube River and its tributaries, as well as the Dniestr River.

In Poland it occurs almost exclusively in the lower course of the Bug river and its tributaries. Some scattered localities are known also from the middle courses of the Odra, Pilica and Warta rivers. A population size is unknown; there are probably several tens of thousand adult individuals.

5. To what extent does the governmental proposal cover the national resources of the species? 😊

6. Suggestions to supplement the Natura 2000 governmental proposal: None.

1. Latin name: *Salmo salar*

2. Polish / English name: łosoś / Atlantic salmon

3. Systematic position: *Pisces*

4. Distribution, Polish resources: The species occurs in the northern part of the Atlantic from the Kara River in Russia in the east to Portugal in the west. Its geographical range encompasses the whole Great Britain, Iceland, Scandinavia and the Baltic Sea (mainly the Boreal and Atlantic biogeographical regions). In many parts of its range it has become extinct as the result of strong anthropopressure (hydrotechnical constructions and water pollution, intensive fishing). In Poland it became extinct in the 1980s (the last locality was in the Drawa River). As the result of reintroduction, carried out since the year 1985, stable and relatively abundant populations inhabit several coastal rivers (Wieprza, Grabowa, Parsęta, Drwęca, Słupia, Rega), and lately also some tributaries to the Warta and Noteć rivers (Drawa, Gwda and Wełna).

5. To what extent does the governmental proposal cover the national resources of the species? ☹ In the governmental proposal 80% of the sites important for the species were disregarded, specifically in the coastal rivers.

6. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Bagienna Dolina Drwęcy (Marshy Drwęca River Valley)
- Puszcza Drawska (Drawska Forest)
- Jezioro Lubie i Dolina Drawy (Lake Lubie and Drawa River Valley)
- Dybowska Dolina Wisły (Vistula River Valley near Dybów)
- Dolina Słupi (Słupia River Valley)
- Dolina Wieprzy i Studnicy (Wieprza and Studnica River Valley)
- Dolina Regi (Rega River Valley)
- Dolina Grabowej (Grabowa River Valley)
- Dolina Wełny (Wełna River Valley).

INVERTEBRATA

1. Latin name: *Anisus vorticulus*

2. Polish/English name: zatoczek łamliwy / little whirlpool rams horn snail

3. Systematic position: *Mollusca*

4. Distribution, Polish resources: This species lives in Europe and Asia, from France and Italy in the west to Siberia in the east. To the north, it reaches south Scandinavia. In Central Europe its sites are scattered and their number is decreasing. In Poland, it mainly occurs in the north of the country (Baltic Coast, Pomerania, Masurian Lake District), in the Wielkopolska-Kujawy Lowland, Mazovia, Białowieża Forest, Małopolska Upland and in Silesia. There is no data as to the size of the Polish population. It is considered to be a rare species whose numbers are decreasing. It is threatened due to loss and degradation of its habitat, mainly small water bodies.

5. To what extent does the governmental proposal cover the national resources of the species? ☹. The governmental proposal only includes 4 sites of this species. In view of the disappearance of its strongholds, at least 2 more sites with relatively strong populations should be included.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the following sites should be included in the network:

- Dolina Pilica Pilicy (Pilica River Valley)
 - Dolna Odry (Lower Odra River Valley)
-

1. Latin name: *Boros schneideri*.

2. Polish/English name: ponurek Schneidera

3. Systematic position: *Insecta*

4. Distribution, Polish resources: A palearctic species. Its range extends from north-eastern and eastern Europe to Japan. Several isolated sites of its occurrence are situated in central Europe (in Poland, Romania and Slovakia). In Poland it was found on Przemyskie Foothills, in Tatra mountains, in Świętokrzyskie mountains and in Białowieża Forest. Recent studies have only confirmed the latter of these sites. There are no numerical data as to the size of its population but it seems that this is an extremely rare and vanishing species. The largest potential threat for this species is posed by intensive forestry – mainly by removal of decaying and dead trees.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Buprestis splendens*.

2. Polish/English name: bogatek wspaniały / goldstreifiger

3. Systematic position: *Insecta*

4. Distribution, Polish resources: It is an European and Siberian species. Despite the fact that it occurs almost throughout Europe, it is very rarely found and in many European countries it has not been found so far at all. It lives in single, separated places and it is a relict of primeval forests. In Poland it is only known from Białowieża Forest. It is found very rarely and it is impossible to estimate the size of its population.

5. To what extent does the governmental proposal cover the national resources of the species? ? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Callimorpha quadripunctaria*

2. Polish/English name: krasopani hera, Jersey tiger

3. Systematic position: *Insecta*

4. Distribution, Polish resources: This butterfly occurs in Central and Southern Europe as well as in Asia Minor. Its range's northern limit goes through southern Poland. In our country its sites are located in the foothills of the Carpathians. The population size is not known, but the species does not seem to be currently threatened.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. **Latin name:** *Carabus zawadzki*.
 2. **Polish/English name:** biegacz Zawadzkiego
 3. **Systematic position:** *Insecta*
 4. **Distribution, Polish resources:** This beetle is an east-Carpathian endemite. It occurs in south-eastern Poland, eastern Slovakia, western Ukraine, north-eastern Hungary and northern Romania. In Poland it is found in Bieszczady mountains and in their foothills. The north-western border of its range goes through Poland. Similarly as it is the case of most invertebrate species, it is practically impossible to establish its population numbers. However, it is certainly very rare. There are 7 sites known in Poland where it occurs in small numbers. Collectors pose the most important potential threat.
 5. **To what extent does the governmental proposal cover the national resources of the species?** ☺
 6. **Suggestions to supplement the Natura 2000 governmental proposal:** None
-

1. **Latin name:** *Carabus variolosus*
 2. **Polish/English name:** biegacz urozmaicony
 3. **Systematic position:** *Insecta*
 4. **Distribution, Polish resources:** A low-mountain and highland species. Its range covers Central and South-Eastern Europe. The north-western border of this species' geographic range goes through southern Poland. In our country, it occurs mainly in the Sudety Mountains, Carpathians and in their foothills. It is also found in the Lublin Upland and Kraków-Częstochowa Upland, in Upper Silesia and in the Sandomierz Lowland. There are no estimates of its population size. It seems, however, that it is rather stable. This beetle usually occurs rarely and in small numbers but in some areas (e.g. in the Bieszczady Mountains) is quite numerous.
 5. **To what extent does the governmental proposal cover the national resources of the species?** ☺
 6. **Suggestions to supplement the Natura 2000 governmental proposal:** None
-

1. **Latin name:** *Cerambyx cerdo*
2. **Polish/English name:** kozioróg dębosz / oak beetle
3. **Systematic position:** *Insecta*
4. **Distribution, Polish resources:** It occurs in most of Europe (reaching as far North as southern Scandinavia, Lithuania and Latvia), as well as in Northern Africa and some regions in Western Asia. In some areas (in Southern Europe) it is quite common, but in many regions its range is strongly fragmented (insular occurrence). In Poland most sites are located in the south-western part of the country and it is also found locally. There is no data on its population size. During the last 25 years only 29 localities were found. The biggest threat to this species is old oak cutting and application of tending measures to oak trees (e.g. filling cavities)
5. **To what extent does the governmental proposal cover the national resources of the species?** ☹. 10 sites of this species have been accepted. In order to protect the population of this rare beetle, at least 5 more sites should be included.
6. **Suggestions to supplement the Natura 2000 governmental proposal:** We suggest that the following sites should be included in the network:

- Grądy w Dolinie Odry (Oak-hornbeam Forests in Odra River Valley)
 - Lasy Żerkowsko-Czeszewskie (Żerków-Czeszewo Forest)
 - Łęgi Odrzańskie (Odra Riverine Forests)
 - Puszcza Zgorzelecko-Osiecznicka (Zgorzelec-Osiecznica Forest)
 - Uroczyska Puszczy Drawskiej (Drawska Forest)
-

1. Latin name: *Coenonympha oedippus*

2. Polish/English name: strzępotek edypus / false ringlet

3. Systematic position: *Insecta*

4. Distribution, Polish resources: The wide range of this species stretches from Western Europe to Japan, although it is rather scattered. In Poland, it is known to occur in three sites: the Białowieża Forest, Narew River Valley and the Zawadówka Nature Reserve near Chełm. Most part of the known Polish population, estimated for several hundred individuals, concentrates in that last site (only one individual was found near Narew and the Białowieża population has probably become extinct). Amongst the main threats to this species are: great isolation of its sites, grass burning in wetlands, succession of vegetation on low-lying peat bogs and captures for collectorship.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Coenagrion ornatum*.

2. Polish/English name: łątka ozdobna (turzycowa) / ornate damselfly

3. Systematic position: *Insecta*

4. Distribution, Polish resources: This damselfly occurs mainly in southern and central parts of Europe (the centre of its range is the northern Balkans and Hungary), as well as western Asia. It is rarely found in Poland. Currently, only 3 sites have been confirmed, all in the southern part of the country. During the last few decades, ornate damselfly population has drastically decreased (almost all of its refuges have disappeared). It is mainly threatened by the disappearance and degradation of its habitats – streams and their surroundings.

5. To what extent does the governmental proposal cover the national resources of a species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Colias myrmidone*

2. Polish/English name: szlaczkoń szafraniec / danube clouded yellow

3. Systematic position: *Insecta*

4. Distribution, Polish resources: In Europe, it is found in the central and eastern part of the continent (as far as eastern Austria), in the south its range extends to Romania and Hungary and farther to the east. The north-eastern limit of its continuous range goes through Poland. Some isolated localities are found farther to the west of Europe. In some areas of southern and eastern Poland the species is numerous and common and does not seem to be threatened. Also its habitats

(roadsides, railwaysides, dry mid-forest meadows) are not threatened in Poland, but we should be aware that they might disappear due to intensive agriculture.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal only includes 9 sites, where species occurs. The Danube clouded yellow is not extremely threatened in Poland and not all of its sites must be protected, but in order to keep its population stable at least 7 further sites should be included.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the following sites should be added:

- Izbicki Przełom Wieprza (Wieprz River Gorge near Izbica)
 - Lasy Sobiborskie (Sobiborskie Forests)
 - Ostoja Knyszyńska (Site of Knyszyńska Forest)
 - Ostoja Środkowojurajska (Central Jura Upland Site)
 - Poleska Dolina Bugu (Bug River Valley in Polesie)
 - Uroczyska Lasów Janowskich (Janowskie Forests Ranges)
 - Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley)
-

1. Latin name: *Cucujus cinnaberinus*

2. Polish/English name: zgniotek cynobrowy / flat bark beetle

3. Systematic position: *Insecta*

4. Distribution, Polish resources: This species occurs in Europe, from Germany to Russia. Its range reaches Scandinavia in the north and the Balkan Peninsula (Bosnia and Croatia) in the south. In Poland, it is mainly found in the south of the country. In other areas it was noted in the Białowieża Forest, near Poznań and Warsaw. There is no information as to the size and status of the Polish population. For its development, this species requires large, not-debarked logs lying on the forest floor. Therefore, the largest threat to this species is loss of old, not managed forest stands.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal does not include a very important site of this beetle (one of the few outside southern Poland), the Koziennicka Forest.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the site of Puszcza Koziennicka (Koziennicka Forest) should be added.

1. Latin name: *Dytiscus latissimus*

2. Polish/English name: pływak szerokobrzegi / European great diving beetle

3. Systematic position: *Insecta*

4. Distribution, Polish resources: The range of this species stretches from the European coast of the Atlantic and the North Sea to eastern Siberia. In all of its range it is rare and occurs in small numbers. In Poland, it was found in several regions; the species most probably occurs scattered throughout the country. There is no quantitative data concerning this species, but it is certainly rare. It has been observed that its localities have been vanishing. The greatest threat to this species is posed by pollution and increasing eutrophication of water bodies.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal does not include one of the species' most important sites

– the Piława River Valley. It should be included to ensure more complete protection of this rare species.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the The Borny – Sulinów and Okonek Heaths should be included in the network.

1. Latin name: *Eriogaster catax*

2. Polish/English name: barczatka kataks

3. Systematic position: *Insecta*

4. Distribution, Polish resources: This species inhabits areas from Western Europe to eastern Siberia. In Poland, it occurs in a few scattered localities in the central and southern part of the country (the northernmost locality was found near Toruń). There are no data on the status and trends of its population. The nature reserve - Zbocza Płutowskie near Toruń may request further studies as the possible place of occurrence of the species. Main threats to this species include the use of chemical agents against agricultural pests and grass burning in spring.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal doesn't include any of the lowlands localities of the species.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the following sites should be included in the network:

- Widawa Valley (Dolina Widawy),
-

1. Latin name: *Euphydryas aurinia*

2. Polish/English name: przeplatka aurinia / marsh fritillary butterfly

3. Systematic position: *Insecta*

4. Distribution, Polish resources: The range of this species stretches from the western to the eastern border of the Eurasian Continent. In Poland, it is mainly found near Kielce, near Wrocław, in the Polesie region and in the Białowieża Forest. In several other parts of the country, single, isolated localities are found. The population size is not known. However, the apparent disappearance of its localities has been observed in Poland. The main possible threat is posed by habitat transformation, intensive use of flooded meadows.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental list does not include one of this species' main sites in Poland – the Sobiborskie Forests.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the site of Lasy Sobiborskie (Sobiborskie Forests) should be added.

1. **Latin name:** *Graphoderus bilineatus*.
 2. **Polish/English name:** kreślinek nizinny
 3. **Systematic position:** *Insecta*
 4. **Distribution, Polish resources:** Its range in Poland extends from central and southern Scandinavia to south-western France, Italy, Slovenia and Serbia. In Poland there is no precise data as to its distribution but it most likely occurs in the whole country, except for mountain areas. It does not to be a currently threatened species.
 5. **To what extent does the governmental proposal cover the national resources of the species?** ☺
 6. **Suggestions to supplement the Natura 2000 governmental proposal:** None
-

1. **Latin name:** *Hypodrias maturna*
 2. **Polish/English name:** przeplatka maturna / scarce fritillary butterfly
 3. **Systematic position:** *Insecta*
 4. **Distribution, Polish resources:** This species occurs scattered in Central and Eastern Europe, as well as in Western and Central Asia. In Poland it is mainly found in the Odra River Valley, in the Białowieża Forest and in the Biebrza River Valley. It was also noted in Mazovia, Lower Silesia and in the Lublin region. There is no data as to its numbers in Poland, but in the three main areas of its occurrence the population seems to be stable. Potential threats to this species have not been identified.
 5. **To what extent does the governmental proposal cover the national resources of the species?** ☺
 6. **Suggestions to supplement the Natura 2000 governmental proposal:** None
-

1. **Latin name:** *Leucorrhinia pectoralis*
 2. **Polish/English name:** zalotka większa / large white-faced darter
 3. **Systematic position:** *Insecta*
 4. **Distribution, Polish resources:** It is a European and Siberian species. Its main range is located in Central and Eastern Europe and in western Siberia. In Poland, it occurs practically throughout the country (except some mountain areas). It is rather numerous and common in some places. Not threatened.
 5. **To what extent does the governmental proposal cover the national resources of the species?** ☺.
 6. **Suggestions to supplement the Natura 2000 governmental proposal:** None
-

1. **Latin name:** *Limoniscus violaceus*.
2. **Polish/English name:** pilnicznik fiołkowy / violet click beetle
3. **Systematic position:** *Insecta*
4. **Distribution, Polish resources:** Violet click beetle is considered to be a relict of primeval forests. It is one of the rarest beetle species in Europe. It occurs on single and isolated sites from Spain to Denmark. It was found in Poland only twice: in Białowieża Forest (at the end of the 19th century) and in the reserve Bielinek nad Odrą, in the Pomeranian Lakeland (in 1920-ties). It is

not known whether it presently occurs in Poland. The largest threat to this species is the disappearance and restructuring of old deciduous forests.

5. To what extent does the governmental proposal cover the national resources of the species? †

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Lucanus cervus*

2. Polish/English name: jelonek rogacz / stag beetle

3. Systematic position: *Insecta*

4. Distribution, Polish resources: This species is found in almost all of Europe, as well as in some areas of Western and Central Asia and in Northern Africa. Although information on its occurrence comes from almost all parts of Poland, recent observations are rare. There is no data to estimate its population size. It is also difficult to say whether the species is currently in regress but the number of current localities where it lives is very small. This species is mainly threatened by intensive forest management (removal of dead and rotting trees) as well as by collecting.

5. To what extent does the governmental proposal cover the national resources of the species? ☹. Currently, only 3 sites have been included in the governmental proposal. In order to protect this species effectively, at least 6 further sites must be included.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the following sites should be included in the network:

- Buczyna Szprotawsko-Piotrowicka (Szprotawa-Piotrowice Beech Forest),
 - Dolina Pliszki (Pliszka River Valley),
 - Lasy Barucickie (Barucice Forests),
 - Lasy Bierzwnickie (Bierzwnik Forests),
 - Puszcza Zgorzelecko-Osiecznicka (Zgorzelec-Osiecznica Forest).
 - Uroczyska Puszczy Drawskiej (Drawska Forest),
-

1. Latin name: *Lycaena dispar*

2. Polish/English name: czerwonończyk nieparek / large copper

3. Systematic position: *Insecta*

4. Distribution, Polish resources: It lives throughout the Palearctic (several subspecies in Asia). The European subspecies (*L. d. rutila*) formerly disappearing and highly threatened (the nominative subspecies died out in Great Britain in the 19th century). In recent years its populations have built up and currently in Poland, particularly in the north and east, it is common and locally numerous and therefore not threatened. In view of unexplained causes of its former decline and current recovery, the population of this species should be monitored.

5. To what extent does the governmental proposal cover the national resources of the species? 😊

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Lycaena helle*

2. Polish/English name: czerwonończyk fioletek / violet copper.

3. Systematic position: *Insecta*

4. Distribution, Polish resources: A boreal species, it reaches the south-western limit of its continuous range in Poland and further to the West its localities are very few and strongly isolated. It is more common in Scandinavia and northern Russia (to the Amur river). In Poland it is found locally and in very small numbers, being slightly more common in the eastern part of the country. It lives in lowmoor bogs. Its precise habitat requirements and population size are not known.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal covers 11 sites of this species. Some most important sites have not been included.

6. Suggestions to supplement the Natura 2000 governmental proposal:

We suggest that the following sites should be added:

- Bystrzyca Jakubowicka
- Ostoja Augustowska (Site of Augustowska Forest)
- Ostoja Knyszyńska (Site of Knyszyńska Forest)
- Ostoa Popradzka (Site on Poprad River)
- Poleska Dolina Bugu (Bug River Valley in Polesie)

1. Latin name: *Maculinea nausithous*

2. Polish/English name: modraszek nausitous / dusky large blue

3. Systematic position: *Insecta*

4. Distribution, Polish resources: It occurs in a narrow belt stretching from Western Europe to the Urals and Caucasus (additionally, some isolated locations in Spain). In Poland, it is quite numerous in certain areas, particularly in the southern part of the country. It is rarer in the north where only known from some isolated localities. The northern limit of its range runs across our country. Population is stable. This butterfly is not currently endangered in Poland, but it will probably become endangered soon as the result of Poland's access to the EU (habitat degradation due to intensification of the use of meadows).

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal includes only 9 sites, where the species occurs. Some of the most important sites have been neglected.

6. Suggestions to supplement the Natura 2000 governmental proposal:

We suggest that the following sites should be added:

- Grądy w Dolinie Odry (Oak-hornbeam Forests in Odra River Valley) – one of the largest populations in Poland!,
- Lasy Sobiborskie (Sobiborskie Forests),
- Łęgi Odrzańskie (Odra Riverine Forests),
- Masyw Ślęży (Ślęża Massif),
- Pojezierze Sławskie (Sławskie Lake District),
- Poleska Dolina Bugu (Bug River Valley in Polesie),
- Przełom Wisły w Małopolsce (Vistula River Gorge in Małopolska),

- Uroczyska Lasów Janowskich (Janowskie Forests Ranges),
 - Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley),
-

1. Latin name: *Maculinea teleius*

2. Polish/English name: modraszek telejus / scarce large blue

3. Systematic position: *Insecta*

4. Distribution, Polish resources: It occurs in a narrow belt in all of the Palearctic, except for its northern and southern parts. Further to the west of Poland it is becoming increasingly rare. In Poland, it is quite common in the south. Most frequently reported from the Lublin region and Silesia. The northern limit of its range runs through Poland (its northernmost, isolated localities are situated near Warsaw). The scarce large blue is not endangered in Poland; its population is stable and strong. A potential threat, associated with Poland's access to the EU, is intensification of the use meadows. This will lead to the degradation of its habitats and extinction of the species.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal only includes 11 sites, where the species occurs and many important sites have been neglected.

6. Suggestions to supplement the Natura 2000 governmental proposal:

We suggest that the following sites should be added:

- Grądy w Dolinie Odry (Oak-hornbeam Forests in Odra River Valley) – one of the largest populations in Poland!,
 - Lasy Sobiborskie (Sobiborskie Forests)
 - Łęgi Odrzańskie (Odra Riverine Forests)
 - Masyw Ślęży (Ślęża Massif)
 - Ostoja Olsztyńsko-Mirowska (Olsztyn-Mirów Site)
 - Ostoja Środkowojurajska (Central Jura Upland Site)
 - Pojezierze Sławskie (Sławskie Lake District)
 - Poleska Dolina Bugu (Bug River Valley in Polesie)
 - Przełom Wisły w Małopolsce (Vistula River Gorge in Małopolska)
 - Uroczyska Lasów Janowskich (Janowskie Forests Ranges)
 - Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley)
-

1. Latin name: *Margaritifera margaritifera*

2. Polish/English name: skójka perłorodna / freshwater pearl mussel

3. Systematic position: *Mollusca*

4. Distribution, Polish resources: In Euroasia it mainly occurs in the northern part of the continent (British Isles, Scandinavia, central and northern Russia). In Europe it is also found in isolated areas in Spain, France, Germany, Czech Republic and Slovakia. This species is vanishing throughout Europe. In Poland, it occurred mostly in the Sudety Mountains. The last records are from the beginning of the 20th century.

5. To what extent does the governmental proposal cover the national resources of the species? † According to present knowledge, this species has been extinct in Poland.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. **Latin name:** *Mesosa myops*.
 2. **Polish/English name:** średzinka
 3. **Systematic position:** *Insecta*
 4. **Distribution, Polish resources:** Very rare in Europe (except for the eastern part), known from single sites. The western limit of its range goes through Latvia, Poland and Ukraine and it reaches East as far as Sachalin. Only one finding in Poland, in Białowieża Forest. As in the case of most invertebrates, it is impossible to estimate the population size. The main threat for this species is the disappearance of deciduous forests (carrs in particular).
 5. **To what extent does the governmental proposal cover the national resources of the species?** ☺
 6. **Suggestions to supplement the Natura 2000 governmental proposal:** none
-

1. **Latin name:** *Ophiogomphus cecilia*.
 2. **Polish/English name:** trzepla zielona
 3. **Systematic position:** *Insecta*
 4. **Distribution, Polish resources:** It is an Eurasian species. The centre of its range is situated in eastern Europe: from Finland, through eastern Germany, to Balkan Peninsula. In Poland it is found almost throughout the country, except for mountain areas. This species is rather numerous and it is not currently threatened.
 5. **To what extent does the governmental proposal cover the national resources of a species?** ☺
 6. **Suggestions to supplement the Natura 2000 governmental proposal:** None
-

1. **Latin name:** *Osmoderma eremita*.
2. **Polish/English name:** pachnica dębowa / hermit beetle
3. **Systematic position:** *Insecta*
4. **Distribution, Polish resources:** Its European range extends from Europe's western limits to the Volga River. In the north, it reaches the southern part of the Scandinavian Peninsula and in the south, the northern Caucasus and the Mediterranean coast. In Poland, it is probably occurs all over the country, except for the mountains. There is no information as to its numbers in our country, but the population seems to be stable. The largest threat is posed by sanitary measures to old, decaying trees and removal of such trees.
5. **To what extent does the governmental proposal cover the national resources of the species?** ☹ The governmental proposal includes 9 sites of this species. In order to provide proper protection for this beetle, at least 3 other sites should be added to the list.
6. **Suggestions to supplement the Natura 2000 governmental proposal:**
We suggest that the following sites should be added:
 - Puszcza Drawska (Drawska Forest)
 - Puszcza Kozińska (Kozińska Forest)
 - Stawy Sobieszowskie (Sobieszowo Ponds)

1. Latin name: *Oxyporus mannerheimii*

2. Polish/English name: pogrzybica Mannerheima

3. Systematic position: *Insecta*

4. Distribution, Polish resources: The range of this species covers Northern Europe and Asia. Throughout this area it is scarce. The south-western border of its range crosses through eastern Poland. During the last 50 years it was only found 3 times in Poland: in the Lublin region and twice in the Knyszyńska Forest (in the earlier part of the 20th century it was also found in the Białowieża Forest). There are no data as to the size of the Polish population, but it is known to be very small. Only single individuals were found on these sites. There is no sufficient information to conclude about population changes and threats.

5. To what extent does the governmental proposal cover the national resources of the species? ☹! The governmental proposal does not include one (but the most recent one!) of the three known sites of this species' occurrence, the Knyszyńska Forest. *O. mannerheimii* was found there twice, at a few years' interval, which indicates a stable refuge.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the site of the Knyszyńska Forest should be added.

1. Latin name: *Phryganophilus ruficollis*.

2. Polish/English name: konarek tajgowy / false darkling beetle

3. Systematic position: *Insecta*

4. Distribution, Polish resources: The range of this species' occurrence extends from Japan, through Siberia, to southern and western Europe. This beetle is found very rarely and it is considered to be a relict of primeval forests. In Poland, it is currently only found in one site situated in Białowieża Forest. There are no data whatsoever as to its population numbers and changes.

5. To what extent does the governmental proposal cover the national resources of the species? 😊

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Polyommatus eroides*

2. Polish/English name: modraszek eroides / false eros blue

3. Systematic position: *Insecta*

4. Distribution, Polish resources: This species occurs in Central and Eastern Europe, as well as in Asia Minor. Only 6 sites are currently known in Poland; they are located in the Knyszyńska Forest and in the surroundings of the Białowieża Forest. There is no data on the population size but it seems to be dying out.

5. To what extent does the governmental proposal cover the national resources of the species? ☹! The governmental proposal does not include any locality of this species. In order to protect it, it is vital to add 2 sites.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the following sites should be added:

- Grzybowce-Narejki

- Jelonka

1. Latin name: *Pseudogaurotina excellens*.

2. Polish/English name: siczawa karpacka

3. Systematic position: *Insecta*

4. Distribution, Polish resources: A Carpathian endemite. Found in Poland, Romania, Slovakia (the most sites), Ukraine and Hungary. In all of its range it is only found in 50 sites, with very few individuals. Altogether, 4 sites are known in Poland: on Babia Góra, in Tatra mountains (2) and in Pieniny mountains. There are no data as to the size of the Polish population, but usually only single individuals were found. It is thought to be dying out, mainly due to private collections (including purposeful destruction of habitats, e.g. cutting down bushes where these insect live in order to keep them in captivity), as well as strong isolation of individual sites.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Pytho kolwensis*.

2. Polish/English name: rozmiarz kolweński

3. Systematic position: *Insecta*

4. Distribution, Polish resources: This species is found in the northern part of Eurasia, from Scandinavia to the river Amur. It is not numerous throughout its range. The south-western border of its range goes through Poland. The only known sites where it occurs are found in Białowieża forest. Its population numbers are impossible to estimate. However, it is known that they are very low. This species is extremely threatened due to the disappearance of its habitat – old, unmanaged forests.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Rhysodes sulcatus*.

2. Polish/English name: zagłębek bruzdkowany

3. Systematic position: *Insecta*

4. Distribution, Polish resources: The European range of this species extends from southern Sweden to the Mediterranean Sea. Throughout Europe its occurrence is regressing. In Poland, its currently few refuges are found in Beskid Niski mountains, in Białowieża Forest, in Świętokrzyskie mountains and in Roztocze. It is not possible to estimate the size of its population. The biggest threat is posed by intensive forest exploitation – mainly removal of dead and decaying trees.

5. To what extent does the governmental proposal cover the national resources of the species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. **Latin name:** *Rosalia alpina*.
 2. **Polish/English name:** nadobnica alpejska / rosalia longicorn
 3. **Systematic position:** *Insecta*
 4. **Distribution, Polish resources:** This species is mainly found in central and southern Europe (its northern range limit goes through Denmark and Sweden). It is very rarely found on lowlands and it prefers mountains and their foothills. This species is very rare in Poland. During recent years it has been found in less than twenty sites, mainly in Bieszczady and Beskid Niski mountains. The main threat for this species is posed by intensive exploitation of beech forests (mainly removal of old trees), which constitute its habitat, as well as collections and trade in this beetle.
 5. **To what extent does the governmental proposal cover the national resources of the species?** ☺ All of this species' refuges that had been suggested are included in the proposal.
 6. **Suggestions to supplement the Natura 2000 governmental proposal:** None
-

1. **Latin name:** *Unio crassus*.
 2. **Polish/English name:** skójka gruboskorupowa / thick shelled river mussel
 3. **Systematic position:** *Mollusca*
 4. **Distribution, Polish resources:** It occurs in most of Europe, from southern Scandinavia and Great Britain in the North, to Mediterranean countries in the South, reaching as far East as areas beyond Caucasus. In Poland, it is found in lowlands, as well as in highlands (rivers and lakes). There are no data as to the size of the Polish population. It is not particularly rare currently, but it is regressing. The main threat is posed by anthropogenic changes in its habitats (chemical pollution and eutrophication, e.g. due to extensive fertilisation).
 5. **To what extent does the governmental proposal cover the national resources of a species?** ☺
 6. **Suggestions to supplement the Natura 2000 governmental proposal:** None
-

1. **Latin name:** *Vertigo angustior*.
 2. **Polish/English name:** poczwarówka zwężona / narrow-mouthed whorl snail
 3. **Systematic position:** *Mollusca*
 4. **Distribution, Polish resources:** Occurs from the western edges of Europe to Ural Mountains. Reaches Scandinavia to the North. Considered a boreal relict. In Poland, it is found almost throughout the country. There are no data as to the population size. It is still found in many areas, but these areas are scattered and their number is shrinking quickly. The biggest threat is posed by habitat changes: drainage, overgrowing and pollution of wetlands.
 5. **To what extent does the governmental proposal cover the national resources of a species?** ☺
 6. **Suggestions to supplement the Natura 2000 governmental proposal:** None
-

1. **Latin name:** *Vertigo genesii*

2. Polish/English name: poczwarówka zmienna / round-mouthed whorl snail

3. Systematic position: *Mollusca*

4. Distribution, Polish resources:

It is a boreal and alpine species. In Europe, it is found in Scandinavia, on the British Isles and in the Alps. Single localities have been found in Poland and in Latvia. In Poland it is claimed to be observed in Białowieża Forest, but most probably because of the wrong identification. It is highly possible that nowadays this species doesn't exist on the territory of our country.

5. To what extent does the governmental proposal cover the national resources of the species? †

6. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Latin name: *Vertigo geyeri*.

2. Polish/English name: poczwarówka Geyera

3. Systematic position: *Mollusca*.

4. Distribution, Polish resources: A boreal and alpine species. In Europe, it occurs in Scandinavia, on British Isles, in alpine countries and in several other states. In Poland it has been found only recently, in the Białowieża Forest and in Tatra Mountains. The main potential threat for this species is a change in water conditions (drainage).

5. To what extent does the governmental proposal cover the national resources of a species? ☺

6. Suggestions to supplement the Natura 2000 governmental proposal: None.

1. Latin name: *Vertigo moulisiana*

2. Polish/English name: poczwarówka jajowata

3. Systematic position: *Mollusca*

4. Distribution, Polish resources: The range of this species includes almost all of Europe (except for Great Britain and the Appeninian Peninsula) and a part of Asia. In Poland it is only found at some sites in the Masurian Lake District, Lubuskie Lake District, in Białowieża Forest and near Kampinoska Forest. There are no data as to the size of its population but a decrease is observed, as well as disappearance of habitats. The main threat is posed by wetland drainage and overgrowing.

5. To what extent does the governmental proposal cover the national resources of the species? ☹ The governmental proposal covers 3 of the 4 sites where this snail lives. Considering its extreme rarity and the fact that it is disappearing, a refuge should be established at the 4th site of its occurrence, which is also the only one in western Poland.

6. Suggestions to supplement the Natura 2000 governmental proposal: We suggest that the site of Lubniewice in Lubuskie Lake District is established.

1. Latin name: *Xylomoia strix*.

2. Polish/English name: sówka puszczykówka

3. Systematic position: *Insecta*

4. Distribution, Polish resources: The species was described as late as 1980. In Europe, it is found in Poland, Russia, Finland, Latvia and Ukraine. It probably also occurs further to the East. Altogether, only 20 individuals have been caught. In Poland it has only been found twice, in the north-eastern part of the country. Not much is known about its distribution and threats.

5. To what extent does the governmental proposal cover the national resources of a species? ?? Due to the lack of reliable information concerning sites of its occurrence, it is impossible to decide whether its protection is sufficient.

6. Suggestions to supplement the Natura 2000 governmental proposal: None

2.2.1. CRITERIA FOR ASSESSING GOVERNMENTAL PROPOSAL OF PROPOSED SITES OF COMMUNITY IMPORTANCE OF NATURA 2000 NETWORK REGARDING BATS (CHIROPTERA)

Knowledge about distribution of bat species in Poland is still weak and this group of mammals is one of worst studied. It is known that in the south of Poland species diversity is higher than in central and northern part of the country. This phenomenon is related to the fact that northern limit of the geographic range of some species runs through Poland. It is difficult, however, to assess the size of particular populations. Therefore, to make the effective protection of each species important to EU, the network of Natura 2000 sites should encompass the most significant localities of those species. In such a situation while protecting relatively low number of localities we protect high share of the population.

Bats spend part of a year in wintering grounds and another part in places of summer stay (breeding colonies or, not so common groups of males). That is why it is essential to protect representative share of both shelter types in order to provide effective protection of those animals.

Therefore, the most important task is to define:

Which wintering grounds and breeding colonies are significant to the bat species?

What population size of the species should be limiting?

How many shelters of both types should be encompassed in the Natura 2000 network to secure permanent presence of the species?

Agreement for the Protection of Bats –uniting the majority of Polish centers working on protection and monitoring of those animals, will try to give answers to those questions. On the base of most detailed available knowledge on abundance, distribution and threats of the species, the Agreement elaborated unified criteria expressed in points, which should be considered as guidelines for the selection of pSCIs designated for the purpose of bats' occurrence. Similar criteria assumed by ornithologists (number of nesting pairs of bird species and abundance of some migrating birds) turned out to be very helpful in the process of creating unite proposal of network of special protection areas for birds. While elaborating such criteria for bats, following rules were assumed:

- the system should include sites that have to be protected to ensure the favorable conservation status for the bat species in Poland
- criteria should address the bat species listed in Annex II to the Habitat Directive
- sites proposed according to the mentioned criteria should be of relatively permanent character

- the number of proposed sites should not exceed the necessary number of sites to ensure the favorable conservation status of bats and to avoid conflicts and financial burden for the State budget.
- the system should be relatively simple and easy to understand, used also by non-professionals.

The assumed criteria indicate the essential minimum of sites that should be included in the Natura 2000 network in order to provide the favorable conservation status for the bat species. They do not exclude the areas, which did not get the sufficient number of „bat points” but have other natural values qualifying them to be in Natura 2000 network.

Taking into consideration current knowledge on population status of the bat species, changes in population size and dynamics, known threats as well as number of protected sites, the following criteria have been assumed:

The sites, which have been given 10 or more points should be undoubtedly included in the Natura 2000 network. The scores are given according to the following rules:

summer colonies of bats

Myotis myotis – 1 point for every 20 individuals (usually females)

Rhinolophus hipposideros, *Myotis emarginatus* and *Myotis dasycneme* – 1 point for every 3 adult individuals

wintering grounds

Myotis myotis – 1 point for every 15 individuals

Barbastella barbastellus – 1 point for every 10 individuals

Rhinolophus hipposideros – 1 point for every 3 individuals

Myotis bechsteinii, *Myotis emarginatus* and *Myotis dasycneme* – 1 point for every individual

If there are over 300 individuals of bats in a wintering ground, regardless of the species, the sum of points should be multiplied by 2.

To acquire the number of points for a site, the points for every species should be added, and in the case of shelter used the whole year round - also the number of points for separate seasons should be summed up.

While creating Polish Shadow List we decided that, with regard to bats, only sites fulfilling those criteria should be designated. Number of scored points is given in the description of each site.

2.3. HABITATS FROM ANNEX I OF HABITAT DIRECTIVE IN POLISH GOVERNMENTAL PROPOSAL OF NATURA 2000 NETWORK

1. Code: 1110

2. **Name:** sandbanks which are slightly covered by sea all the time

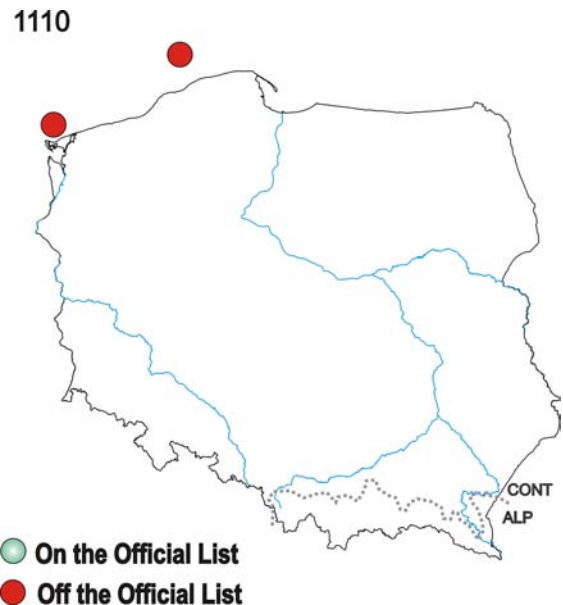
3. **Distribution, diversity, Polish resources:** This habitat type is represented by Ławica Odrzana (Odra Sandbank) in the Zatoka Pomorska (Pomeranian Bay) and Ławica Słupska (Słupsk Bank) in the Polish zone of the Baltic Sea.

4. **To what extent does the governmental proposal cover the national resources of the habitat type?**

⊗! Localities of this habitat type are not included in the governmental proposal, in which the Polish Zone of the Baltic Sea is totally disregarded. The habitat is mistakenly indicated in the SDFs for several coastal sites – Zatoka Pucka (Puck Bay) and Zalew Wiślany i Mierzeja Wiślana (Vistula Lagoon and Vistula Spit).

5. **Suggestions to supplement the Natura 2000 governmental proposal:**

Marine sites such as Ławica Odrzana (or larger site Zatoka Pomorska / Pomeranian Bay, also for others species & habitats) and Ławica Słupska (Słupsk Bank) should be included in the network.



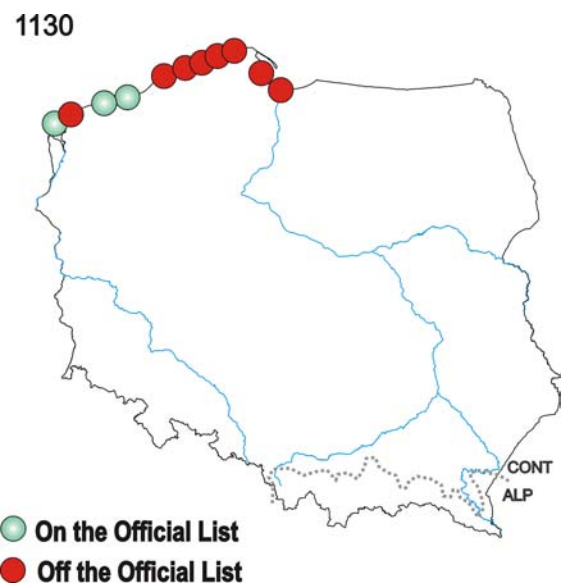
1. Code: 1130

2. **Name:** estuaries

3. **Distribution, diversity, Polish resources:**

Estuaries of a dozen or so rivers of different size, flowing into the Baltic Sea (CONT). A specific character of the ecosystem results from the mixing of fresh and salt waters, and this phenomenon occurs even in estuaries with a transformed morphology. Larger estuaries are changed by antropogenic factors; some smaller, especially on Gdańsk Coastland, still preserve seminatural character. The more differentiated forms of the habitat are the estuaries of the biggest rivers, Vistula and Odra, which are partially taken up by big sea ports.

4. **To what extent does the governmental proposal cover the national resources of the habitat type?** ⊗



The governmental proposal encompasses

the Rega River estuary, the Parsęta River estuary and a part of the Odra River estuary (without neither Zalew Kamieński (Kamieński Lagoon) nor the valuable and unique Dziwna River estuary). The estuaries of such rivers as Wieprza, Słupia, Łupawa, and Łeba have not been included in the network despite the fact that the inclusion of two of them would demand just a slight correction of the borders of Pobrzeże Słowińskie (Słowińskie Coastland), a pSCI in the national list. The state proposal covers approximately 30% of the Polish resources of the habitat type.

5. Suggestions to supplement the Natura 2000 governmental proposal:

A slight correction of the boundaries of the pSCI of Pobrzeże Słowińskie (Słowińskie Coastland) is suggested, so as to cover the two estuaries: of the Łeba and Łupawa rivers. The pSCI of Zalew Szczeciński i Ujście Odry (Szczecin Lagoon and Odra River Estuary) should be enlarged, so as to include the Dziwna River estuary and Zalew Kamieński (Kamieński Lagoon). A small correction of the boundaries of the pSCI of Piaśnickie Łąki (Piaśnica Meadows) will make possible to include Piaśnica natural estuary. The inclusion of a new site: Dolina Wieprzy i Studnicy (Wieprza and Studnica River Valley), important also for conservation of other habitat types and salmon, will make possible protection of another estuary. New site Ujście Wisły / Wisła Mouth would make possible protection of natural part of Vistula estuary. In view of the highly developed infrastructure of marine ports, it is not recommended to include in the network the remaining part of the Odra River estuary, as well as western part of the Vistula River estuary (port in Gdańsk).

1. Code: 1150 *

2. Name: Lagoons (coastal lagoons and lakes)*

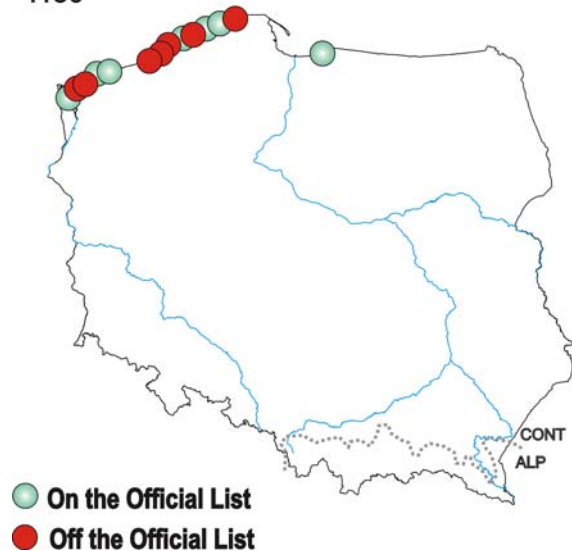
3. Distribution, diversity, Polish resources:

The subtype of lagoons are represented by the Szczecin Lagoon and the Vistula Lagoon. The subtype of costal lakes is represented by lakes: Koprowo, Liwia Łuża, Resko Przymorskie, Jamno, Bukowo, Kopań, Wicko, Modła, Gardno, Łebsko, Sarbsko (CONT).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ⊗

The subtype of the lagoons is well represented; both localities are included in the proposal. The subtype of costal lakes is represented by 5 of the 11 lakes (Liwia Łuża, Resko, Modła, Gardno, Łebsko), and this number seems to be insufficient in view of the priority status of the habitat type.

1150



5. Suggestions to supplement the Natura 2000 governmental proposal: A slight correction of the boundaries of the pSCI of Mierzeja Sarbska (Sarbska Spit) will enable the inclusion of Sarbsko Lake (adjacent to the present boundary). A correction of the borderline of the pSCI of Wolin i Uznam (Wolin and Uznam Islands), proposed for conservation of 1130, will enable the

inclusion of Koprowo Lake. In addition, a new site, Jezioro Bukowo (Lake Bukowo), is proposed.

1. Code: 1160

2. Name: large shallow inlets and bays

3. Distribution, diversity, Polish resources: The habitat represented exclusively by the Puck Bay (CONT)

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The Puck Bay is included in the proposal.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 1170

2. Name: reefs (rocky sea bed)

3. Distribution, diversity, Polish resources: A habitat type represented only by the north-western part of Ławica Słupska (Słupsk Bank) in the Polish sector of the Baltic Sea.

4. To what extent does the governmental proposal cover the national resources of the habitat type?

☹! The only locality in the Polish sector of the Baltic Sea is not included in the governmental proposal.

5. Suggestions to supplement the Natura 2000 governmental proposal:

A marine site, Ławica Słupska (Słupsk Bank), should be included in the network.



1. Code: 1210

2. Name: annual vegetation of drift lines

3. Distribution, diversity, Polish resources: It is scattered along the whole coastline (CONT). As the character of the habitat is very dynamic, the resources are varied. Nevertheless, the habitat is best developed in the western part of the Polish coast, as well as in the “accumulative” beaches of Pobreże Słowińskie (Słowińskie Coastland) and Mierzeja Sarbska (Sarbska Spit).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The beaches of Uznam, Wolin, Pobrzeże Słowińskie (Słowińskie Coastland) and Mierzeja Sarbska (Sarbska Spit), where the habitat is usually best developed, are included in the proposal. The state proposal encompasses 50% of the Polish coastline, therefore not less than 50% of the resources of the habitat type are covered.

5. Suggestions to supplement the Natura 2000 governmental proposal: None. Including of Ujście Wisły / Wisła Mouth site, necessary for 1130, will additionally improve habitat representation.

1. Code: 1230

2. Name: vegetated sea cliffs of the Baltic Coast

3. Distribution, diversity, Polish resources: The habitat type occurs in several sections of the coastline (CONT). The total length of the living cliffs with the on-going process of cliff abrasion amounts to 45 km, while the length of the dead cliff is 25 km. The highest and most impressive cliffs are on the Wolin Island, there is also another long stretch of cliffs in the area of Pobierowo-Niechorze.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The governmental proposal comprises all coast fragments with cliffs, suggested by Polish naturalists, covering approximately 50% of the Polish cliff coast and including the areas where the cliffs are best developed (Wolin Island and Trzęsacz-Niechorze).

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 1310

2. Name: Salicornia and other annuals colonizing mud and sand

3. Distribution, diversity, Polish resources: Natural, inland localities of the habitat type are in Poland potentially situated in Kujawy and in the vicinity of Łęczycza (the state of preservation of the habitat is unknown). At present the best known large-area sites are meadows near sodium works in Inowrocław-Mątwy and Janikowo (they are however of anthropogenic origin and character). There are also small patches of the habitat in a halophyte nature reserve in Ciechocinek (but it is necessary to examine the state of its preservation).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The habitat type was not listed in the SDFs at all; patches situated near Łęczycza are within the pSCI of Pradolina Bzury-Neru (Proglacial Stream Valley of Bzura and Ner). Patches from Kujawy have not been suggested for inclusion so far.

5. Suggestions to supplement the Natura 2000 governmental proposal:

Further research is needed. It is certain that some additional sites should be proposed for conservation of this habitat type but first the present state of its localities should be examined.

1. Code: 1330

2. Name: Atlantic salt meadows

3. Distribution, diversity, Polish resources: The habitat type is scattered along the Polish coastline of the Baltic Sea (CONT) in five areas: Backward Delta of Świna River, on the Dziwna River (Chrząszczewska Island), on the Rega River (Włodarka), in the vicinity of Kołobrzeg and on Puck Bay.

4. To what extent does the governmental proposal cover the national resources of the habitat type?

☺ The governmental proposal encompasses approximately 75% of the Polish resources of Atlantic salt meadows, disregarding localities on the Dziwna River and Zalew Kamieński (Kamieński Lagoon).

5. Suggestions to supplement the Natura 2000 governmental proposal:

Despite the fact that the habitat type is well represented, it is suggested that the site of Ujście Odry i Zalew Szczeciński (Odra Estuary and Szczecin Lagoon) should be enlarged to include the Dziwna River and Zalew Kamieński (Kamień Bay). As a result, the Atlantic salt meadows on the Dziwna River and on Wyspa Chrząszczewska (Chrząszczewska Island) would be comprised. This enlargement is essential for conservation of other habitat types, and the presence of salt meadows is an additional reason.

1. Code: 1340*

2. Name: Inland salt meadows*

3. Distribution, diversity, Polish resources: The habitat type occurs in the brine areas in the southern part of Wielkopolska, in Kujawy, in the lower course of the Nida River, in the Podkarpacie region. As it disappears rapidly, the present resources of the habitat in Poland are difficult to estimate.

4. To what extent does the governmental proposal cover the national resources of the habitat type?

?? The governmental proposal covers only two known localities: Ostoja Nadwarciańska (Site on Warta River) and Pradolina Bzury-Neru (Proglacial Stream Valley of Bzura and Ner) with no more than 25% of the national resources. Nevertheless, there is no data on present area covered by this habitat type, even in the localities included in the network (halophyte communities on the Bzura and Ner rivers have probably disappeared entirely). Therefore, it is difficult to assess percentage of the habitat area included in the network.

5. Suggestions to supplement the Natura 2000 governmental proposal: Further research is needed. It is certain that some additional sites should be proposed for conservation of this habitat type but first the state of its known localities should be examined.

1. Code: 2110

2. Name: embryonic shifting dunes (initial stadiums of white coastal dunes).

3. Distribution, diversity, Polish resources: They occur on permanent or temporary accumulative fragments of shoreline, more common on western and middle part of Polish coast or on spits (CONT). In exceptional cases this habitat can occur even below not active cliffs. Pobreże Słowińskie (Słowińskie Coastland; Słowiński National Park) is regarded as the classic area of this habitat type.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The governmental proposal includes practically all the sites with this habitat, suggested by Polish naturalists. It includes the pSCI of Pobreże Słowińskie (Słowińskie Coastland), where the habitat is best developed. The proposal encompasses probably most of the Polish resources of the habitat type, but it is very dynamic and difficult to quantification.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 2120

2. Name: Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”)

3. Distribution, diversity, Polish resources: The habitat type occurs on the Baltic Coast (CONT). Typical form is, however, relatively rare, as dunes on the major part of the seashore are heavily abraded by the sea (the processes of abrasion dominate over the processes of accumulation). Therefore, the belt of white dunes, taken by sea, is missing. The well-developed white dunes are on the Mierzeja Łebska (Łebska Spit) and in several other scattered localities.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The governmental proposal includes approximately 70% of Polish resources of the habitat type, including the areas where white dunes are best developed and preserved and are still building up (Pobreże Słowińskie / Słowińskie Coastland).

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 2130*

2. Name: Fixed coastal dunes with herbaceous vegetation (“grey dunes”)*

3. Distribution, diversity, Polish resources: These dunes occur as an inconsecutive belt on a long stretch of the Baltic Coast (CONT). A great part of resources have been destroyed by afforestation, alien shrubs plantation and spontaneous invasion, or by abrasion, as 2120.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The governmental proposal encompasses over 50 % of the Polish resources of this habitat type.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 2140*

2. Name: Decalcified fixed dunes with *Empetrum nigrum**

3. Distribution, diversity, Polish resources: The habitat type occurs in two basic subtypes: dry sand heaths with *Calluna vulgaris* and *Empetrum nigrum* [scarce; present only on the Mierzeja Łebska (Łebska Spit) and the Mierzeja Sarbska (Sarbska Spit) and in the vicinity of Białogóra] and dry sand heaths with *Vaccinium vitis-idaea* and *Empetrum nigrum* (slightly more common; scattered along the central and western Baltic Coast). The habitat type is scarce, occurring only in the better preserved and more natural stretches of the Coast (CONT).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The governmental proposal encompasses all sites with the habitat type suggested by Polish naturalists. In the network there are the Pobrzeże Słowińskie (Słowińskie Coastland) and Mierzeja Sarbska (Sarbska Spit), the sites where this habitat type is best developed. Smaller patches of the habitat type are in other sites (Białogóra) and may also occur elsewhere on the Baltic Coast but as the proposed network will comprise approximately 50% of Polish seashore, the majority of them will be included.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 2160

2. Name: Dunes with *Hippophae rhamnoides*

3. Distribution, diversity, Polish resources: Coastal dunes with thickets of *Hippophae rhamnoides* are scattered along the Polish Coast (CONT) – from Wolin Island to the estuary of the Vistula River. The largest patches of the habitat have developed on the sand-bar of Lake Bukowo, westward of Darłowo, and dispersed on coastal fragments with dunes from Świnoujście to Niechorze. The natural locality of *Hippophae rhamnoides* persists in the Mewia Łacha Nature Reserve on the Vistula River estuary.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses habitat patches near Puck Bay, while other localities of the habitat are disregarded. The proposal comprises less than 30% of the national resources of the habitat.

5. Suggestions to supplement the Natura 2000 governmental proposal: Jezioro Bukowo (Lake Bukowo) together with a sand-bar separating the lake from the sea should be included in the network.

1. Code: 2170

2. Name: Dunes with *Salix repens ssp. argentea* (*Salicion arenariae*)

3. Distribution, diversity, Polish resources: Coastal dunes with *Salix repens* are scattered along the Polish seashore of the Baltic Sea (CONT) – from Wolin Island to the estuary of the Vistula

River. The largest and relatively stable patches of the habitat have developed on the Mierzeja Łebska (Łebska Spit) and Mierzeja Sarbska (Sarbska Spit).

4. To what extent does the governmental proposal cover the national resources of the habitat type:

☺ The governmental proposal encompasses over 50 % of the national resources of this habitat type, including the areas where it is best developed and preserved: Pobrzeże Słowińskie (Słowińskie Coastland) and Mierzeja Sarbska (Sarbska Spit).

5. Suggestions to supplement the Natura 2000 governmental proposal: **None**

1. Code: 2180

2. Name: Wooded dunes of the Atlantic, Continental and Boreal region

3. Distribution, diversity, Polish resources: They occur on the Baltic Coast (CONT), and their conservation status varies largely. The habitat type is represented by several subtypes: (1) wooded dunes with birch and oak, (2) wooded dunes with beech and oak, (3) coastal riverine forest with bird-cherry and European ash and (4) pine forests with *Empetum nigrum* (*Empetro nigri*-Pinetum). The best preserved patches of this habitat type (regarded as a whole) occur in the sites included in the network such as: Mierzeja Wiślana (Vistula Spit), Słowiński National Park and Wybrzeże Trzebiatowskie (Trzebiatów Coastline), some dispersed sites on the Gdańsk Coastland as well as in the vicinity of Lake Bukowo. The birch-oak woods, beech-oak woods and coastal riverine forests are present along the entire seashore with concentrations in its best preserved fragments. Larger complexes of *Empetro nigri Pinetum* persist almost exclusively in the Pobrzeże Słowińskie (Słowińskie Coastland) and Wybrzeże Trzebiatowskie (Trzebiatów Coastline).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses areas with the best preserved patches of *Empetro-nigri Pinetum* (4): Pobrzeże Słowińskie (Słowińskie Coastland) and Wybrzeże Trzebiatowskie (Trzebiatów Coastline), but the Polish resources of other subtypes (1-3) are included in less than 30%.

5. Suggestions to supplement the Natura 2000 governmental proposal:

The site of Jezioro Bukowo (Lake Bukowo) should be included in the network and as a result, the other subtypes of wooded dunes will be better represented.

1. Code: 2190

2. Name: Humid dune slacks

3. Distribution, diversity, Polish resources: The well-developed and preserved patches of this habitat type are situated in three main localities on the Polish Coast of the Baltic Sea (CONT) – in Białogóra, on the Mierzeja Łebska (Łebska Spit) and Mierzeja Sarbska (Sarbska Spit).

4. To what extent does the governmental proposal cover the national resources of the habitat type: ☺ The governmental proposal encompasses all the three localities with the well developed and preserved habitat type.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 2330

2. Name: Inland dunes with open *Corynephorus* and *Agrostis* grasslands

3. Distribution, diversity, Polish resources: Small patches of the habitat type are common and spread over the whole area of lowland Poland (CONT). However, there are no large areas of well preserved inland dunes.

4. To what extent does the governmental proposal cover the national resources of the habitat type: ☺ The governmental proposal encompasses 70% of the resources of the habitat type suggested by Polish naturalists for inclusion into the Natura 2000 network, which means that it covers probably only 30–40% of the Polish resources. As the habitat type is common, this share seems to be sufficient. The network comprises, among others, a typical area where inland dunes are well developed and protected, i.e. Puszcza Kampinowska (Kampinowska Forest) near Warszawa (Kampinoski National Park).

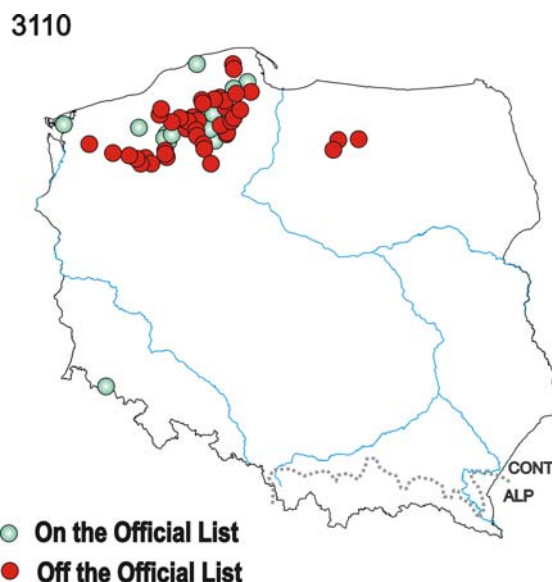
5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 3110

2. Name: Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)

3. Distribution, diversity, Polish resources: This habitat type is in Poland represented by approximately 170 lakes of different conservation status. They occur exclusively in the Continental biogeographical region (CONT); the majority of them are situated in the Pomeranian Lake District, and only three lakes are in the Warmia region and one in the Karkonosze Mountains.

4. To what extent does the governmental proposal cover the national resources of the habitat type?: ☹ The governmental proposal encompasses 41 lakes, (24% of the total number of lakes), but provides protection for neither the best preserved reservoirs nor the largest complexes of these lakes; in addition, the proposed lakes do not represent the entire biogeographical diversity of the habitat type. The only mountain lake of this type is included (Wielki Staw in the Karkonosze Mountains) but none of the lakes situated in



the Warmia-Mazury region is listed. The lakes of the Pomeranian Lake District have also been almost entirely disregarded.

5. Suggestions to supplement the Natura 2000 governmental proposal:

It is essential to:

- include the site Jeziora Czaplineckie (Czaplinek Lakes) in the Pomeranian Lake District, so that the Western Pomeranian lakes are represented in the network;
- enlarge the site of Dolina Drwęcy (Drwęca River Valley), included in the national list, to cover Lake Czarne, so that the lakes of Warmia-Mazury region are represented in the network; it would be advisable to include in the future also the two other lakes of the region as individual sites: Lake Długie and Lake Tyrsko (Gutkowskie);
- include the following sites: Jezioro Bobęcińskie (Lake Bobęcińskie), Miasteckie Jeziora Lobeliowe (Miasteckie Lobelia Lakes), Dolina Słupi (Słupia River Valley), Młosino (Lake Młosino), Jeziora Wdzydzkie (Wdzydze Lakes). As a result, significant concentrations of lobelia lakes would be included in the network.
- include the best preserved lakes: Lake Krasne in the Pomorskie voivodeship and Lake Śniadowo in the Zachodniopomorskie voivodeship as separate sites.

1. Code: 3130

2. Name: Oligotrophic and mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and of the *Isoeto-Nanojuncetea*

3. Distribution, diversity, Polish resources: Distribution and resources of this habitat type in Poland are poorly known. It occurs exclusively in the Continental biogeographical region. Small patches of the habitat type may be found on the banks of Lobelia lakes (*Littorelletalia uniflorae*) but are also present in other localities, as well as on banks of lakes with other water trophy (some silt mesotrophic lakes).

Silt communities belonging to *Littorelletea* and *Isoeto-Nanojuncetea* develop at present mainly in habitats of anthropogenic origin, for instance on the bottom of occasionally emptied ponds (Ostoja nad Baryczą/Site on Barycz River, Stawy w Borowej / Ponds in Borowa, Stawy Łęczok/Łęczok Ponds). Protection of traditionally managed ponds is the only way to conserve biological diversity connected with these habitat types (including some rare plant species: *Elatine*, *Crassula*, *Dichostylis*, *Lindernia*).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ?? It is difficult to assess as there is no sufficient data on the distribution of the habitat type in Poland. The governmental proposal covers only 20% of the area suggested by Polish naturalists for inclusion, which constitutes possibly no more than 10–15% of the national resources.

5. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network: Ostoja nad Baryczą (Site on Barycz River) and Stawy w Borowej (Ponds in Borowa; Lower Silesia) as well as Stawy Łęczok (Łęczok Ponds; Silesia). Creation of new sites will be needed but at present there is no sufficient data to indicate them.

1. Code: 3140

2. Name: Hard oligo-mesotrophic waters with benthic vegetation of *Chara spp.*

3. Distribution, diversity, Polish resources: The habitat type occurs in the lake districts of northern Poland to Wielkopolska in the south, and in the Polesie region. It is confined exclusively to the Continental biogeographical region (CONT). An exact number of water reservoirs as well as the Polish resources of the habitat type are not known. It is possible, however, to indicate areas with significant concentrations of these water bodies and localities where the habitat is best preserved. These are: Pojezierze Myśliborskie (Myślibórz Lake District), Pojezierze Ińskie (Ińsko Lake District), Puszcza Drawska (Drawska Forest), Pojezierze Sejneńskie (Sejny Lake District) and Pojezierze Gnieźnieńskie (Gniezno Lake District).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses 30% of the resources suggested by Polish naturalists for inclusion into the Natura 2000 network, which constitutes not more than 15–20% of the national resources of the habitat type. Of the areas with the best developed water reservoirs of this type, only Pojezierze Myśliborskie (Myślibórz Lake District) is included in the governmental proposal.

5. Suggestions to supplement the Natura 2000 governmental proposal:

Inclusion of the areas with the largest concentrations of these lakes and with the best preserved lakes is suggested. The following sites should be added (in order of significance): Uroczyska Puszczy Drawskiej (Drawska Forest Ranges), Jeziora Czaplineckie (Czaplinek Lakes), Jezioro Lubie (Lake Lubie), Pojezierze Ińskie (Ińsko Lake District), Pojezierze Sejneńskie (Sejny Lake District), Puszcza Barlinecka (Barlinek Forest) and Pojezierze Gnieźnieńskie (Gniezno Lake District).

1. Code: 3150

2. Name: Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* – type vegetation.

3. Distribution, diversity, Polish resources: It has two distinct subtypes: (1) eutrophic lakes and (2) old river beds; both occurring almost exclusively in the Continental biogeographical region (CONT) and occasionally in the Alpine biogeographical region (ALP). Eutrophic lakes are the most common type of lakes in Poland and they are spread all over the country. The most numerous groups of lakes are situated in the lake districts of northern Poland. Old river beds are confined to the valleys of big and medium size rivers.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ Eutrophic lakes subtype (1) are present in numerous sites included in the proposed network. It has been estimated that the governmental proposal encompasses approximately 20% of the national resources of this habitat subtype, which seems to be a sufficient representation in view of their large number and wide geographic range. Old river beds (subtype 2) are, however, almost entirely disregarded in the national list, which hardly includes any fragments of big and medium-sized river valleys.

5. Suggestions to supplement the Natura 2000 governmental proposal:

It is suggested to include the following areas comprising fragments of big and medium-sized river valleys (listed in geographical order): Dolna Odra (Lower Odra River), Ujście Warty (Mouth of Warta River), Krośnieńska Dolina Odry (Odra River Valley near Krosno), Kargowskie Zakola Odry (Meanders of Odra River near Kargowa), Nowosolska Dolina Odry (Odra River Valley near Nowa Sól), Łęgi Odrzańskie (Odra Riverine Forests), Grądy w Dolinie Odry (Oak-hornbeam Forests in Odra River Valley), Opolska Dolina Odry (Odra River Valley near Opole), Graniczny Meander Odry (Boundary Meander of Odra River), Lasy Żerkowsko-Czeszewskie (Żerkowo-Czeszewo Forests), Ostoja nad Baryczą (Site on Barycz River), Dolina Pilicy (Pilica River Valley), Dolna Wisła (Lower Vistula), Solecka Dolina Wisły (Vistula River Valley near Solec), Nieszawska Dolina Wisły (Vistula River Valley near Nieszawa), Włocławska Dolina Wisły (Vistula River Valley near Włocławek), Wisła Środkowa (Middle Vistula River), Przełom Wisły w Małopolsce (Vistula River Gorge in Małopolska), Dybowska Dolina Wisły (Vistula River Valley near Dybów), Poleska Dolina Bugu (Bug River Valley in Polesie), Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley), Dolny Wieprz (Lower Wieprz River).

1. Code: 3160

2. Name: natural dystrophic lakes and ponds

3. Distribution, diversity, Polish resources: The habitat type is rather common and widely spread in the regions of Pomerania, Masurian Lakes, Suwałki Lake District, and in the Sudety Mountains, and much less common in Wielkopolska (CONT). It is particularly well preserved in large forest complexes.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses only 25% of the area suggested for inclusion by Polish naturalists, which constitutes no more than 15–20% of the area covered by this habitat type in Poland. The national list covers dystrophic lakes at random; they are listed in sites designated for conservation of other habitat types. As a result, the classic areas of dystrophic lakes occurrence and areas where they are best developed are not included in the network.

5. Suggestions to supplement the Natura 2000 governmental proposal:

Typical areas of dystrophic lakes and best developed examples of this habitat type should be included in the network. These are:

- Ostoja Augustowska / Site of Augustowska Forest,
- Uroczyska Puszczy Drawskiej / Drawska Forest Ranges,
- Jeziora Czaplneckie / Czaplneck Lakes (including the area of outwash plain in eastern part),
- Jeziora Wdzydzkie / Wdzydze Lakes,
- Ostoja Piska / Site of Piska Forest.

1. Code: 3220

2. Name: Alpine rivers and the herbaceous vegetation along their banks

3. Distribution, diversity, Polish resources: The habitat type has been relatively common in the whole area of the Carpathians (ALP); now, it is becoming rarer as the result of river regulation.

4. To what extent does the governmental proposal cover the national resources of the habitat type?

?? Distribution of this habitat type as well as the location of the best developed fragments has not been thoroughly studied, therefore it is difficult to assess its representation in the proposal. Nevertheless, the governmental proposal includes only 0.2% of the area of this habitat covered by the proposal of Polish naturalists. Only one small site (Czarna Orawa), comprising this habitat is included. As the governmental proposal does not cover most of the large mountain areas where streams with gravel-banks occur, the representation of this habitat type cannot be sufficient.

5. Suggestions to supplement the Natura 2000 governmental proposal:

The key mountain areas, important also for other habitat types and species, should be included in the network:

- Beskid Żywiecki / Beskid Żywiecki Mountains;
 - Ostoja Gorczańska / Site of Gorce Mountains;
 - Ostoja Popradzka / Site on Poprad River;
 - Góry Słonne / Słonne Mountains.
-

1. Code: 3230

2. Name: Alpine rivers and their ligneous vegetation with *Myricaria germanica*

3. Distribution, diversity, Polish resources: The habitat type is scattered in the Carpathians (ALP). The known typical localities of this habitat are situated along larger streams or rivers at higher altitudes in the Magura National Park (Wisłoka), the Bieszczady National Park and landscape parks in the Bieszczady Mts. (Stebnik in the Niskie Bieszczady and Moczarny in the BNP), the Tatra National Park (Chochołowski Potok and Poroniec where the habitat is partly developed), the Pieniny National Park (Głęboki Potok, Pieniński Potok), and in the Gorce National Park.

4. To what extent does the governmental proposal cover the national resources of the habitat type?

?? Distribution of the habitat type and location of its best-developed patches are poorly known, therefore it is difficult to assess its real representation in the network.

5. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included:

- Ostoja Gorczańska / Site of Gorce Mountains (with the important Kamienica River Valley)
- Ostoja Popradzka / Site on Poprad River

1. Code: 3240

2. Name: Alpine rivers and their ligneous vegetation with *Salix elaeagnos*

3. Distribution, diversity, Polish resources: The habitat type is scattered in the Carpathians (ALP). It occurs in the Magura National Park (Wisłoka), the Bieszczady Mts. (Stebnik and Moczarny), the Pieniny National Park, the Tatra National Park and in the Gorce National Park.

4. To what extent does the governmental proposal cover the national resources of the habitat type?

?? Distribution of the habitat type and location of its best-developed fragments are poorly known, so its real representation in the proposal is difficult to assess.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 3260

2. Name: Water courses with plane to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation

3. Distribution, diversity, Polish resources: Scattered in the whole Poland, except for the Carpathians (exclusively in CONT) with the centre of distribution in western Poland and late-glacial landscapes of northern Poland. It is differentiated into ecological and geographical forms. A typical form occurs in the rivers of north-western and western Poland. A continental form is present in Suwałki Lake District, Roztocze, Kraków-Częstochowa Jura Upland but also in water courses intensively supplied with underground water in the whole country. An upland form of water courses on crystalline rocks occurs in the Sudety Mts. and their foothills, as well as in the Świętokrzyskie Mts.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ⊗ The governmental proposal encompasses 28% of the area suggested for inclusion by Polish naturalists, which constitutes approximately 10–15% of the Polish resources of the habitat type. The selection of pSCIs with this habitat type is random; they do not comprise well-developed and well-preserved patches (with the exception of Ostoja Goleniowska / Site of Goleniów); for none of these sites its value for conservation of the species concerned was assessed as excellent (A). The governmental proposal totally disregards the ecological and geographical differentiation of the habitat type.

5. Suggestions to supplement the Natura 2000 governmental proposal:

At least the sites encompassing river courses with the best developed patches of this habitat type should be included in the network. With regard to the typical form the following sites should be added:

- Uroczyska Puszczy Drawskiej / Drawska Forest Ranges
- Jezioro Lubie i Dolina Drawy / Lake Lubie and Drawa River Valley
- Dolina Rurzyca / Rurzyca River Valley
- Dolina Wieprzy i Studnicy / Wieprza and Studnica River Valley
- Dolina Ilanki / Ilanka River Valley
- Dolina Pliszki / Pliszka River Valley

Knowledge of the distribution of an upland continental form is insufficient to indicate separate sites for its conservation. Nevertheless, the following sites should be included in the network in order to improve representation of the continental form:

- Pojezierze Sejneńskie / Sejny Lake District
- Ostoja Augustowska / Site of Augustowska Forest
- Ostoja Piska / Site of Piska Forest
- Ostoja Lidzbarska / Lidzbark Site
- Dolina Rzeki Wel k. Kopaniarzy / Wel River Valley near Kopaniarze

To improve the representation of the upland form we propose to add:

- Góry i Pogórze Kaczawskie / Kaczawa Hills and Foothills
- Góry Sowie i Bardzkie / Sowie & Bardzkie Mts.
- Przełom Nysy k. Morzyszowa / Nysa Gorge near Morzyszów
- Dolina Bobru / Bóbr Valley
- Góry Bialskie i Grupa Śnieżnika / Bialskie Mountains and Śnieżnik Massif
- Dolina Białej Łądeckiej / Biała Łądecka Valley (important for biodiversity connected with this habitat; one of two Polish localities of *Ranunculus penicillatus*).

1. Code: 3270

2. Name: Rivers with muddy banks with *Chenopodium rubri* p.p. and *Bidention* p.p. vegetation

3. Distribution, diversity, Polish resources: The habitat type is rather common and scattered along big river banks of lowland Poland (CONT).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ⊗ The governmental proposal encompasses just 18% of the habitat area suggested by Polish naturalists for inclusion, which constitutes not more than 5–10% of the Polish resources of the habitat type. The proposed sites do not comprise the best-developed or preserved habitat fragments. The national list does not include almost any sites situated in big river valleys where this habitat type occurs.

5. Suggestions to supplement the Natura 2000 governmental proposal:

The most important fragments of big river valleys, indicated in the experts' proposal, should be included in the network: Dolna Odra (Lower Odra), Ujście Warty (Mouth of the Warta River), Krośnieńska Dolina Odry (Odra Valley near Krosno), Kargowskie Zakola Odry (Odra River Meanders near Kargowo), Nowosolska Dolina Odry (Odra River Valley near Nowa Sól), Łęgi Odrzańskie (Odra Riverine Forest), Grądy w Dolinie Odry (Oak-hornbeam Forests in Odra River Valley), Opolska Dolina Odry (Odra River Valley near Opole), Graniczny Meander Odry (Borderland Meander of the Odra River Valley), Lasy Żerkowsko-Czeszewskie (Żerków-Czeszewo Forests), Ostoja Nad Baryczą (Site on Barycz River), Dolna Wisła (Lower Vistula River), Solecka Dolina Wisły (Vistula River Valley near Solec), Włocławska Dolina Wisły (Vistula River Valley near Włocławek), Dybowska Dolina Wisły (Vistula River Valley near Dybów), Nieszawska Dolina Wisły (Vistula River Valley near Nieszawa), Wisła Środkowa (Middle Vistula River), Przełom Wisły w Małopolsce (Vistula River Gorge in Małopolska), Dolina Pilicy (Pilica River Valley), Poleska Dolina Bugu (Bug River Valley in Polesie),

Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley), Dolny Wieprz (Lower Wieprz River).

1. Code: 4010

2. Name: Northern Atlantic wet heaths with *Erica tetralix*

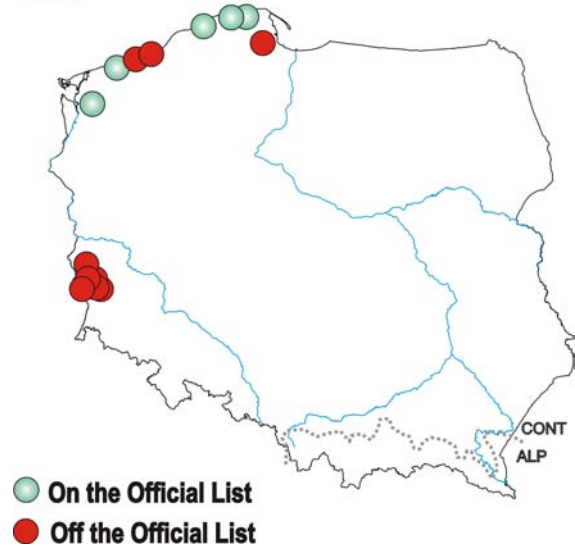
3. Distribution, diversity, Polish resources: It is a very rare habitat type, reported so far from the eastern part of Pobrzeże Kaszubskie (Kaszubskie Coastland), Pobrzeże Słowińskie (Słowińskie Coastland), Bagna Izbickie (Izbica Bogs), from the region of Kołobrzeg, Trzebiatów, Puszcza Goleniowska (Goleniowska Forest) and Bory Dolnośląskie (Lower Silesia Forests) (all CONT).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses 50% of the Polish resources of the habitat type, including most of its typical localities in Pomerania. The localities in Bory Dolnośląskie (Lower Silesia Forests), important for protection of the full ecological and geographical diversity of this habitat type, are not covered by the proposal.

5. Suggestions to supplement the Natura 2000 governmental proposal:

The site of Puszcza Zgorzelecko-Osiecznicka (Zgorzelec-Osiecznica Forest), encompassing Lower Silesian localities, should be included in the network.

4010



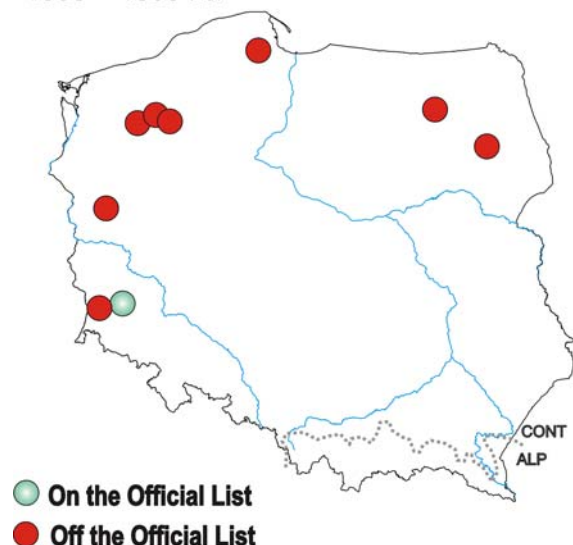
1. Code: 4030

2. Name: European dry heaths

3. Distribution, diversity, Polish resources: The habitat type is common and dispersed in coniferous forest habitats in the whole of Poland; there are, however, only small patches of the habitat in logged areas and along forest roadsides etc. In Poland, vast heathlands where all ecological features of the habitat and related to it high biological diversity can develop occur only in few localities, usually in active or former military firing grounds. The habitat type occurs only in the Continental biogeographical region.

4. To what extent does the governmental

4030 > 1000 ha



proposal cover the national resources of the habitat type? ☹ Small patches of the habitat are scattered within coniferous forests in many pSCIs and their representation is probably sufficient. Nevertheless, the governmental proposal covers only one vast heathland, important for conservation of the habitat type: Wrzosowisko Przemkowskie (Przemków Heathland), comprising mere 5–7% of the Polish resources of European dry heath.

5. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Wrzosowiska Bornego Sulinowa i Okonka / Heathland of Borne Sulinowo and Okonek,
- Puszcza Zgorzelecko-Osiecznicka / Zgorzelec-Osiecznica Forest (encompassing heathlands of the firing ground in Żagań),
- Jezioro Lubie i Dolina Drawy / Lake Lubie and Drawa River Valley (encompassing part of heathlands of the Drawa Firing Ground),
- Dolna Odra / Lower Odra (encompassing the Wrzosy Cedyńskie nature reserve).

1. Code: 4060

2. Name: Alpine and boreal heaths (*Empetro-Vaccinietum*)

3. Distribution, diversity, Polish resources: The habitat type occurs in Poland in four areas: the Tatra Mts., Bieszczady Mts., Mt. Babia Góra (ALP) and the Karkonosze Mts. (CONT)

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The governmental proposal encompasses all the suggested localities.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 4070

2. Name: Bushes with *Pinus mugo* (*Pinetum mugo*)

3. Distribution, diversity, Polish resources: The habitat type is present in the Tatra Mts., Mt. Babia Góra (locality on Mt. Polica is probably artificial), Mt. Pilsko (ALP) and in the Karkonosze Mts. (CONT).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses most of the national resources of the habitat type, only one small and isolated natural locality on Mt. Pilsko is not covered. However, as the habitat type occurs only in 4 localities in Poland, the national list of pSCIs without Mt. Pilsko does not represent the full diversity of the habitat type.

4070



5. Suggestions to supplement the Natura 2000 governmental proposal: Inclusion of the Beskid Żywiecki / Site of Beskid Żywiecki Mts. with Mt. Pilsko is suggested.

1. Code: 4080

2. Name: Sub-Arctic *Salix spp.* Scrub

3. Distribution, diversity, Polish resources: The habitat type occurs in Poland in three areas: the Bieszczady Mts., Mt. Babia Góra (ALP) and the Karkonosze Mts. (CONT)

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The government proposal encompasses all the suggested sites.

5. Suggestions to supplement the Natura 2000 governmental proposal:
None

1. Code: 6110

2. Name: Rupicolous calcareous or basophilic grasslands of the *Alyso-Sedion albi*

3. Distribution, diversity, Polish resources: The habitat type occurs exclusively in the Sudety Mts. and their foothills (CONT): the Kaczawa Hills and Foothills, the Kamienna Góra Basin, Wałbrzych-Bolków Foothills, Góry Sowie Mts. and Góry Bardzkie Mts. and the foothills of the Karkonosze Mts.. The potential geographical range of the habitat covers the whole Sudety Mts., Sudety Foothills and Foreland and its distribution requires further studies.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal does not cover any of the localities known from the Sudety Mts. Even though there is no sufficient data on the distribution of this habitat type in Poland, it is almost certain that it has been entirely ignored in the proposal.

5. Suggestions to supplement the Natura 2000 governmental proposal: It is indispensable to include the following sites: Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills), Pasma Krowiarki (Krowiarki Range), Dobromierz, Góry Sowie i Bardzkie (Sowie & Bardzkie Mts.).

6110



● On the Official List
● Off the Official List

1. Code: 6120*

2. Name: Xeric sand calcareous grasslands (*Koelerion glaucae*)*

3. Distribution, diversity, Polish resources: The habitat type is scattered in lowland Poland (CONT) and rather common.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The governmental proposal encompasses 58% of the area proposed by Polish experts, which constitutes approximately 30–40% of the habitat resources in Poland. This representation of the rather common and not much threatened habitat type seems to be satisfactory.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 6150

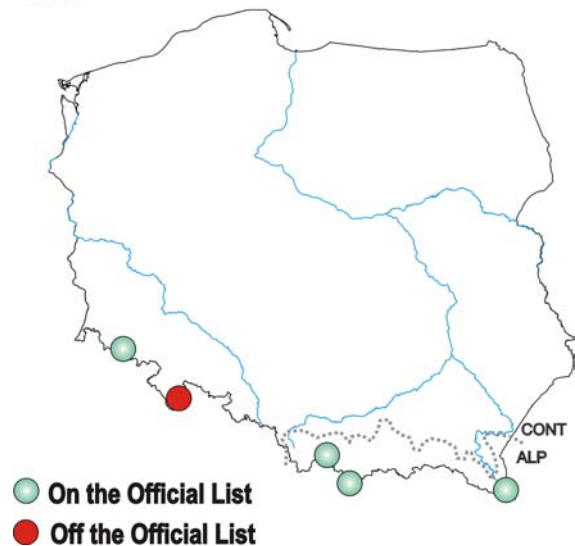
2. Name: Siliceous alpine and boreal grasslands

3. Distribution, diversity, Polish resources: The most important and largest patches of the habitat type occur in the Tatra Mountains, the Bieszczady Mountains, Mt. Babia Góra (ALP) and in the Karkonosze Mts. (CONT). Alpine grasslands are also present on Mt. Śnieżnik Kłodzki (CONT) where they occupy a small area but this locality is important in terms of phytogeography (isolated locality) and biological diversity (unique species belonging to the Hieracium order)

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses its main regions of occurrence: the Tatra Mountains, the Bieszczady Mountains, Mt. Babia Góra and the Karkonosze Mountains. The small and isolated locality on Mt. Śnieżnik, important for conservation of full geographical and ecological diversity of the habitat type has not been included.

5. Suggestions to supplement the Natura 2000 governmental proposal: The site of Góry Bialskie i Grupa Śnieżnika (Bialskie Mts. and Śnieżnik Massif) should be included in the network.

6150



1. Code: 6170

2. Name: Alpine and subalpine calcareous grasslands

3. Distribution, diversity, Polish resources: The habitat type occurs exclusively in the Tatra Mountains, the Pieniny Mountains and on Mt. Babia Góra.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ All three areas of the habitat type occurrence are included into the governmental proposal (Tatra Mountains, Pieniny Mountains and Mt. Babia Góra)

5. Suggestions to supplement the Natura 2000 governmental proposal: None

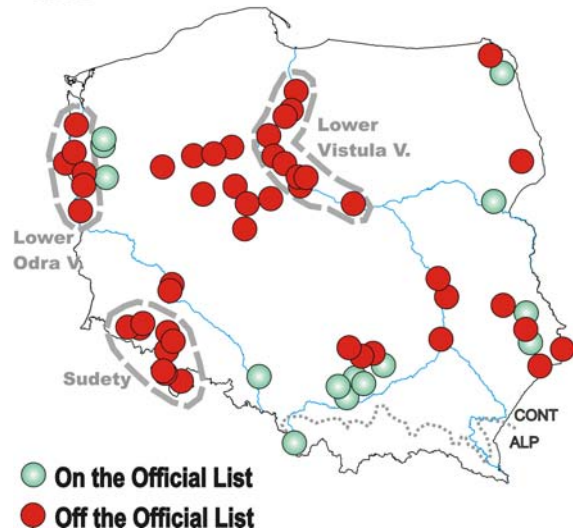
1. Code: 6210*

2. Name: Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* - important orchid sites)

3. Distribution, diversity, Polish resources: The habitat type is dispersed over the whole of lowland Poland and in the Sudety Mts. (CONT) but there are several exceptionally valuable sites with concentrations of these grasslands. In each site grasslands present a slightly different form with unique species composition. The most important sites are:

- Lower Odra and Warta River Valley (river valley slopes)
- Lower Vistula and Vistula River Valley up to Płock (river valley slopes)
- Nida Basin (limestone and gypsum hills and ridges)
- Lublin region with the valleys of the Bug, Wieprz and Vistula rivers (mainly river valley slopes)
- Kraków-Częstochowa Jura Upland and Opole region (limestone hills and ridges)
- Sudety Mts. and their foothills (ridges of different limestone rocks; specific types of grasslands with orchids are present here)

6210



4. To what extent does the governmental proposal cover the national resources of the habitat type? ⊕ The governmental proposal covers approximately 50% of the area suggested by Polish naturalists, including, however, randomly chosen sites, while the most typical localities and best-developed habitat patches have been ignored. The proposal does not reflect the full diversity of the habitat either. All localities from the Odra and Vistula rivers, as well as the localities from the Sudety Mts. (including all priority varieties of the habitat with orchids), are left out of the network.

5. Suggestions to supplement the Natura 2000 governmental proposal: Inclusion of the following sites is indispensable: Dolina Dolnej Odry (Lower Odra Valley with the Bielinek nature reserve), Ujście Warty (Mouth of the Warta River), Dolina Dolnej Wisły (Lower Vistula Valley), Włocławska Dolina Wisły (Vistula River Valley near Włocławek), Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley), Ostoja Olsztyńsko-Mirowska (Olsztyn-Mirów Site) and Ostoja Środkowojurajska (Central Jura Upland Site), Pasma Krowiarki (Krowiarki Range), Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills), Grodczyn and Homole, Masyw Ślęży z Kamiennym Grzbieciem (Ślęza Massif with Kamienny Range).

1. Code: 6230*

2. Name: Species-rich *Nardus* grasslands, on siliceous substrates in mountain areas (and submountain areas in Continental Europe) (* - floristically rich)

3. Distribution, diversity, Polish resources: The habitat type is scattered all over Poland (CONT and ALP) and is relatively common; however, the national resources of the habitat type are not known and difficult to assess.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ It is difficult to assess, as there is no data concerning Polish resources of the habitat type. The governmental proposal encompasses 28% of the area suggested by Polish naturalists, which may constitute some 5–20% of the national resources. Perhaps this proportion is sufficient for conservation of this rather common habitat type. Perhaps also full diversity is represented.

5. Suggestions to supplement the Natura 2000 governmental proposal: Further inventory is required. At present there is no foundation for suggesting any additions to the proposal.

1. Code: 6410

2. Name: Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)

3. Distribution, diversity, Polish resources: The habitat type is scattered in the whole of lowland Poland and in the foothills of the Sudety Mts. (CONT). The national resources of the habitat type are not known and difficult to assess, especially in view of rapid changes in the status of this plant community (it is in decline).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses 38% of the area suggested by Polish naturalists. This representation seems to be sufficient, though knowledge about the quality (representativity) and importance of the included patches of the habitat is unsatisfactory. However, typical areas of the occurrence of Molinia meadows, where they are best preserved and developed, e.g. Piaśnickie Łąki (Piaśnica Meadows) in Pomerania have been covered by the proposal. On the other hand, the national list does not cover the whole geographical diversity of the habitat type, e.g. Molinia meadows of the Sudety variety (submountain) have been entirely neglected.

5. Suggestions to supplement the Natura 2000 governmental proposal: The sites of Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills) and Masyw Ślęży (Ślęża Massif), where the Sudety foothill type of the habitat is present, should be included in the network.

1. Code: 6430

2. Name: Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels

3. Distribution, diversity, Polish resources: The habitat type is scattered over the whole area of Poland but the national resources are not known and difficult to assess. It is represented by two distinct subtypes: tall herb communities of the mountain to alpine levels (CONT and ALP) and tall herb communities of plains (CONT).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ Tall herb communities of the montane to alpine levels are relatively well represented in the governmental proposal, which cover the main areas of their occurrence in Poland. But phytogeographically important site Masyw Śnieżnika have not been included. On the contrary, the most typical and well-developed tall herb communities of plains have not been included, as the proposal comprises hardly any fragments of big river valleys.

5. Suggestions to supplement the Natura 2000 governmental proposal: For mountain habitats site Góry Bialskie i Grupa Śnieżnika (Bialskie Mts and Śnieżnik Massif) should be added for improving representativity. For plain habitats the following sites encompassing fragments of great river valleys should be included: Dolna Odra (Lower Odra), Ujście Warty (Mouth of the Warta River), Krośnieńska Dolina Odry (Odra Valley near Krosno), Kargowskie Zakola Odry (Odra River Meanders near Kargowo), Nowosolska Dolina Odry (Odra River Valley near Nowa Sól), Łęgi Odrzańskie (Odra Riverine Forest), Grądy w Dolinie Odry (Oak-hornbeam Forests in Odra River Valley), Opolska Dolina Odry (Odra River Valley near Opole), Graniczny Meander Odry (Borderland Meander of the Odra River Valley), Lasy Żerkowsko-Czeszewskie (Żerków-Czeszewo Forests), Ostoja Nad Baryczą (Site on the Barycz River), Dolna Wisła (Lower Vistula River), Solecka Dolina Wisły (Vistula River Valley near Solec), Włocławska Dolina Wisły (Vistula River Valley near Włocławek), Dybowska Dolina Wisły (Vistula River Valley near Dybów), Nieszawska Dolina Wisły (Vistula River Valley near Nieszawa), Wisła Środkowa (Middle Vistula River), Przełom Wisły w Małopolsce (Vistula River Gorge in Małopolska), Dolina Pilicy (Pilica River Valley), Poleska Dolina Bugu (Bug River Valley in Polesie), Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley), Dolny Wieprz (Lower Wieprz River).

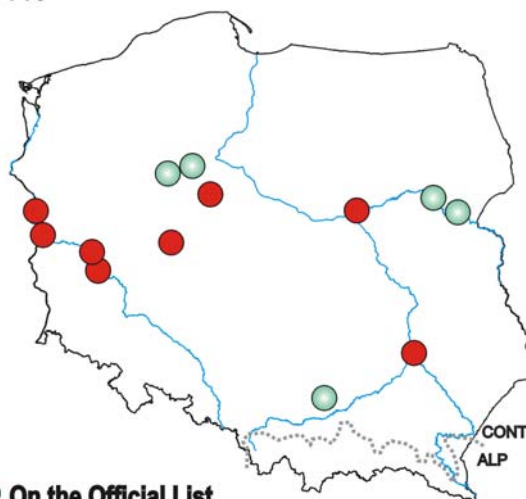
1. Code: 6440

2. Name: Alluvial meadows of river valleys of the *Cnidion dubii*

3. Distribution, diversity, Polish resources: The habitat type occurs along the Odra, Warta, Bug and Vistula river valleys. It is also present in the Nida River valley, in the mouth of the San and Narew rivers, as well as in the area of Lake Gopło (CONT).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ Seemingly, it is well represented, as 68% of the area proposed by Polish naturalists are included. However, as the result of insufficient knowledge on the distribution of this habitat type, especially in western Poland, it is not indicated in the SDFs. In consequence of this, the alluvial meadows of this type in eastern Poland are well represented in the proposal, while those of western Poland are not. The national list includes no more than 20–30% of the Polish resources of the habitat. Some typical areas with the numerous occurrence of

6440



the habitat type have been neglected: Krośnieńska Dolina Odry (Odra River Valley near Krosno), Kargowskie Zakola Odry (Odra River Meanders near Kargowo), Nowosolska Dolina Odry (Odra River Valley near Nowa Sól), Łęgi Odrzańskie (Odra Riverine Forests), as well as the ecologically unique meadows surrounding Lake Gopło (connected with a lake).

5. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network: Krośnieńska Dolina Odry (Odra Valley near Krosno), Kargowskie Zakola Odry (Odra River Meanders near Kargowo), Nowosolska Dolina Odry (Odra River Valley near Nowa Sól), Łęgi Odrzańskie (Odra Riverine Forest), Jezioro Gopło (Lake Gopło).

1. Code: 6510

2. Name: Lowland and mountain hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) extensively used (*Arrhenatherion elatioris*)

3. Distribution, diversity, Polish resources: The habitat type is rather common and scattered over the whole area of Poland (CONT and ALP); however, the national resources of these meadows are not known and difficult to assess. A specific subtype is formed by endemic Pieniny meadows (*Anthyllidi-Trifolietum montani*) occurring exclusively in the Pieniny Mountains (ALP) and mountain meadows (*Gladiolo-Agrostietum*) occurring in the Carpathian ranges (ALP), mainly on grazed glades in the Tatra and Pieniny Mountains but also at lower altitudes in the Beskid Niski Mts..

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses 37% of the area proposed by Polish naturalists, which constitutes approximately 10–20% of the national resources of the habitat type. In the Continental biogeographical region, the representation of the habitat seems to be sufficient, covering its entire diversity. In the Alpine biogeographical region, the total resources of the endemic Pieniny meadows are encompassed, but mountain meadows, *Gladiolo-Agrostietum*, are insufficiently represented (the national list includes exclusively the meadows of the Tatra Mts., neglecting other Carpathian sites, such as Ostoja Gorczańska (Site of Gorce Mts.), Ostoja Jaśliska (Site of Jaśliska), Ostoja Popradzka (Site of Poprad)).

5. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network: Ostoja Gorczańska (Site of Gorce), Ostoja Jaśliska (Site of Jaśliska), Ostoja Popradzka (Site of Poprad).

1. Code: 6520

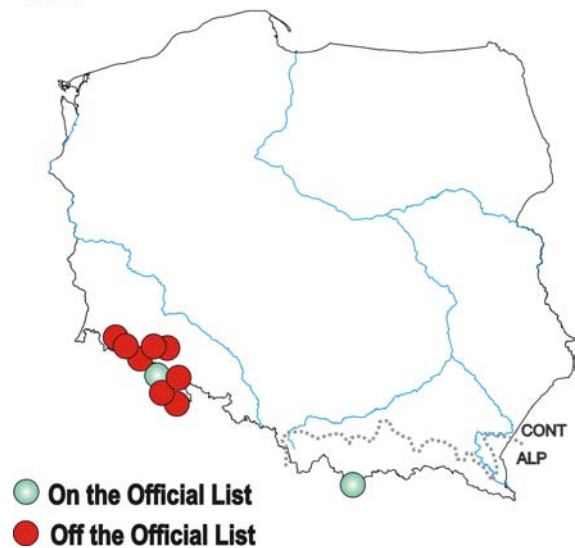
2. Name: Mountain hay meadows (*Polygono-Trisetion*) extensively used

3. Distribution, diversity, Polish resources: This habitat type includes two different subtypes: in the Sudety Mts. (CONT, common) and in the Tatra Mts. (ALP, scarce). It does not occur in other mountain ranges (mistakenly listed in the SDFs of several mountain pSCIs).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ⊗ The Tatra subtype (ALP) is entirely covered, but in the main area of mountain hay meadows in the Sudety Mts. (CONT) almost all sites comprising this habitat type have been disregarded.

5. Suggestions to supplement the Natura 2000 governmental proposal: The site of Karkonosze should be enlarged, so as to include Grzbiet Lasocki (Lasocki Ridge) with meadows near the villages of Myszkowice and Jarkowice. The sites of Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills), Góry Kamienne (Kamienne Mts.) and Góry Bialskie i Masyw Śnieżnika (Bialskie Mountains and Śnieżnik Massif) should be included in the network.

6520

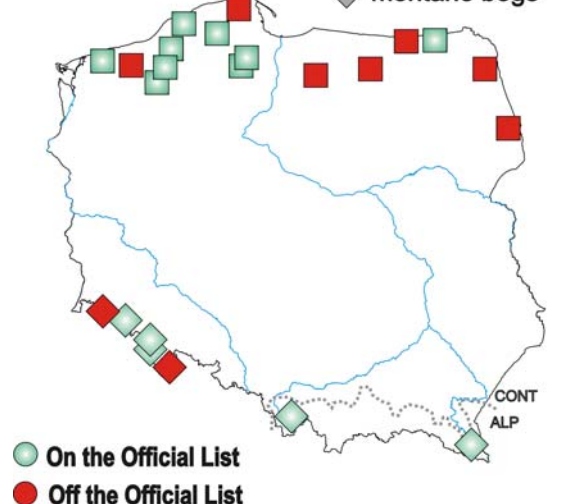


1. Code: 7110*

2. Name: Active raised bogs*

3. Distribution, diversity, Polish resources: The habitat type occurs in Poland (CONT) in the form of small lowland raised bogs filling land depressions or small peatbogs of continental character; those forms are still relatively common in the late-glacial landscape. Large, raised bogs of Atlantic type are of unique character. In Poland there were approximately 70 localities of this habitat subtype but only a few have survived to this day. The mountain subtypes are interesting: peatbogs in the Karkonosze Mts. and in the Izerskie Mts, near Zieleniec in the Bystrzyckie Mts, in the Stołowe Mts. (CONT) and in the Orawa-Nowy Targ Peatlands (ALP), as well as small peatlands in the Bieszczady Mts. (ALP).

7110 - selected subtypes: ■ baltic raised bogs
◆ montane bogs



4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal covers 37% of the area proposed by Polish naturalists, which constitutes 20% of the national resources. This representation is probably sufficient from the point of view of conservation of relatively common small peatbogs of continental character. As to large raised bogs of Atlantic character, all their localities in Pomerania are included in the network but all sites in the north-eastern part of Poland are ignored (Podlasie and Warmia-Mazury regions). The mountain peatbogs in the Alpine biogeographical region are well represented (almost 100%) but in the Continental biogeographical region, the unique peatbogs from the Góry Izerskie Mts. are left out. Small, but important peatbog near the Śnieżnik Mt. is also left out.

5. Suggestions to supplement the Natura 2000 governmental proposal: In order to improve the representation of cupola raised bogs of the Atlantic type, the sites of Gązwa and Budwity (nature reserves) situated in the Warmia-Mazury region as well as Bagno Krasna Gruda in the Sejny Lake District should be included in the network. The list of mountain peatbogs (CONT) should be completed by enlargement of the site of Karkonosze Mts., so as to include the Góry Izerskie Mts. and Góry Bialskie and Grupa Śnieżnika / Bialskie Mountains and Śnieżnik Massif.

1. Code: 7120

2. Name: Degraded raised bogs still capable of natural regeneration

3. Distribution, diversity, Polish resources: Distribution of the habitat type is almost the same as that of the active raised bogs (7110), and the percentage of degraded habitat type is similar all over Poland.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal does not include several localities of the habitat type which despite their degradation still present the most valuable and rarest types of raised bogs and peat deposits.

5. Suggestions to supplement the Natura 2000 governmental proposal: Three degraded but still capable of natural regeneration raised bogs of Atlantic type should be included in the network:

- Bielawskie Błoto / Bielawa Bog (large raised bog where the process of renaturalization should be initiated);
 - Łebskie Bagna / Leba Bogs
 - Warnie Bagno / Warnie Bog with well regenerating habitat.
-

1. Code: 7140

2. Name: Transition mires and quaking bogs

3. Distribution, diversity, Polish resources: In lowland Poland (CONT) the habitat type is rather common and scattered all over the area. The unique mountain subtype occurs in the Sudety Mts. (CONT: Karkonosze Mts., Izerskie Mts., Stołowe Mts., Bystrzyckie Mts., Masyw

Śnieżnika /Śnieżnik Massif, Orlickie Mts.). Transitional mires occur also in the Tatra Mts., in the Podhale region (Torfowiska Orawsko-Nowotarskie / Orawa-Nowy Targ Peatlands) and in the Bieszczady Mts. (ALP).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses almost 50% of the area proposed by Polish naturalists in lowland Poland (approximately 20–30% of the national resources). The representation of the habitat type in lowlands seems to be sufficient. Unique peatlands of the Alpine biogeographical region (Tatra Mts., Orawa-Nowy Targ Peatlands and Bieszczady Mts.) are also properly covered. However, localities of the mountain subtype of the habitat from the Sudety Mts. (CONT), except for the Karkonosze Mts., have not been included in the proposal. Though transitional mires occur in the Sudety Mts. in small, scattered patches, their protection is of great importance for conservation of the full diversity of this habitat type.

5. Suggestions to supplement the Natura 2000 governmental proposal: The site of Karkonosze should be enlarged, so as to include the main range of Izerskie Mts. with the Izera River Valley.

1. Code: 7150

2. Name: Depressions on peat substrates of the *Rhynchosporion*

3. Distribution, diversity, Polish resources: A typical form of the habitat type, i.e. subatlantic large-area depressions communities, are in Poland truly scarce and occurs exclusively in two areas (CONT): in Białogóra and in several dispersed localities in Lower Silesian Forests (Puszcza Zgorzelecko-Osiecznicka / Zgorzelec-Osiecznica Forest). It is probable that the habitat type is present also in Bory Tucholskie (Tucholskie Forests), in the Bytów Lake District and in some other sandr areas in Pomerania and in the Sandomierz Basin. However, the occurrence of “peat hollows” with *Rhynchospora alba*, *Scheuchzeria palustris* and *Sphagnum cuspidatum*, as an element of transitional mire plant communities, or an element of raised bogs regeneration after peat-cutting, is rather common.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ Numerous sites with other forms of this habitat was included, but oOf the localities with a typical form of the habitat, the governmental proposal encompasses only Białogóra, while the localities from Lower Silesian Forests are not covered.

5. Suggestions to supplement the Natura 2000 governmental proposal: The site of Puszcza Zgorzelecko-Osiecznicka (Zgorzelec-Osiecznica Forest) should be included in the network.

1. Code: 7210*

2. Name: Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae**

3. Distribution, diversity, Polish resources: Larger concentrations of these fens occur in the Pomeranian Lake District, Masurian Lakes, Suwałki Lake District, Ziemia Lubuska region, in Wielkopolska and in the Lublin region (CONT). Typical calcareous fens with *Carex buxbaumii*

and *Schoenus nigricans* have the centre of their occurrence in Western Pomerania. The most typical area of this habitat type is in the Myślubórz Lake District and in the vicinity of Lake Miedwie. *Cladium mariscus* beds are more widespread: they are related to sands of the Pomeranian Lake District. Puszcza Drawska (Drawska Forest) and Lasy Bierzwnickie (Bierzwnik Forest) are the areas where this habitat type is best developed. Another area of the occurrence of *Cladium mariscus* beds is in the Chełm Lake District. In north-eastern Poland, on lake chalk there are rushes with *Carex lasiocarpa* which may be regarded as a marginal form of the habitat type. Such boreal varieties of calcareous fens are particularly common in Puszcza Augustowska Augustowska Forest and Sejny Lake District where the area of Lake Wilkokuk and Lake Zelwa are particularly important.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The government proposal encompasses the most typical sites of fens with *Carex buxbaumii* and *Schoenus nigricans*, such as Torfowiska Chełmskie (Chełm Peatlands), Pojezierze Myśluborskie (Myślubórz Lake District), Śniatycze, Sulęczyno, and Miedwie, and these subtypes seems to be well represented. The national list includes approximately 20–30 % of the area of calcareous fens with *Cladium mariscus* which seems to be insufficient, as the most typical areas with ones of the best preserved habitat patches in Poland such as Puszcza Drawska (Drawska Forest) and Lasy Bierzwnickie (Bierzwnik Forest) are not covered. The boreal type of calcareous fens, widespread in the Augustowska Forest and Sejny Lake District, is almost entirely disregarded and represented only by several localities in Ostoja Wigierska (Site on Lake Wigry)

5. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network: Uroczyska Puszczy Drawskiej (Drawska Forest Ranges), Lasy Bierzwnickie (Bierzwnik Forests), Puszcza Augustowska (Augustowska Forest), Pojezierze Sejneńskie (Sejny Lake District).

1. Code: 7220*

2. Name: Petrifying springs with tufa formations (*Cratoneurion*)

3. Distribution, diversity, Polish resources: Typical springs accumulating travertine occur in southern Poland (ALP), e.g. Cieszyńskie Źródła Tufowe (Cieszyn Tufa Springs), as well as in Kraków-Częstochowa Jura Upland (CONT) and in the limestone ranges of the Sudety Mts. (Krowiarki Range, CONT). In lowland Poland, deposits of spring travertine are mostly the result of their accumulation in the past but in several localities of northern Poland (Radew, Chociel and Chotła River Valley, Rurzyca River Valley, Wieprza River Valley) accumulation of travertine occurs in springs also at the present time.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The governmental proposal encompasses half of the localities proposed by Polish naturalists, which is probably 40–50% of the important resources of the habitat type in Poland. All the most important localities in the Carpathians (ALP), including Cieszyńskie Źródła Tufowe (Cieszyn Tufa Springs) where the habitat is best developed, are included in the network. However, the representation of the habitat in the Continental biogeographical region is insufficient for conservation of the entire geographical and ecological diversity of the type. The

springs of Kraków-Czestochowa Jura Upland are well represented but the springs of limestone ranges of the Sudety Mts. are not covered at all.

5. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network: Pasma Krowiarki (Krowiarki Range), Dolina Radwi, Chocieli i Chotli (Radew, Chociel and Chotla River Valley), Dolina Wieprzy i Studnicy (Wieprza and Studnica River Valley), Dolina Rurzycy (Rurzyca River Valley).

1. Code: 7230

2. Name: Alkaline fens

3. Distribution, diversity, Polish resources: The habitat type is rather common in Poland, both in the Continental and Alpine biogeographical regions. Lowland fens are particularly numerous in the river valleys of late-glacial landscape of the Pomeranian Lakes District and Masurian Lakes, but occur also in the area of Wielkopolska and Ziemia Lubuska regions (CONT). Alkaline fens of the sub-mountain subtype are scattered in the belt of Polish uplands, and particularly valuable aggregations of these fens are in the Łęczyca-Włodawa Lake District, Nida Basin and in the Kraków-Czestochowa Upland, while the separate Sudetes subtype occurs in the Ślęza Massif (Łąka Sulistrowicka/Sulistrowice Meadow). Mountain fens are dispersed in the Carpathian ranges (ALP), especially in the Gorce Mts. and Beskid Sądecki Mts., and also in the Sudety Mts. (CONT; Kaczawskie Mts., Karkonosze Mts., Stołowe Mts.)

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses 27% of the area suggested by Polish naturalists, i.e. no more than 15% of the national resources of this highly dispersed habitat type. Most sites where the habitat type is best developed and preserved, and characterizes by the highest biological diversity and a large number of endangered plant species, are not covered. Among lowland fens of northern Poland (CONT), such a generally known and important sites, as the Rospuda River Valley in the Augustowska Forest (the only locality of *Herminium monorhis* in Poland) has not been included. The list of other disregarded lowland sites encompasses: Peatland near Sernetki in the Augustowska Forest (one of the most significant populations of *Saxifraga hirculus* in Poland), the Wel River Valley near Kopaniarze (one of the most significant populations of *Saxifraga hirculus* in Poland), the Radew, Chociel and Chotla River Valley (population of *Saxifraga hirculus* and best developed meadows with *Trollius europeus* in Pomerania), the Stropna Valley (with *Trollius* and *Dactylorhiza* big populations), the Wieprza and Studnica River Valley, the Rurzyca River Valley, Rzecin Peatland in Wielkopolska. Some important localities of submountain fens, as Łąka Sulistrowicka (Sulistrowice Meadow) in the massif of Ślęza (CONT, the only locality of *Gladiolus paluster* in Poland), have also been ignored. The main localities of mountain fens, the Gorce Mts. and the Beskid Sądecki Mts. (ALP, the only locality of *Primula farinosa* in Poland) have not been included either.

5. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network: Puszcza Augustowska (Augustowska Forest), Dolina rzeki Wel koło Kopaniarzy (Wel River Valley near Kopaniarze), Dolina Wieprzy i Studnicy (Wieprza and Studnica River Valley), Dolina Radwi, Chocieli i Chotli (Radew, Chociel and Chotla River Valley), Dolina Rurzycy (Rurzyca River Valley), Dolina Stropnej (Stropna Valley), Torfowisko

Rzecińskie (Rzecin Fen), Masyw Ślęży (Ślęża Massif), Ostoja Gorczańska (Site of Gorce Mountains), Ostoja Popradzka (Site on Poprad River).

1. Code: 8110 (During work on the Polish proposal of the Natura 2000 network the codes 8110 and 8150 were not at first distinguished from each another, therefore in some SDFs 8150 may be classified as 8110)

2. Name: Siliceous scree of the montane to snow levels

3. Distribution, diversity, Polish resources: Three localities in Poland: Tatra Mts., Bieszczady Mts (ALP) and Karkonosze Mts. (CONT)

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ All localities are included

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 8120

2. Name: Calcareous and calcshist screes of the montane to alpine levels with the plant communities *Papaverion tatricum* or *Arabidion alpinae*

3. Distribution, diversity, Polish resources: The only locality in Poland, in the Tatra Mts., is included in the network (ALP).

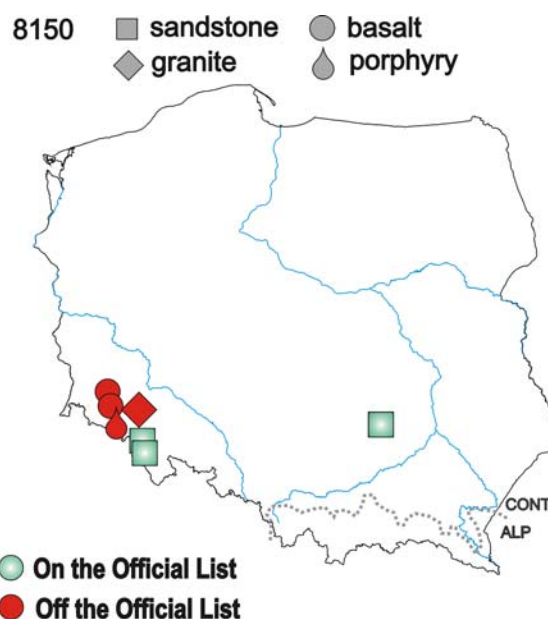
4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The Tatra Mts., the only locality of the habitat type, are included in the network.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 8150 (During work on the Polish proposal of the Natura 2000 network the codes 8110 and 8150 were not at first distinguished from each other, therefore in some SDFs 8150 may be classified as 8110)

2. Name: Medio-European upland siliceous screes

3. Distribution, diversity, Polish resources: The habitat type occurs in the upland area and at lower altitudes of the Sudety Mts. (CONT) in several distinct varieties related to the type of rock they are originated from. These are:



- quartz and sandstone boulder fields (Świętokrzyskie Mts, Stołowe Mts., Piekielna Valley near Polanica Zdrój;
- granite boulder fields (Ślęza Massif);
- basalt boulder fields (Ostrzyca Proboszczowska in the Sudety Mts. where they are best developed in Poland, and Kaczawa Hills and Foothills);
- acidophilous porphyritic screes near Jeleniak (Kamienne Mts) and in the Kaczawa Hills and Foothills.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses exclusively quartz and sandstone boulder fields in the Góry Świętokrzyskie Mts and in the Sudety Mts. (Stołowe Mts, Piekielna Valley near Polanica). Other habitat varieties and localities have been totally ignored in the proposal, therefore the included sites do not represent the entire diversity of the habitat type.

5. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included: Masyw Ślęży (Ślęza Massif), Ostrzyca Proboszczowska, Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills), Góry Kamienne (Góry Kamienne Mts).

8160

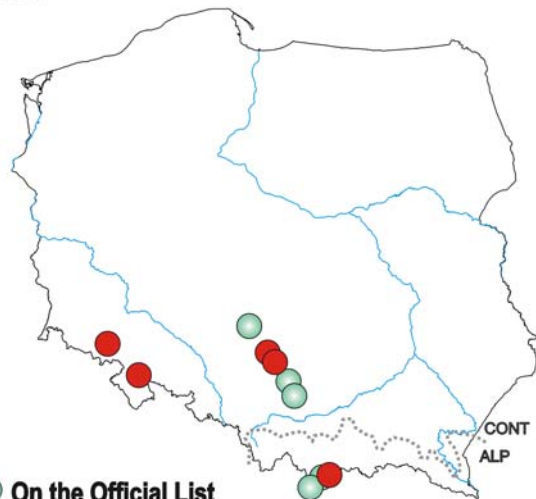
1. Code: 8160*

2. Name: Medio-European calcareous scree of hill and montane levels*

3. Distribution, diversity, Polish resources: The habitat type occurs in the Tatra Mts., the Pieniny Mts. (ALP), in the Kraków-Częstochowa Upland, Załęczański Łuk Warty (Warta River Meander near Załęcze) (CONT), as well as in the limestone ranges of the Sudety Mts. (CONT, Pasma Krowiarki /Krowiarki Range/, Góry i Pogórze Kaczawskie /Kaczawa Hills and Foothills)

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ In the Alpine biogeographical region, patches of this habitat type occurring in the Tatra Mts. and in the Pieniny Mts. are included but without Małe Pieniny (Small Pieniny). In the Continental biogeographical region 30–40% of the area occupied by the habitat type in the Kraków-Częstochowa Upland are covered by the proposal but all sites from the Sudety Mts. have been ignored. The governmental proposal covers altogether 40% of the area suggested by Polish naturalists for inclusion but it does not represent the entire diversity of the habitat type; the included habitat fragments are mostly situated in the national parks of the Tatra Mts. and the Pieniny Mts. (ALP).

5. Suggestions to supplement the Natura 2000 governmental proposal: The site of Pieniny Mountains should be enlarged, so as to include the Small Pieniny. The following sites should be added to the proposal: Ostoja Olsztyńsko-Mirowska (Olsztyn-Mirów Site), Pasma Krowiarki (Krowiarki Range), Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills).



- On the Official List
- Off the Official List

1. Code: 8210

2. Name: Calcareous rocky slopes with chasmophytic vegetation

3. Distribution, diversity, Polish resources: The habitat type is represented in the Western Tatra Mts. and in the Pieniny Mts. (ALP) as well as on the outcrops of limestone rocks of the Kielce-Sandomierz Upland, Kraków-Częstochowa Upland, Carpathian Foothills and the Sudety Foothills (CONT). It is difficult to assess the total area covered by this habitat type because of its scattered occurrence.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal covers 38% of the area suggested by Polish naturalists for inclusion. In the Alpine biogeographical region the main and most typical localities in the Tatra Mts. and the Pieniny Mts. have been included in the network but the area of Małe Pieniny with the unique rock communities (in Homole and Biała Woda), have been ignored. In the Continental biogeographical region 20–30% of the resources are covered (in the Kraków-Częstochowa Upland) but localities with the specific Sudetic variety of the habitat type from the Sudety Mts. have been left out.

5. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network: Ostoja Olsztyńsko-Mirowska (Olsztyn-Mirów Site), Ostoja Złotopotocka (Złoty Potok Site), Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills), Pasma Krowiarki (Krowiarki Range). The site Pieniny Mts. should be enlarged to include Małe Pieniny (Small Pieniny).

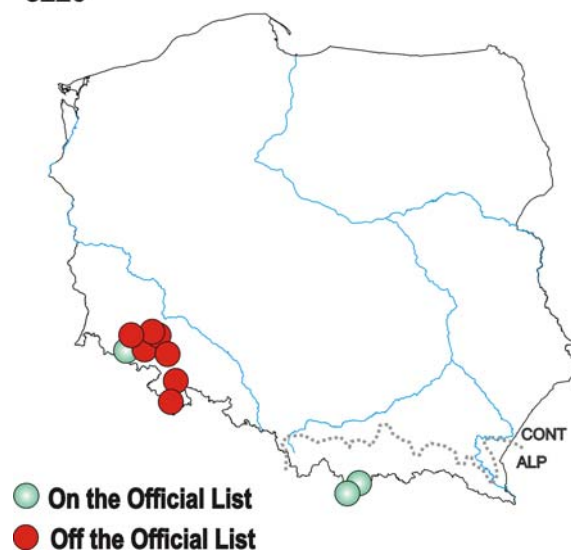
8220

1. Code: 8220

2. Name: Siliceous rocky slopes with chasmophytic vegetation

3. Distribution, diversity, Polish resources: The habitat type occurs in Poland in dispersed localities concentrated in the Sudety Mts. (CONT), also in the Tatra Mts. It is differentiated into several ecological types.

The subtype formed on serpentine marble occurs exclusively in the Sudety Mts. and their foothills in the area of serpentine rock occurrence. Present localities (approximately 35 rock walls) are known from the southern and eastern fringes of the massif of Ślęza (Wzgórza Kielczyńskie, Wzgórza Oleszeńskie with Radunia, Kamienny Grzbiet), from the surroundings of the Góry Sowie Mts (Grochowa Range, small patches near Bielawa, Kamionki, Przygórze and Wolibórz) as well as single localities in the Śnieżnik Massif (Żmijowiec) and in Kaczawa Hills (near Janowice Wielkie).



Chasmophytic communities of acid and neutral rocks, differentiated into the photo- and thermophilous subtype and shade-loving subtype, are more common. They are scattered in the Sudety Mts. and their foothills, as well as in the Tatra Mts.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The subtype occurring on serpentine marble has not been included in the network. The subtypes confined to other rock types are represented in about 40%. The representation of the habitat in the Alpine biogeographical region is sufficient; the pSCIs of the Tatra Mts. and the Pieniny Mts. are the only areas of occurrence of the habitat in this region. In the Continental biogeographical region the government proposal covers no more than 20–30% of the resources.

5. Suggestions to supplement the Natura 2000 governmental proposal: In order to protect the serpentine subtype, it is indispensable to include the following sites: Wzgórza Kiełczyńskie (Kiełczyño Hills), Masyw Ślęży z Kamiennym Grzbietem (Ślęża Massif with Kamienny Range), Góry Sowie i Bardzkie (Sowie & Bardzkie Mts.), Góry Bialskie i Grupa Śnieżnika (Bialskie Mts. and Śnieżnik Massif). To protect other subtypes it is recommended to include Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills), Dolina Bobru (Bóbr Valley), Góry Kamienne (Kamienne Mts.), Góry Sowie i Bardzkie (Sowie & Bardzkie Mts.), and Ostrzyca Proboszczowska.

1. Code: 8230

2. Name: Siliceous rock with pioneer vegetation of *Arabidopsidion thalianae*

3. Distribution, diversity, Polish resources: Distribution of the habitat type in Poland is not known, as it was only lately identified. Up to now it has been noted in single localities (Chojnik Hill near Jelenia Góra, and one patch near Duszniki Zdrój). It is certain, however, that further research will reveal a wider range of its occurrence. The potential geographic range covers the whole Sudety Mts., as well as their foothills and foreland (CONT)

4. To what extent does the governmental proposal cover the national resources of the habitat type? ?? It is difficult to estimate as the occurrence is poorly known. Typical patches from Góra Chojnik (Chojnik Hill) are included in the network.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 8310

2. Name: Caves not open to the public

3. Distribution, diversity, Polish resources: Caves occur in several regions. There are approximately 780 caves formed in calcareous rock in the Tatra Mts. and in the Pieniny Mts. (ALP), while 630 small fissure caves formed in sandstone are scattered in the Beskidy Mts. (ALP). In the Kraków-Częstochowa Jura Upland (CONT) there are approximately 1700 calcareous caves. In Nida Basin (CONT) there are 40 unique gypsum karst caves. There are also 130 caves formed in different rock types (limestone, dolomite, sandstone) in the area of the

Świętokrzyskie Mts. (CONT) and another 150 caves formed in crystalline limestone, chalky clay and other rock types in the Sudety Mts. (CONT).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ In the Alpine biogeographical region, all the caves of the Tatra Mts. and the Pieniny Mts. have been included in the proposal. Of over 600 sandstone caves of the Beskidy Mts., only a small number situated in Ostoja Magurska (Magura Site) are included in the proposal, while the significant concentrations of caves in Ostoja Popradzka (Site on Poprad River), Ostoja Gorczańska (Site of Gorce Mountains), Beskid Żywiecki Mts. and Beskid Śląski Mts. have been ignored. In the Continental biogeographical region, the whole group of gypsum caves of Nida Basin is included. Of 1700 Jura caves, only 300 situated in the Prądnik Valley and in the site of Załęczański Łuk Warty (Warta River Meander near Załęcze) are represented in the proposal. Jaskinia Szachownica (Cave Szachownica) is a separate pSCI. An important site of Ostoja Środkowojurajska (Central Jura Upland Site) and caves in the vicinity of Olsztyn have been left out. Caves of the Świętokrzyski region have almost entirely been ignored (e.g. there are 130 caves in the neglected site of Wzgórza Chęcińsko-Kieleckie / Chęciny-Kielce Hills). The governmental proposal does not include caves of the Sudety Mts., situated mainly in such sites as: Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills), Pasma Krowiarki (Krowiarki Range), Grupa Śnieżnika (Śnieżnik Massif).

5. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Ostoja Popradzka (Site on Poprad), Ostoja Gorczańska (Site of Gorce Mts.), and Beskid Żywiecki (Beskid Żywiecki Mts.), which are also important for other habitat types and species, to improve the representation of the Beskidy caves;
- Ostoja Środkowojurajska (Central Jura Upland Site) and Ostoja Olsztyńsko-Mirowska (Olsztyn-Mirów Site) to improve the representation of the Jura Upland caves;
- Wzgórza Chęcińsko-Kieleckie (Chęciny-Kielce Hills) to improve the representation of the Świętokrzyski region caves;
- Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills), Pasma Krowiarki (Krowiarki Range), and Góry Bialskie i Grupa Śnieżnika (Bielskie Mts. and Śnieżnik Massif) to improve the representation of the Sudety caves.

1. Code: 9110

2. Name: Luzulo-Fagetum beech forests

3. Distribution, diversity, Polish resources: It is the rather common type of forest in northern, western and southern Poland, both in the lowland part of its range (CONT) and in the Sudety Mts. (CONT), and the Tatra Mts. (ALP). It is differentiated into the lowland and mountain subtypes. In the Carpathians, in contrast to the rest of the country, acidophilous beech forests are much less common than fertile beech forest (9130).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal covers 27% of the habitat resources. Luzulo-Fagetum beech forests have been included in the proposed sites only because they concur there with other habitat types. Therefore, the largest and most typically developed patches of this forest type have been neglected. The acidophilous beech forests of the Sudety Mts. have almost entirely

been ignored; the total area of fragments, which are in the pSCIs of the Karkonosze Mts., Stołowe Mts and the Rudawy Mts. constitutes no more than 10% of the regional resources. In the Carpathians, acidophilous beech forests of the Bieszczady Mts. are included; it is the largest, most diverse and best preserved complex of forests of this type in Poland. However, other very well-preserved Carpathian acidophilous beech forests situated in the nature reserves of the Beskid Sądecki Mts. are ignored.

5. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included:

- Wysoczyzna Elbląska (Elbląg Plateau), Paraszyńskie Buczyny (Paraszyno Beech Forests), Buczyny Łagowsko-Sulecińskie (Łagów-Sulecin Beech Forests), Jeziora Czaplneckie (Czaplinek Lakes), Uroczyska Puszczy Drawskiej (Drawska Forest Ranges), Puszcza Barlinecka (Barlinek Forest), Lasy Suchedniowskie (Suchedniów Forests) – in order to improve representation of the lowland form of this habitat type;
- Góry Opawskie (Opawskie Mts.), Góry Bialskie i Grupa Śnieżnika (Bialskie Mts. and Śnieżnik Massif), Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills) – to improve the representation of the Sudety beech forests
- Ostoja Popradzka (Site on Poprad) – to improve the representation of the habitat type in the Alpine biogeographical region.

1. Code: 9130

2. Name: *Asperulo-Fagetum* beech forests

3. Distribution, diversity, Polish resources: It is a rather common type of forest in northern, western and southern Poland, in both the lowland part of its range (CONT) and the Tatra Mts. (ALP, potentially it is the main plant community of the lower montane belt). It occurs also in the Sudety Mts. (CONT) but there it is very rare. The habitat differentiated into the lowland and mountain subtypes. Distribution of the mountain subtype is particularly interesting: a variety occurring in the Sudety Mts. is very rare and preserved only in a few places, and the area covered by this subtype does not exceed 1/100 of the Carpathian beech forests. A unique phenomenon is the occurrence of the mountain subtype (of both the Sudety Mts. and the Carpathian varieties) in the upland area: near Szprotawa in Lower Silesia, in Kraków-Częstochowa Jura Upland, in the Świętokrzyskie Mountains, Roztocze and the Przemyśl Foothills.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal covers approximately 40% of the Polish resources of the habitat type. However, fertile beech forests have been included in the proposed sites only because they concur with other habitat types of Community importance. Therefore, the largest and most typically developed patches of this forest type have been neglected. The proposal has almost entirely left out fertile beech forests of the Sudety Mts., even though they are very rare in this mountain range. The Stołowe Mts. are the only exception. Ignored are also some peripheral, northern localities of the mountain subtype of the habitat in the lowland/upland area: Buczyna Szprotawsko-Piotrowicka (Szprotawa-Piotrowice Beech Forest), Ostoja Złotopotocka (Złoty Potok Site), Lasy Suchedniowskie (Suchedniów Forests), Lasy Cisowsko-Orłowińskie (Cisowsko-Orłowińskie Forests), Ostoja Przemyska (Przemyśl Site).

5. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

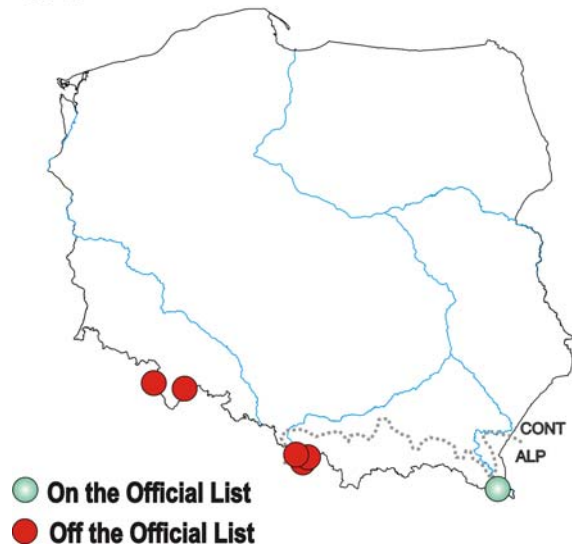
- Wysoczyzna Elbląska (Elbląg Plateau), Parazyńskie Buczyny (Paraszyno Beech Forests), Buczyny Łagowsko-Sulecińskie (Łagów-Sulecin Beech Forests), Uroczyska Puszczy Drawskiej (Drawska Forest Ranges), Dziky Las i Dolina Tywy (Dziky Las and Tywa River Valley) – in order to improve the representation of lowland beech forests;
- Góry Opawskie (Opawskie Mts.), Góry Bialskie i Grupa Śnieżnika (Bialskie Mts. and Śnieżnik Massif), Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills), Masyw Ślęży (Ślęza Massif) – to include fertile beech forests of the Sudety Mts.. In addition, the area of pSCI Karkonosze should be extended to comprise Grzbiet Lasocki (Lasocki Range).
- Buczyna Szprotawsko-Piotrowicka (Szprotawa-Piotrowice Beech Forest), Ostoja Złotopotocka (Złoty Potok Site), Lasy Suchedniowskie (Suchedniów Forests), Lasy Cisowsko-Orłowińskie (Cisowsko-Orłowińskie Forests), Ostoja Przemyska (Przemysł Site) – to protect peripheral, lowland/upland localities of the habitat type.

1. Code: 9140

2. Name: Medio-European subalpine beech woods with *Acer* and *Rumex arifolius*

3. Distribution, diversity, Polish resources: The largest and best preserved patches of the habitat type are in the Bieszczady Mts. (ALP). Single, peripheral localities, very important in terms of biogeography, are situated in the Western Carpathians (ALP) in the Beskid Żywiecki Mts.: in the Dziobaki, Oszast and Pod Rysianką Nature Reserves and near the peak of Mt. Wielka Rycerzowa. Lately, the occurrence of this habitat type was discovered in the Sudety Mts. near Zieleniec in the Bystrzyckie Mts.; it is possible that it occurs also in the Bialskie Mts.

9140



4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal covers 47% of the Polish resources of the habitat type; however the representation is not satisfactory, as only the patches situated in the Bieszczady Mts. have been included. The entire area of the Western Carpathian variety of the habitat and all localities in the Continental biogeographical region have been ignored.

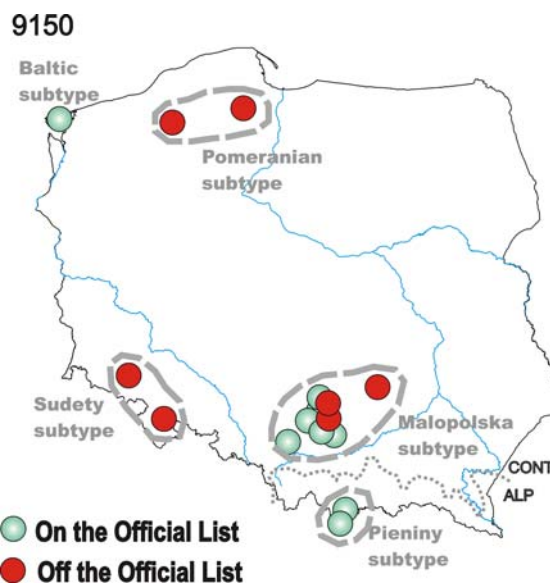
5. Suggestions to supplement the Natura 2000 governmental proposal: The site of Beskid Żywiecki Mts. should be included to preserve the Western Carpathian variety. Inclusion of the newly discovered localities in the Sudety Mts. (the only localities in CONT) will be indispensable but further research is needed to know better the location and area of habitat patches.

1. Code: 9150

2. Name: Medio-European limestone beech forest of the Cephalanthero-Fagion

3. Distribution, diversity, Polish resources: The occurrence of the habitat type is highly dispersed; it is more common only in Kraków-Częstochowa Jura Upland. In Poland this type is differentiated into 5 ecologically and floristically distinct subtypes:

- Pieniny subtype (Pieniny Mts.; ALP)
- Małopolska subtype (Kraków-Częstochowa Jura Upland, Świętokrzyskie Mts.; CONT)
- Sudety subtype (Krowiarki Range and Kaczawa Hills; CONT)
- Pomeranian (Cashubian) (two localities in northern Poland; CONT)
- Baltic (coastal) subtype (one locality on Wolin Island; CONT)



4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal covers approximately 40% of the Polish resources of the habitat type but does not protect its diversity. It comprises as a whole orchid beech forests from the Pieniny Mts. (ALP) and the only patch of coastal beech wood. The Małopolska beech forests are represented in 25–30%. All localities in the Sudety Mts. and in Pomerania have been ignored.

5. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network:

- Pasma Krowiarki (Krowiarki Range), Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills) to include the representation of Sudety orchid beech forest;
- Jeziora Raduńsko-Ostrzyckie (Lakes of Radunia-Ostrzyca); Dolina Radwi, Chotli and Chocieli (Radew, Chociel and Chotła River Valley) to include Pomeranian orchid beech forest;
- Ostoja Złotopotocka (Złoty Potok Site), Ostoja Olsztyńsko-Mirowska (Olsztyn-Mirów Site), Wzgórza Chęcińsko-Kieleckie (Chęciny-Kielce Hills) to improve the representation of Małopolska orchid beech forest.

1. Code: 9160

2. Name: Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli.

3. Distribution, diversity, Polish resources: Patches of this habitat type are scattered in northern Poland (CONT).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The governmental proposal covers some 10–20% of the total area of this

habitat type and this representation seems to be sufficient in view of the character of its distribution.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 9170

2. Name: Galio-Carpinetum oak-hornbeam forest

3. Distribution, diversity, Polish resources: The habitat type occurs in the whole area of Poland apart from the mountains and northern Poland (CONT). There are single isolated localities in the Alpine biogeographical region – e.g. Obrożyska in the Beskid Śląski Mts. It is differentiated into two subtypes: central-Poland and sub-continental oak-hornbeam forests.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal covers 10–20% of the Polish resources of this habitat type and this portion seems to be sufficient in view of the character of its distribution but the included areas do not represent the whole diversity of the habitat type. The best preserved habitat fragment is situated in the Białowieża Forest, which has been included in the network. However, Puszcza Borecka (Borecka Forest) with its well-preserved sub-continental oak-hornbeam forest in a boreal variety and unique localities in the Alpine biogeographical region (Ostoja Popradzka/ Site on Poprad) have been ignored.

5. Suggestions to supplement the Natura 2000 governmental proposal:

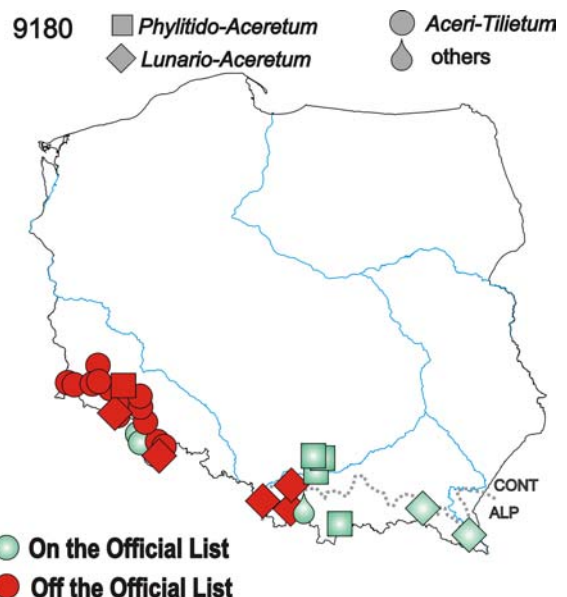
The sites: Ostoja Borecka (Borecka Forest Site) and Ostoja Popradzka (Site on Poprad) should be included in the network.

1. Code: 9180

2. Name: *Tilio-Acerion* forests of slopes, screes and ravines

3. Distribution, diversity, Polish resources: The habitat type occurs in the Sudety Mts. and the Sudety Foothills (CONT), as well as in the Carpathians (ALP). It does not occur in lowland Poland (it was mistakenly mentioned in the SDFs for some lowland sites). It is differentiated into 7 distinct subtypes:

- maple-lime forests of the Sudety Mts. and the Sudety Foothills (CONT)
- sycamore woods with *Phyllitis scolopendrum* occurring in the Pieniny Mts. (ALP), Kraków-Częstochowa Jura Upland (CONT) and in one isolated locality in the Sudety Mts. (CONT)



- the Carpathian sycamore forests with *Lunaria rediviva* (ALP)
- the Sudety sycamore forests with *Lunaria rediviva* (CONT)
- sycamore-rowan woods on Mt. Babia Góra (ALP)
- the Carpathian sycamore woods on slopes with tall herb communities (ALP)
- the Sudety sycamore woods on slopes with tall herb communities (CONT, three localities)

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal has almost completely ignored the Sudety and sub-Sudety maple-lime forests. Only two localities, in Piekielna Valley near Polanica Zdrój and in the Stołowe Mts. have been included. No more than 2% of the habitat resources in the region are covered.

Sycamore woods with *Phyllitis scolopendrum* are well represented in the Carpathians (the Pieniny Mts., Ostoja Magurska/Magura Site, Bieszczady Mts.) but the only locality in the Sudety Mts. (Wąwóz Myśluborski / Myśluborski Gorge in the site of Góry i Pogórze Kaczawskie / Kaczawa Hills and Foothills) has been neglected. The habitat fragments in Kraków-Częstochowa Jura Upland are mostly ignored as they concentrate in the site of Ostoja Środkowojurajska / Central Jura Upland Site which has not been included in the proposal.

The Carpathian sycamore woods with *Lunaria rediviva* have been described so far from the Beskid Żywiecki Mts. and Beskid Śląski Mts., the Bieszczady Mts., the Beskid Niski Mts. and the Beskid Mały Mts. The governmental proposal covers 50% of the resources of this subtype but totally ignores localities from the Beskid Śląski, Beskid Żywiecki and the Beskid Mały ranges.

The Sudety sycamore woods with *Lunaria rediviva* are mostly left out of the proposal. This subtype occurs in single isolated localities, described so far from the Stołowe Mts, Śnieżnik Massif, Ołowiane Mts, the foothills of the Karkonosze Mts., Kamienne Mts, Sowie Mts. and the foothills of Izerskie Mts. Of the above mentioned localities, only the Stołowe Mts have been included in the proposal, covering no more than 10% of the resources. Very important sites, such as: Góry Sowie i Bardzkie (Sowie and Bardzkie Mts ; eastern part) and Góry Bialskie i Grupa Śnieżnika (Góry Bialskie Mts. and Śnieżnik Massif with a typically developed habitat patch in Wąwóz Wilczki / Wilczki Gorge) have been ignored.

The Carpathian sycamore-rowan woods occur exclusively on Mt. Babia Góra and this site is listed in the proposal.

The Carpathian sycamore woods on slopes with tall herb communities are partly included in the proposal. Their large concentration is in the pSCI of Bieszczady Mts. Western Carpathian localities in the Beskid Żywiecki Mts., e.g. in the Pod Rysianką, Dziobak, Oszast Nature Reserves, important in terms of biogeographical range are ignored.

The Sudety sycamore woods on slopes with tall-herb communities are represented in the network by one locality in the Stołowe Mts. (Cygański Wąwóz / Cygański Gorge – Dolina Czerwonej Wody / Czerwona Woda Valley) but two other localities in the Bialskie Mts. and in the Bystrzyckie Mts. are ignored.

5. Suggestions to supplement the Natura 2000 governmental proposal:

The following sites should be included in the network: Przełomy Pałeczniczy pod Książem (Pałecznicza Gorge near Książ), Przełom Nysy k. Morzyszowa (Nysa Gorge near Morzyszów), Dobromierz, Czarne Urwisko koło Lutyni (Czarne Urwisko near Lutynia), Ostrzyca Proboszczowska, Dolina Bobru (Bóbr River Valley), Góry Kamienne (Kamienne Mts.), Góry

Sowie i Bardzkie (Sowie and Bardzkie Mts.), Góry i Pogórze Kaczawskie (Kaczawa Hills and Foothills), Góry Bialskie i Grupa Śnieżnika (Bialskie Mts. and Śnieżnik Massif), Beskid Żywiecki (Beskid Żywiecki Mts.).

1. Code: 9190

2. Name: Old acidophilous oak woods with *Quercus robur* on sandy plains

3. Distribution, diversity, Polish resources: The habitat type occurs on the Baltic Coast and in the coastal zone (CONT). It is difficult to estimate its Polish resources. In some SDFs for the proposed sites, inland acidophilous oak forests are wrongly classified among this habitat type.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal includes some sites, such as Pobrzeże Słowińskie (Słowińskie Coastland), Trzebiatowsko-Kołobrzeski Pas Nadmorski (Trzebiatów-Kołobrzeg Coastland) and Dorzecze Parsęty (Parsęta River Basin), with this habitat type. It seems however, that most of the resources (e.g. well-developed forests of this type on Lake Bukowo and the Wkrzańska Forest) have been ignored.

5. Suggestions to supplement the Natura 2000 governmental proposal: The site of Jezioro Bukowo (Bukowo Lake) should be included.

1. Code: 91D0*

2. Name: Bog woodland*

3. Distribution, diversity, Polish resources: The habitat type occurs in Poland as 5 distinct ecological subtypes:

- Scots pine mire woods, dispersed in the whole of lowland Poland (CONT); exceptionally well-developed and covering large areas in some localities (eg. Solska Forest, Janowskie Forests and large peatlands of the Baltic type in Pomerania);
- sub-atlantic Sphagnum birch wood, dispersed mainly in northern and western Poland (CONT);
- boreal spruce forest occurring in north-eastern Poland (CONT), especially well developed in the Romincka Forest (Żytkiejmska Struga – the largest fragment in Poland), Knyszyńska Forest and the Białowieża Forest;
- sub-boreal Sphagnum birch woods and pine-birch mire woods occurring in north-eastern Poland (CONT), best developed and most common in the Augustów Forest and in the Knyszyńska Forest;
- mountain coniferous mire forests and spruce forests in isolated localities: in the Izera River Valley in the Izerskie Mts., near Zieleniec in the Bystrzyckie Mts., in the Stołowe Mts. (CONT), in the Śnieżnik Massif (CONT), Orawa-Nowy Targ Peatlands (ALP), on Mt. Babia Góra and in the Bieszczady Mts. (ALP).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal covers 40% of the area suggested by Polish

naturalists for inclusion; this value is equivalent to 15–20% of the Polish resources of the habitat type and does not represent its full ecological and geographical diversity.

The representation of Scots pine mire woods seems to be sufficient in terms of quantity (15–20%) but not in terms of diversity and quality; e.g. coniferous mire woods of the Solska Forest and Janowskie Forests, believed to be ones of best developed in Poland, have not been included. The proposal does not cover coniferous mire woods on domes of Atlantic raised bogs in northern Poland; many of them occupy large areas and are perfectly preserved (Warnie Bagno, Łebskie Bagna, Gązwa, Budwity, Bieńkowo, Nowa Wieś).

Sub-Atlantic Sphagnum birch woods seem to be sufficiently represented (20–25%).

The same concerns boreal spruce forest. The proposal covers 20–30% of the Polish resources of this subtype, including the best developed patches.

Boreal pine-birch mire woods and Sphagnum birch woods are represented by no more than 10% of the resources and the most important areas of this subtype in Poland are ignored (Augustowska Forest and Knyszyńska Forest). As a result, the most valuable and best-developed fragments are not included in the network.

Mountain coniferous mire forests and spruce forests are covered in 30–40%, and this proportion is not sufficient as this subtype is extremely rare. A big mistake is leaving out mountain peatbogs in the Izera River Valley in the Izerskie Mts. (CONT). The proposal includes all localities of this subtype in the Alpine biogeographical region.

5. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network: Ostoja Augustowska (Site of Augustowska Forest), Ostoja Knyszyńska (Site of Knyszyńska Forest), Uroczyska Puszczy Solskiej (Solska Forest Ranges), Uroczyska Lasów Janowskich (Janowskie Forests Ranges), Warnie Bagno (Warnie Bog), Łebskie Bagna (Łebskie Bogs), Gązwa, Budwity, Bieńkowo, Nowa Wieś, Góry Bialskie and Grupa Śnieżnika (Bialskie Mts. and Śnieżnik Massif). The pSCI of Karkonosze should be enlarged, so as to include the Izera River Valley in the Izerskie Mts.

1. Code: 91E0*

2. Name: Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) *

3. Distribution, diversity, Polish resources: The habitat type is dispersed in the whole area of Poland. It is differentiated into several ecological subtypes:

- riverine forests with *Salix* and *Populus* in valleys of great rivers; they are scarce, as heavily destroyed by man (exclusively CONT), best-preserved in the Vistula River basin;
- ash-alder riverine forests in valleys of medium-size and small rivers; they are common in Poland and constituting 80% of the national resources of the habitat 91E0 (exclusively CONT);
- submountain ash riverine forests, occurring in the Carpathians (ALP) and the Sudety Mts. (CONT) and their foothills (relatively common there) and rarely in lowland Poland in the late-glacial landscape of Pomerania (CONT);
- mountain swamp alder forests in the Carpathians.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses 41% of the area suggested by Polish naturalists for inclusion, which constitutes 10–20% of the national resources of the habitat type. It is represented, however, mainly by the most common subtype of ash-alder riverine forests in valleys of medium-size and small rivers.

Riverine forests with *Salix* and *Populus* in valleys of great rivers have been ignored almost as a whole, because almost any of the suggested sites situated in great river valleys have been included in the governmental proposal.

Ash-alder riverine forests in valleys of medium-size and small rivers are covered in 15 – 20%, which seems to be sufficient, as it is a common habitat type.

Submountain ash riverine forests of the Carpathians have their representation in the proposal but those of the Sudety Mts. (with the exception of the Stołowe Mts.) have been ignored. Apart from the site of Puszcza Bukowa (Bukowa Forest) near Szczecin, most of the unique lowland habitats of this subtype have not been included in the network.

The most important localities of mountain swamp alder woods have been included.

5. Suggestions to supplement the Natura 2000 governmental proposal: In order to improve the representation of riverine forests with *Salix* and *Populus*, it is absolutely necessary to include the following sites, representing great river valleys: Ujście Ilanki (Mouth of Ilanka River), Dolna Wisła (Lower Vistula River), Solecka Dolina Wisły (Vistula River Valley near Solec), Włocławska Dolina Wisły (Vistula River Valley near Włocławek), Dybowska Dolina Wisły (Vistula River Valley near Dybów), Nieszawska Dolina Wisły (Vistula River Valley near Nieszawa), Wisła Środkowa (Middle Vistula River), Przełom Wisły w Małopolsce (Vistula River Gorge in Małopolska), Dolina Środkowej Pilicy (Middle Pilica Valley), Poleska Dolina Bugu (Bug River Valley in Polesie), Zachodniowołyńska Dolina Bugu (Western Volhynian Bug River Valley), Dolny Wieprz (Lower Wieprz River).

To improve the representation of submountain ash riverine forests, we recommend inclusion of at least one locality in the Sudety Mts. (Góry i Pogórze Kaczawskie /Kaczawa Hills and Foothills, Góry Sowie i Bardzkie / Sowie & Bardzkie Mts.) and some unique lowland localities (Wysoczyzna Elbląska / Elbląg Plateau, Dolina Łupawy / Łupawa valley and Dzikie Las i Dolina Tywy / Dzikie Las and Tywa River Valley).

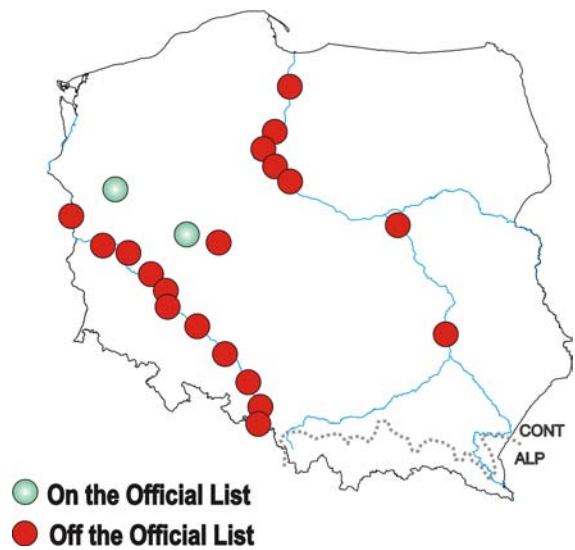
1. Code: 91F0

2. Name: Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior*, along the great rivers (*Ulmenion minoris*)

3. Distribution, diversity, Polish resources: The habitat type occurs in the whole area of lowland Poland (CONT). It is rather common and differentiated into two distinct ecological subtypes:

- typical oak-elm-ash riparian forests in the sporadically flooded zone of great river valleys; best-preserved in the Odra Valley;
- subtype with *Chrysosplenium alternifolium*, occurring outside valleys of great rivers, in wet habitats in forest complexes, generally among wet oak-hornbeam forests; it is more common than the former subtype and dispersed all over Poland.

91F0 - alluvial form



4. To what extent does the governmental proposal cover the national resources of the habitat type? ⊕ The governmental proposal covers 27% of the area suggested by Polish naturalists, which constitutes approximately 10–15% of the Polish resources of the habitat. But the included area comprises almost exclusively the non-flooded subtype with *Chrysosplenium alternifolium*, while the typical, occasionally flooded riparian forests of great river valleys have almost entirely been ignored.

5. Suggestions to supplement the Natura 2000 governmental proposal: The sites encompassing riparian forests of great river valleys, mainly in the Odra and Vistula River Valleys, should be included in the network: Słubickie Łęgi (Słubice Rivierine Forests) Nowosolska Dolina Odry (Odra River Valley near Nowa Sól) Dolina Widawy (Widawa River Valley) Łęgi Odrzańskie (Odra Riverine Forest), Grądy w Dolinie Odry (Oak-hornbeam Forests in Odra River Valley), Dolina Widawy (Widawa Valley), Las k. Tworkowa (Forest near Tworków) and Lasy Żerkowsko-Czeszewskie (Żerków-Czeszewo Forests).

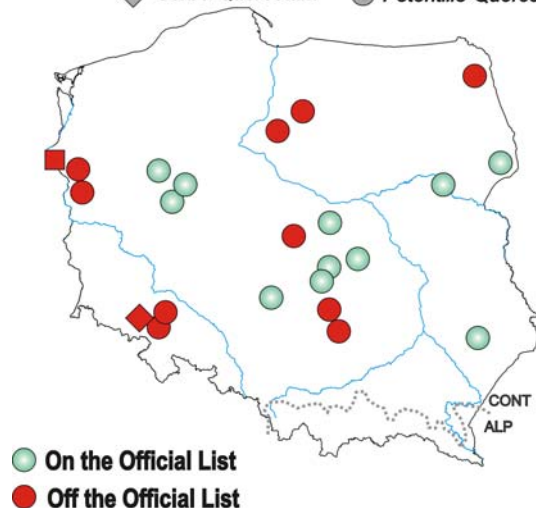
1. Code: 91I0

2. Name: Euro-Siberian steppic woods with *Quercus spp.*

3. Distribution, diversity, Polish resources: A typical form of this habitat type occurs exclusively in one locality, in the Bielinek Nature Reserve on the Odra River in Pomerania (CONT). However, two other subtypes have been assigned to 91I0:

- sessile oak wood (*Potentillo albae-Quercetum*), dispersed over lowland

91I0 ■ typical = *Litospermo-Quercetum*
◆ *Sorbo-Quercetum* ● *Potentillo-Quercetum*



Poland (CONT) and disappearing as the result of oak-hornbeam forest succession;

- termophilous oak wood with *Sorbus terminalis* (*Sorbo torminali-Quercetum*), lately discovered in Poland, occurring exclusively in the Kaczawa Foothills (CONT).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal covers most of the suggested by Polish naturalists areas of *Potentillo albae-Quercetum*, ignoring two other subtypes, including the locality in Bielinek with, according to the Interpretation Manual, the only typical form.

5. Suggestions to supplement the Natura 2000 governmental proposal: The site of Dolina Dolnej Odry (Lower Odra River), including nature reserve Bielinek, and the site of Góry i Pogrze Kaczawskie (Kaczawa Hills and Foothills) should be included in the network.

1. Code: 91P0

2. Name: Holy Cross fir forest (*Abietetum polonicum*)

3. Distribution, diversity, Polish resources: Larger patches of the habitat described as 91P0 occur in the Świętokrzyskie Mts and their surroundings, in Roztocze (Roztocze National Park and two nature reserves: Derby and Święty Roch), in the Solska Forest and the Sandomierz Basin. It is also found in the Janowskie Forests, as well as in the Carpathian Foothills. It is confined to the Continental biogeographical region.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ?? It is difficult to assess. It is certain that typical localities from the Świętokrzyskie Mts. (Świętokrzyski National Park) and localities from Roztocze have been included. There is, however, no data which would allow one to estimate the proportion of the national resources which has been left out of the network. .

5. Suggestions to supplement the Natura 2000 governmental proposal: It requires further research.

1. Code: 91Q0

2. Name: Western Carpathian calcicolous *Pinus sylvestris* forest (*Erico-Pinion*).

3. Distribution, diversity, Polish resources: The habitat type occurs in the Pieniny Mts. and the Tatra Mts. (ALP)

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The governmental proposal covers all localities of the habitat type.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

1. Code: 91T0

2. Name: Central European lichen Scots pine forests

3. Distribution, diversity, Polish resources: The habitat type was relatively common and dispersed in Poland, with concentrations in forests on coniferous forest habitat (Kurpiowska Forest, Tucholskie Forests). It is rapidly disappearing and available information is quickly becoming out of date. The total resources are not known.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ?? It is difficult to estimate the representation of the habitat in the network. It seems, however, that the majority of the resources have not been included in the proposal (Kurpiowska Forest, most of the area of Tucholskie Forests). The governmental proposal covers only 8% of the area suggested by the NFEP and the INC PAS but it should be remembered that some information supplied in the SDFs may be out of date (the habitat type is rapidly disappearing).

5. Suggestions to supplement the Natura 2000 governmental proposal: Further research is required. There is not enough knowledge for a comprehensive proposal, but some sites should be added beyond a doubt, for example fragments of Dolina Pilicy (Pilica River Valley), the last site with good preserved lichen forests in the Middle Poland.

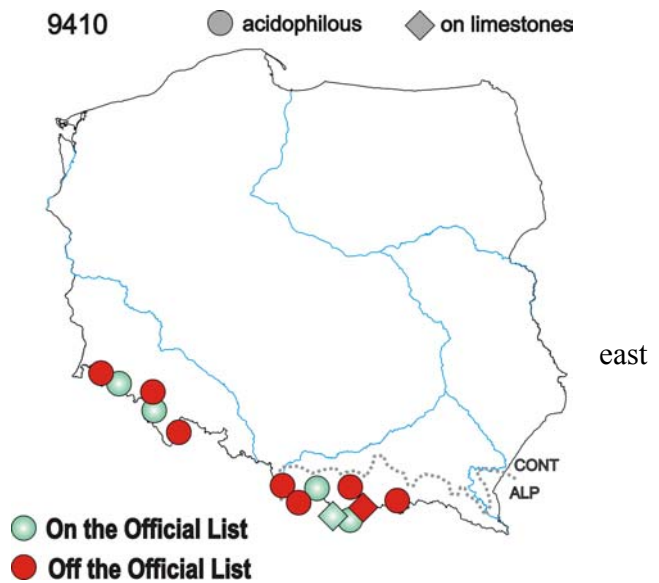
1. Code: 9410

2. Name: Acidophilous *Picea* forests of the montane to alpine levels (*Vaccinio-Pineteta*)

3. Distribution, diversity, Polish resources: Typical form of the habitat type, upper montane coniferous forest, covers the largest area (4,000 hectares) in the Tatra Mts. (ALP). It is a continuous forest belt stretching from the Rybi Potok Valley in the east to the Chochołów Valley in the west. In the Beskidy Mts. the centre of upper montane spruce coniferous forest is in the Gorce range (ALP) where it occupies an area of 1,200 ha. Large areas are also covered in the Beskid Żywiecki Mts. (ALP) with Mt. Babia

Góra and Mt. Pilsko. Small fragments of this habitat type may be found in the Beskid Śląski Mts., Gubałówka Range and the Beskid Sądecki Mts. (ALP). In the Sudety Mts., the habitat covers the largest area in the Karkonosze Mts. and in the Izerskie Mts. and smaller areas in the Śnieżnik Massif and in the Białskie Mts. Impoverished patches of the habitat type are found in the Orlickie Mts. and in the Sowie Mts. Small patches are also situated at the highest altitudes of the Sowie Mts.

Unique, calcareous form of the upper montane spruce forest occurs in the Tatra Mts. and in an isolated locality near the top of Wysokie Skałki in Małe Pieniny (ALP).



Lower montane spruce forests and spruce-fir forests are also included into this habitat type. Their centre of distribution is in the Beskid Żywiecki and Beskid Śląski Mts. (ALP), they occur also in the Tatra Mts. (ALP) and, much altered by forest management, in the Sudety Mts. (CONT).

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☹ The governmental proposal encompasses 15% of the national resources of this habitat type, but subtypes are not equally represented.

Part of the typical upper montane coniferous forests of the Alpine biogeographical region, occurring in the mountain ranges of the Tatra Mts. and Babia Góra Mountain, have been included in the proposal, while the most important site of the Beskidy Mts. (Gorce Mts.), as well as important localities on Mt. Pilsko and Mt. Romanka in the Beskid Żywiecki Mts. have been ignored. In the Continental biogeographical region, the sites from the Karkonosze Mts. are included but the fragments from the Śnieżnik Massif (second most significant locality in the Sudety Mts.) are ignored. The governmental proposal covers most of the area occupied by this habitat type (50–60%) but does not reflect its geographical diversity.

Calcareous upper montane coniferous forests are protected within the pSCI of Tatry (main area of occurrence, 90% of the resources) but a unique and isolated locality in Male Pieniny is left out of the proposal.

The majority of lower montane fir-spruce and spruce coniferous forests, including the main areas in the Beskid Żywiecki and Beskid Śląski Mts., have been ignored. The network covers no more than 5–10% of this subtype area.

5. Suggestions to supplement the Natura 2000 governmental proposal: The following sites should be included in the network: Ostoja Gorczańska (Site of Gorce Mountains), Beskid Żywiecki Mts., Beskid Śląski Mts., Góry Bialskie i Grupa Śnieżnika (Bialskie Mts. and Śnieżnik Massif).

1. Code: 9420

2. Name: Alpine *Larix decidua* and *Pinus cembra* forests

3. Distribution, diversity, Polish resources: The habitat type occurs exclusively in the Tatra Mountains.

4. To what extent does the governmental proposal cover the national resources of the habitat type? ☺ The governmental proposal covers the entire national resources of the habitat.

5. Suggestions to supplement the Natura 2000 governmental proposal: None

3. Proposal of Sites of Community Importance for Natura 2000 network in Poland

The table presented below contains the list of pSCIs that make up our proposal concerning the sites designated for species and habitats from the Annexes of Habitat Directive. It includes both those sites that have been previously proposed by the Polish government, as well as those that, in our opinion, must be added to the proposal of Natura 2000 network. These are distinguished by the colour and shape of fonts.

The sites are listed according to the provinces (województwa - voivodeships), which correspond to NUTS codes. In each province the sites are ordered in the alphabetic order. In the case of sites that are situated on border of province, they have been assigned to the voivodeship, which contains the majority of the sites' areas. Voivodeship codes given in the table are presented in accordance with NUTS codes existing in the European Union and they signify the following:

NUTS code	Province
PL01	Dolnośląskie
PL02	Kujawsko-pomorskie
PL03	Lubelskie
PL04	Lubuskie
PL05	Łódzkie
PL06	Małopolskie
PL07	Mazowieckie
PL08	Opolskie
PL09	Podkarpackie
PL0A	Podlaskie
PL0B	Pomorskie
PL0C	Śląskie
PL0D	Świętokrzyskie
PL0E	Warmińsko-mazurskie
PL0F	Wielkopolskie
PL0G	Zachodniopomorskie

The subsequent number of the site presented in the table corresponds to the number of site presented on the map of proposed pSCIs. The size of sites proposed by the government has been quoted in accordance with official materials, after the Standard Data Forms sent by the government to the European Commission. The size of sites proposed hereby are given according to GIS electronic planimetry, hence they may slightly differ from the areas of the same sites described in other reports. The previous area and the proposed correction of size have been given for each site, which needs the borders' modification.

The codes of habitat types and names of species, for which the modification of Natura 2000 governmental proposal by additional sites or borders' correction is necessary, have been presented in the table. The data in the table refers to the related descriptions in the report. The listed species and habitats in the table are not all species and habitats, which occur in the site.

The last column of the table presents the relationship between the included presentation of particular pSCIs and the proposals made before. The included maps give a schematic localisation of presented sites. Sites' numbers on the maps correspond with their numbers in the table.

Nr	Voivodeship (NUTS Codes)	Names of the sites	Area (ha)	Status	Proposed sites (marked in red) or the correction of borders recognized as necessary for the protection of: (Notice - this is not a full list of species and habitats which exist in the site!)			Proposed borders' correction	Source of documentation
					Habitats	Plants' species	Animals' species		
1	PL01	Chłodnia w Cieszkowie	0.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
2	PL01	Czarne Urwisko k. Lutyni	30.6	necessary to be added	9180				prepared especially for this list
3	PL01	Dębniańskie Mokradła	4758.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
4	PL01	Dobromierz	1124.2	necessary to be added	6110, 9180				prepared especially for this list
5	PL01	Dolina Białej Łądeckiej	152.1	necessary to be added	3260				prepared especially for this list
6	PL01	Dolina Bobru	10081.2	necessary to be added	9180, 3260, 8220		<i>Myotis myotis, Lampetra planeri, Misgurnus fossilis, Rhodeus sericeus amarus</i>		according to the proposal of National Foundation and Institute of Nature Conservation (2003) completed in the process of this list preparation by the proposed Wlenie Church site
7	PL01	Dolina Łachy	910.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
8	PL01	Dolina Widawy	908.7	necessary to be added			<i>Misgurnus fossilis</i>		according to WWF proposal (2004)

9	PL01	Góry Białskie i Grupa Śnieżnika	15745.4	necessary to be added	3260, 6150, 6430, 6520, 7110, 8220, 8310, 9110, 9130, 9180, 9410	<i>Asplenium adulterinum</i>	<i>Rhinolophus hipposideros, Myotis bechsteinii, M. emarginatus, M. myotis, Barbastella barbastellus</i>		according to the proposal of NFEP and INC (2003)
10	PL01	Góry i Pogórze Kaczawskie	42527.0	necessary to be added	6110, 6210, 6410, 6520, 8150, 8170, 8220, 8310, 9110, 9130, 9150, 9180, 91E0, 9110	<i>Cypripedium calceolus, Trichomanes speciosum, Gladiolus paluster, Asplenium adulterinum</i>	<i>Myotis bechsteinii, Myotis dasycneme, Myotis myotis, Barbastella barbastellus</i>		according to the proposal of NFEP and INC (2003) completed during the works on this list
11	PL01	Góry Kamiene	27496.7	necessary to be added	6520, 8150, 8220, 9180				prepared especially for this list.
12	PL01	Góry Sowie i Bardzkie	19775.3	necessary to be added	3260, 6110, 8220, 91E0, 9180		<i>Myotis bechsteinii, Myotis myotis, Barbastella barbastellus</i>		prepared especially for this list to replace the site that was previously proposed in NFEP and INC concept (2203) It includes also the island sites for bats, the building in Rościszów and underground galleries and Donjon for in Srebrna Góra.
13	PL01	Góry Stołowe	11004.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
14	PL01	Grądy w Dolinie Odry	8026.9	necessary to be added	3150, 3270, 6440, 91F0		<i>Gobio albipinnatus, Cerambyx cerdo, Maculinea nausithous, Maculinea teleius</i>		according to the proposal of NFEP and INC (2003)
15	PL01	Grodzryn i Homole k. Dusznik	253.2	necessary to be added	6210				prepared especially for this list.
16	PL01	Kamionki	0.1	in the governmental proposal (2004)					according to the governmental proposal (2004)

17	PL01	Karkonosze	5536,6 + 14964,7	in the governmental proposal (2004), but the borders' modification is needed.	6520, 7110, 7140, 9130, 91D0			It should be extended by the part of Góry Izerskie and Grzbiet Lasocki. Suggested change of name for the "Ostoja Karkonoska" site (the range of this site will be bigger than geographical area of Karkonosze Mountains)	according to the governmental proposal (2004) with the borders correction. The proposed extension of borders is especially elaborated for this list. In NFEP and INC proposal (2003) there is bigger site: "Karkonosze i Góry Izerskie"
18	PL01	Kopalnie w Złotym Stoku	0.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
19	PL01	Kościół w Konradowie	0.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
20	PL01	Łęgi Odrzańskie	18108.3	necessary to be added	3150, 3270, 6440, 91F0		<i>Gobio albipinnatus, Aspius aspius, Cerambyx cerdo, Maculinea nausithous, Maculinea teleius</i>		according to the proposal of NFEP and INC (2003)
21	PL01	Masyw Ślęży	5654.6	necessary to be added	6210, 6410, 7230, 8150, 8220, 9130	<i>Gladiolus paluster</i>	<i>Maculinea nausithous, Maculinea teleius</i>		according to the NFEP and INC proposal (2003) modifications made during this list elaboration (borders' correction and data completion)
22	PL01	Ostoja nad Baryczą	85571.2	necessary to be added	3130, 3150, 3270, 91F0				according to the proposal of NFEP and INC (2003)
23	PL01	Ostrzyca Proboszczowska	66.2	necessary to be added	8150, 8220, 9180				prepared especially for this list preparation
24	PL01	Panieńskie Skały	9.9	in the governmental proposal (2004)					according to the governmental proposal (2004)
25	PL01	Pasmo Krowiarki	4880.4	necessary to be added	6110, 6210, 7220, 8160, 8210, 8310, 9150	<i>Cypripedium calceolus</i>			according to the proposal of NFEP and INC (2003)

26	PL01	Piekielna Dolina koło Polanicy	110.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
27	PL01	Przełom Nysy k. Morzyszowa	279.5	necessary to be added	9180, 3260				prepared especially for this list preparation
28	PL01	Przełomy Pelcznicy pod Książem	242.3	necessary to be added	9180				according to the proposal of NFEP and INC (2003)
29	PL01	Puszcza Zgorzelecko-Osiecznicka	93991.0	necessary to be added	4010, 4030, 7150	<i>Luronium natans</i>	<i>Cerambyx cerdo,</i> <i>Lucanus cervus</i>		according to the proposal of NFEP and INC (2003) modified, completed during the elaboration of this list
30	PL01	Rudawy Janowickie	8298.2	in the governmental proposal (2004)					according to the governmental proposal (2004)
31	PL01	Skałki Stoleckie	2.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
32	PL01	Stawy Sobieszowskie	198.4	necessary to be added			<i>Osmoderma eremita</i>		prepared especially for this list preparation
33	PL01	Stawy w Borowej	174.6	necessary to be added		<i>Coleanthus subtilis</i>			prepared especially for this list preparation
34	PL01	Sztolnia w Młotach	0.1	necessary to be added			<i>Barbastella barbastellus</i>		prepared especially for this list preparation
35	PL01	Sztolnie w Leśnej	0.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
36	PL01	Torfowisko pod Zieleńcem	208.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
37	PL01	Wąwóz Złotego Potoku k. Złotego Stoku	176.6	necessary to be added	9180				according to the proposal of NFEP and INC (2003)

38	PL01	Wrzosowisko Przemkowskie	6606.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
39	PL01	Wzgórze Kielczyńskie	439.1	necessary to be added	8220	<i>Asplenium adulterinum</i>			according to the elaboration of INC (2003)
40	PL01	Żwirownia w Starej Olesznej	132.4	necessary to be added		<i>Luronium natans</i>			prepared especially for this list preparation
41	PL02	Bagienna Dolina Drwęcy	3147.4	necessary to be added			<i>Cottus gobio, Cobitis taenia, Salmo salar, Lampetra fluviatilis, Lampetra planeri, Misgurnus fossilis</i>		according to the proposal of NFEP and INC (2003)
42	PL02	Cyprianka	64.2	necessary to be added			<i>Phoxinus phoxinus</i>		according to the additional concept of INC (2003)
43	PL02	Cytadela Grudziądz	0.1	necessary to be added			<i>Barbastella barbastellus, Myotis myotis</i>		prepared especially for this list preparation
44	PL02	Dybowska Dolina Wisły	1314.0	necessary to be added	3150, 3270, 91E0		<i>Salmo salar, Gobio albipinnatus, Cobitis taeni</i>		according to the proposal of NFEP and INC (2003)
45	PL02	Forty w Toruniu	0.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
46	PL02	Jeziro Gopło	13659.7	necessary to be added	6440				according to the proposal of NFEP and INC (2003)
47	PL02	Nieszawska Dolina Wisły	3928.0	necessary to be added	3150, 3270, 91E0		<i>Lampetra fluviatilis</i>		according to the proposal of NFEP and INC (2003)
48	PL02	Ostoja Lidzbarska	8333.3	necessary to be added	3260	<i>Pulsatilla patens, Thesium ebracteatum</i>			prepared especially for this list in place of Górznieńsko-Lidzbarski Kompleks Leśny, site which was proposed previously by NFEP and INC
49	PL02	Solecka Dolina Wisły	7309.6	necessary to be added	3150, 3270, 91E0				according to the proposal of NFEP and INC (2003)
50	PL02	Włocławska Dolina Wisły	5787.1	necessary to be added	3150, 3270, 6210, 91E0				according to the proposal of NFEP and INC (2003)

51	PL02	Zamek Świecie	0.1	necessary to be added			<i>Barbastella barbastellus</i>		prepared especially for this list preparation
52	PL03	Bystrzyca Jakubowicka	293.7	necessary to be added			<i>Lycaena helle</i>		according to the proposal of NFEP and INC (2003)
53	PL03	Chmiel	25.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
54	PL03	Czarny Las	16.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
55	PL03	Debry	179.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
56	PL03	Dobryń	87.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
57	PL03	Dobużek	93.5	necessary to be added			<i>Echium russicum</i>		according to the additional INC elaboration (2003)
58	PL03	Dolina Środkowego Wieprza	1353.9	in the governmental proposal (2004)					according to the governmental proposal (2004)
59	PL03	Dolny Wieprz	6969.4	necessary to be added	3150, 3270, 6430, 91E0		<i>Marsilea quadrifolia</i>		according to the proposal of NFEP and INC (2003)
60	PL03	Dom Dziecka w Puławach	0.1	necessary to be added			<i>Myotis myotis</i>		prepared especially for this list.
61	PL03	Gliniska	34.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
62	PL03	Gościeradów	582.8	in the governmental proposal (2004)					according to the governmental proposal (2004)
63	PL03	Hubale	35.0	in the governmental proposal (2004)					according to the governmental proposal (2004)

64	PL03	Izbicki Przełom Wieprza	1545.9	necessary to be added	6210			<i>Colias myrmidone</i>		according to the proposal of NFEP and INC (2003)
65	PL03	Jezióra Uściwierskie	1956.2	in the governmental proposal (2004)						according to the governmental proposal (2004)
66	PL03	Kąty	16.9	in the governmental proposal (2004)						according to the governmental proposal (2004)
67	PL03	Krowie Bagno	477.6	in the governmental proposal (2004)						according to the governmental proposal (2004)
68	PL03	Lasy Sobiborskie	8262.7	necessary to be added		<i>Aldrovanda vesiculosa</i>	<i>Phoxinus phoxinus, Canis lupus, Emys orbicularis, Colias myrmidone, Euphydryas aurinia, Maculinea nausithous, Maculinea teleius</i>			according to the proposal of NFEP and INC (2003), modified during the work on this list and enlarged by key sites for <i>Emys orbicularis</i>
69	PL03	Liceum Ogólnokształcące w Opolu Lubelskim	0.1	necessary to be added				<i>Myotis myotis</i>		prepared especially for this list.
70	PL03	Olszanka	8.8	in the governmental proposal (2004)						according to the governmental proposal (2004)
71	PL03	Ostoja Parczewska	5795.4	necessary to be added				<i>Canis lupus, Emys orbicularis</i>		according to the proposal of NFEP and INC (2003)
72	PL03	Ostoja Poleska	10213.2	in the governmental proposal (2004)						according to the governmental proposal (2004)
73	PL03	Pastwiska nad Huczą	171.1	in the governmental proposal (2004)						according to the governmental proposal (2004)

74	PL03	Płaskowyż Natęczowski	1080.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
75	PL03	Poleska Dolina Bugu	8233.4	necessary to be added	3150, 3270, 91E0		<i>Cobitis taenia,</i> <i>Misgurnus fossilis,</i> <i>Colias myrmidone,</i> <i>Lycaena helle,</i> <i>Maculinea nausithous,</i> <i>Maculinea teleius</i>		according to the proposal of NFEP and INC (2003)
76	PL03	Popówka	53.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
77	PL03	Przełom Wisły w Małopolsce	10208.4	necessary to be added	3150, 3270, 6210, 91E0		<i>Emys orbicularis,</i> <i>Maculinea nausithous,</i> <i>Maculinea teleius</i>		according to the proposal of NFEP and INC (2003)
78	PL03	Roztocze Środkowe	8482.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
79	PL03	Stawska Góra	4.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
80	PL03	Suśle Wzgórza	27.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
81	PL03	Sztolnie w Senderkach	1.5	in the governmental proposal (2004)					according to the governmental proposal (2004)
82	PL03	Świdnik	127.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
83	PL03	Święty Roch	202.6	in the governmental proposal (2004)					according to the governmental proposal (2004)

84	PL03	Torfowiska Chełmskie	2033.5	in the governmental proposal (2004)					according to the governmental proposal (2004)
85	PL03	Torfowisko Sobowice	95.2	in the governmental proposal (2004)					according to the governmental proposal (2004)
86	PL03	Torfowisko węglanowe Śniatycze	14.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
87	PL03	Uroczyska Janowskich Lasów	4238.9	necessary to be added	91D0			<i>Canis lupus, Colias myrmidone, Maculinea nausithous, Maculinea teleius</i>	according to the proposal of NFEP and INC (2003)
88	PL03	Uroczyska Puszczy Solskiej	15344.9	necessary to be added	91D0			<i>Canis lupus</i>	according to the proposal of NFEP and INC (2003); includes also the part of site proposed by WWF PL(2004) - "Dolina Tanwi"
89	PL03	Wisła Środkowa	4020.6	necessary to be added	3150, 3270, 91E0				according to the proposal of NFEP and INC (2003)
90	PL03	Wodny Dół	186.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
91	PL03	Wygon Grabowiecki	6.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
92	PL03	Zachodniowolyńska Dolina Bugu	1682.5	necessary to be added	3150, 3270, 6210, 91E0	<i>Echum russicum</i>		<i>Misgurnus fossilis, Cobitis taenia, Rhodeus sericeus amarus, Aspius aspius, Spermophilus suslicus, Colias myrmidone, Maculinea nausithous, Maculinea teleius</i>	according to the proposal of NFEP and INC (2003)

93	PL03	Zarośle	379.9	in the governmental proposal (2004)					according to the governmental proposal (2004)
94	PL03	Żurawce	68.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
95	PL04	Buczyna Szprotawsko-Piotrowicka	1587.9	necessary to be added	9130		<i>Lucanus cervus</i>		according to the proposal of NFEP and INC (2003)
96	PL04	Buczyny Sulęcińskie Łagowsko	6368.1	necessary to be added	9110, 9130				according to the proposal of NFEP and INC (2003) which was corrected and completed during the preparation of this list
97	PL04	Dolina Ilanki		necessary to be added	7230		<i>Emys orbicularis</i>		according to the proposal of NFEP and INC (2003)
98	PL04	Dolina Leniwej Obry	8072.8	in the governmental proposal (2004)					according to the governmental proposal (2004)
99	PL04	Dolina Pliszki	3216.1	necessary to be added	7230		<i>Lucanus cervus</i>		according to the proposal of NFEP and INC (2003)
100	PL04	Jeziora Pszczewskie i Dolina Obry	15294.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
101	PL04	Kargowskie Zakola Odry	3038.1	necessary to be added	3150, 3270, 6440				according to the proposal of NFEP and INC (2003)
102	PL04	Krośnieńska Dolina Odry	17073.0	necessary to be added	3150, 3270, 6440				according to the proposal of NFEP and INC (2003)
103	PL04	Łęgi Słubickie	709.7	necessary to be added	91F0				according to the proposal of NFEP and INC (2003)

104	PL04	Nietoperek	1474,8 + 4930,9	in the governmental proposal (2004), but the borders' modification is needed.				The existing borders need to be corrected to protect the important winter shelters for bats	according to the governmental proposal (2004). The necessity of correction has been noticed during the preparation of this list.
105	PL04	Nowosolska Dolina Odry	5935.0	necessary to be added	3150, 3270, 91F0				according to the proposal of NFEP and INC (2003)
106	PL04	Puszcza Barlinecka	23627.3	necessary to be added	3410, 9110		<i>Emys orbicularis</i>		according to the proposal of NFEP and INC (2003)
107	PL04	Torfowisko Chłopiny	571.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
108	PL04	Torfowisko Młodno	191.9	in the governmental proposal (2004)					according to the governmental proposal (2004)
109	PL04	Ujście Ilanki	788.6	necessary to be added	91E0		<i>Emys orbicularis</i>		according to the proposal of NFEP and INC (2003)
110	PL04	Ujście Noteci	3648.3	in the governmental proposal (2004)					according to the governmental proposal (2004)
111	PL04	Ujście Warty	32894.4	necessary to be added	3150, 3270, 6210, 6430		<i>Myotis bechsteinii</i> , <i>Myotis myotis</i> , <i>Barbastella barbastellus</i> , <i>Gobio albipinnatus</i> , <i>Misgurnus fossilis</i>		according to the proposal of NFEP and INC (2003) and completed by the island site for bats - Fort w Sarbinowie; completion has been proposed during the works on this list
112	PL05	Dąbrowa Grotnicka	108.5	in the governmental proposal (2004)					according to the governmental proposal (2004)
113	PL05	Dąbrowa Świetlista w Pernie	40.1	in the governmental proposal (2004)					according to the governmental proposal (2004)

114	PL05	Dolina Środkowej Pilicy	3627.4	necessary to be added	91E0					according to the WWF proposal (2004)
115	PL05	Lasy Spalskie	1970.7	in the governmental proposal (2004)						according to the governmental proposal (2004)
116	PL05	Łąka w Bęczkowicach	24.6	in the governmental proposal (2004)						according to the governmental proposal (2004)
117	PL05	Niebieskie Źródła	28.8	in the governmental proposal (2004)						according to the governmental proposal (2004)
118	PL05	Pradolina Bzury-Neru	17884.0	in the governmental proposal (2004)						according to the governmental proposal (2004)
119	PL05	Załęczański Łuk Warty	9055.2	in the governmental proposal (2004)						according to the governmental proposal (2004)
120	PL06	Babia Góra	3442.4	in the governmental proposal (2004)						according to the governmental proposal (2004)
121	PL06	Czarna Orawa	37.1	in the governmental proposal (2004)						according to the governmental proposal (2004)
122	PL06	Diable Skąły	16,1 0,1	in the governmental proposal (2004), but the borders' modification is needed.			<i>Rhinolophus hipposideros, Myotis myotis</i>	The "Kościół w Bukowcu" site needs to be added and the name should be changed for "Ostoje Nietoperzy Okolic Bukowca".		according to the governmental proposal (2004) with the correction of borders and name, proposed in the process of this list preparation. The "Kościół w Bukowcu" site is included in this proposal.

123	PL06	Dolina Prądnika	2146.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
124	PL06	Dolinki Jurajskie	916.2	in the governmental proposal (2004)					according to the governmental proposal (2004)
125	PL06	Jaroszowiec	537.8	in the governmental proposal (2004)					according to the governmental proposal (2004)
126	PL06	Kalina-Lisiniec	3.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
127	PL06	Klasztor w Czernej	0.1	necessary to be added			<i>Rhinolophus hipposideros, Myotis emarginatus, M. myotis</i>		prepared especially for this list.
128	PL06	Koło Grobli	623.2	in the governmental proposal (2004)					according to the governmental proposal (2004)
129	PL06	Kostrza	38.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
130	PL06	Lipówka	25.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
131	PL06	Michałowiec	12.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
132	PL06	Na Policy	72.6	in the governmental proposal (2004)					according to the governmental proposal (2004)

133	PL06	Ostoja Gorczańska	18445.0	necessary to be added	3220, 3230, 6510, 7230, 8310, 9410		<i>Ursus arctos, Lynx lynx, Canis lupus, Triturus montandoni</i>		according to the proposal of NFEP and INC (2003)
134	PL06	Ostoja Popradzka	54043.3	necessary to be added	3220, 3230, 6510, 7230, 8310, 9110, 9130, 9170		<i>Ursus arctos, Lynx lynx, Canis lupus, Lycaena helle, Rhinolophus hipposideros, Myotis myotis</i>		according to the proposal of NFEP and INC (2003) corrected during this list elaboration (addition of the bats' sites in Łabowa and Nawojowa). The previously elaborated sites are included in this list: Dwór w Nawojowej, Dawna cerkiew w Wierchomli Wielkiej, kościół w Łabowej, Szkoła w Wojkowej, cerkiew w Krynicy, kościół w Leluchowie.
135	PL06	Ostoje Nietoperzy Beskidu Wyspowego	0.1	necessary to be added			<i>Rhinolophus hipposideros, R. ferrumequinum, Myotis bechsteinii, M. myotis</i>		proposed especially for this list. The following sites are included: Jaskinia Zbójcka w Łopieniu, Opactwo Cystersów w Szczyrzycu, Kościół w Szyku, Kościół w Węglówce, kościół w Łącku
136	PL06	Ostoje Nietoperzy Powiatu Gorlickiego	0.1	necessary to be added			<i>Rhinolophus hipposideros, Myotis myotis</i>		prepared especially for this list. Following sites are included: Cerkiew w Śnietnicy, cerkiew w Łosiach koło Ropy
137	PL06	Pieniny	2346,0 + 2264,5	in the governmental proposal (2004), but the borders' modification is needed.	8210		<i>Rhinolophus hipposideros</i>	The site extention by "Małe Pieniny" area. The island sites for bats should be added - two in Szczawnica and one in Jaworki.	according to the governmental proposal (2004) with the correction of borders. The following previously proposed sites are included: Kościół w Szczawnicy, Willa Maria w Szczawnicy, Kościół w Jaworkach. Borders' extension has been proposed as the result of this list elaboration.
138	PL06	Pustynia Błędowska	2006.8	in the governmental proposal (2004)					according to the governmental proposal (2004)

139	PL06	Sterczów-Ścianka	6.3	in the governmental proposal (2004)					according to the governmental proposal (2004)
140	PL06	Tatry	21207.2	in the governmental proposal (2004)					according to the governmental proposal (2004)
141	PL06	Torfowiska Orawsko-Nowotarskie	7363.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
142	PL06	Wały	5,8 3,2	+ in the governmental proposal (2004), but the borders' modification is needed.		<i>Carlina onopordifolia</i>		The borders should be corrected to extend the site area to 9 ha.	according to the governmental proposal (2004), the site has been proposed during this list elaboration and extended by the proposed nature reserve
143	PL07	Bagno Całowanie	3110.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
144	PL07	Baranie Góry	176.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
145	PL07	Dąbrowa Radziejowska	51.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
146	PL07	Dąbrowy Seroczyńskie	550.2	in the governmental proposal (2004)					according to the governmental proposal (2004)

147	PL07	Dolina Pilicy	32203.0	necessary to be added	3150, 3270, 6430		<i>Lampetra planeri, Cobitis taenia, Eudontomyzon mariae, Misgurnus fossilis, Rhodeus sericeus amarus, Aspius aspius, Anisus vorticulus</i>		according to the proposal of NFEP and INC (2003) modified and extended during this list elaboration, proposed sites by WWF PL (2004) - "Dolina Drzewiczki" and "Łąki Cieblowickie" have been included
148	PL07	Dolina Wkry	23.8	in the governmental proposal (2004)					according to the governmental proposal (2004)
149	PL07	Dolina Zwoleńki	1934.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
150	PL07	Forty Modlińskie	0.1	necessary to be added			<i>Barbastella barbastellus</i>		prepared especially for this list.
151	PL07	Kantor Stary	95.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
152	PL07	Krogulec	110.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
153	PL07	Lasy Gostynińsko-Włocławskie	36584.5	necessary to be added			<i>Lynx lynx</i>		according to the proposal of NFEP and INC (2003)
154	PL07	Łęgi Czarnej Strugi	39.5	in the governmental proposal (2004)					according to the governmental proposal (2004)
155	PL07	Olszyny Rumockie	149.5	in the governmental proposal (2004)					according to the governmental proposal (2004)
156	PL07	Ostoja Nadbużańska	49570.9	in the governmental proposal (2004)					according to the governmental proposal (2004)

157	PL07	Pakosław	1334.0	necessary to be added		<i>Ligularia sibirica</i>			according to the proposal of NFEP and INC (2003)
158	PL07	Puszcza Kampinoska	37469.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
159	PL07	Puszcza Kozienicka	29566.2	necessary to be added		<i>Pulsatilla patens</i>	<i>Emys orbicularis,</i> <i>Osmoderma eremita,</i> <i>Cucujus cinnaberinus</i>		according to the proposal of NFEP and INC (2003)
160	PL07	Sikórz	142.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
161	PL07	Wydmy Lucynowsko-Mostowieckie	435.2	in the governmental proposal (2004)					according to the governmental proposal (2004)
162	PL08	Forty Nyskie	49.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
163	PL08	Góra Św. Anny	5174.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
164	PL08	Góry Opawskie	4424.3	necessary to be added	9110, 9130				according to the proposal of NFEP and INC (2003)
165	PL08	Graniczny Meander Odry	165.6	necessary to be added	3150, 3270				according to the proposal of NFEP and INC (2003)
166	PL08	Kamień Śląski	231.7	necessary to be added			<i>Spermophilus citellus</i>		prepared especially for this list.
167	PL08	Lasy Barucickie	6472.7	necessary to be added			<i>Lucanus cervus</i>		according to the proposal of NFEP and INC (2003)
168	PL08	Opolska Dolina Odry	3739.8	necessary to be added	3150, 3270				according to the proposal of NFEP and INC (2003). This site was previously proposed (2001) by BIOS Society from Opole as the "Dolina Odry Opolskiej" site of slightly bigger area

169	PL08	Ostoja Sławniowicko-Burgrabicka	0.1	necessary to be added			<i>Rhinolophus hipposideros, Myotis emarginatus, M. myotis</i>		prepared especially for this list. The following previously proposed sites are included in this site: "Ostoja Nietoperzy w Sławniowicach" and "kościół w Burgrabicach"
170	PL09	Bieszczady	107317.9	in the governmental proposal (2004)					according to the governmental proposal (2004)
171	PL09	Fort Salis Soglio	0.1	necessary to be added			<i>Barbastella barbastellus</i>		according to the PTOP "Salamandra" (2003) proposal
172	PL09	Góry Słonne	56256.0	necessary to be added	3220	<i>Cypripedium calceolus</i>	<i>Canis lupus, Triturus montandoni</i>		according to the proposal of NFEP and INC (2003)
173	PL09	Klasztor w Horyńcu Zdroju	0.1	necessary to be added			<i>Myotis myotis</i>		prepared especially for this list.
174	PL09	Kołacznia	0.1	necessary to be added		<i>Rhododendron luteum</i>			according to the proposal of NFEP and INC (2003)
175	PL09	Ostoja Jaślińska	29909.3	necessary to be added	6510		<i>Ursus arctos, Lynx lynx, Canis lupus, Triturus montandoni, Rhinolophus hipposideros, Myotis bechsteinii, M. emarginatus, M. myotis</i>		according to the proposal of NFEP and INC (2003), corrected, completed and extended during the elaboration of this list (the site has been extended by areas important for meadows protection and by sites important for bats' protection: Góra Cergowa, kościół k. Pustelni w Trzciannej, Kościół w Rymanowie)
176	PL09	Ostoja Magurska	19439,0 + 11,91	in the governmental proposal (2004), but the borders' modification is needed.			<i>Rhinolophus hipposideros, Myotis bechsteinii, M. emarginatus, M. myotis</i>	The island bats' shelter in Bednarka village and "Rezerwat Kornuty" should be added.	according to the governmental proposal (2004) extended by the addition of the "Rezerwat Kornuty" site and the "kościół w Bednarce" site; the borders have been corrected during the works on this list

177	PL09	Ostoja Przemyska	42173.1	necessary to be added	9130			<i>Barbus meridionalis, Cottus gobio, Gobio kessleri, Lampetra planeri, Aspius aspius, Canis lupus, Lynx lynx</i>		according to the proposal of NFEP and INC (2003) corrected during the works on this list (completed by the important part of San river between the Krzemienna i Medyka towns)
178	PL09	Sztolnie w Węglówce	0.1	necessary to be added				<i>Myotis bechsteinii, M. myotis, Barbastella barbastellus</i>		according to PTOP "Salamandra" (2003) proposal
179	PL09	Twierdza Terespol	0.1	necessary to be added				<i>Barbastella barbastellus</i>		prepared especially for this list preparation
180	PL0A	Dolina Biebrzy	124104.6	in the governmental proposal (2004)						according to the governmental proposal (2004)
181	PL0A	Dolina Górnej Narwi	15910.0	in the governmental proposal (2004)						according to the governmental proposal (2004)
182	PL0A	Jeleniewo	0.1	in the governmental proposal (2004)						according to the governmental proposal (2004)
183	PL0A	Jelonka	1581.7	necessary to be added				<i>Polyommatus eroides</i>		according to the additional elaboration of INC (2003)
184	PL0A	Narwiańskie Bagna	7350.0	in the governmental proposal (2004)						according to the governmental proposal (2004)
185	PL0A	Ostoja Augustowska	105241.8	necessary to be added	3160, 3260, 7210, 7230, 91D0	<i>Aldrovanda vesiculosa, Liparis loeselii, Saxifraga hirculus, Pulsatilla patens</i>	<i>Lynx lynx, Canis lupus, Lycaena helle</i>			according to the proposal of NFEP and INC (2003), corrected, extended and completed during this list elaboration (borders' modification, data completion)

186	PL0A	Ostoja Knyszyńska	13577.2	necessary to be added	91D0	<i>Pulsatilla patens</i>	<i>Eudontomyzon mariae</i> , <i>Bison bonasus</i> , <i>Lynx lynx</i> , <i>Canis lupus</i> , <i>Lycaena helle</i> , <i>Colias myrmidone</i> , <i>Oxyporus mannerheimii</i> , <i>Polyommatus eroides</i>		according to the proposal of NFEP and INC (2003), corrected, extended and completed during the work on this list (borders' modification, data completion). It includes also the "Grzybowce-Narejki" site previously proposed for the butterflies' protecton.
187	PL0A	Ostoja Suwalska	6284.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
188	PL0A	Ostoja Wigierska	15085.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
189	PL0A	Pojezierze Sejneńskie	7456.9	necessary to be added	3140, 3260, 7110, 7210	<i>Liparis loeseli</i> , <i>Saxifraga hirculus</i> , <i>ALdrovanda vesiculosa</i>			prepared especially for this list preparation; the peat bog Bobrowe Bagno is included in this site
190	PL0A	Przełomowa Dolina Narwi	6988.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
191	PL0A	Puszcza Białowieska	62942.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
192	PL0A	Schrony Brzeskiego Rejonu Umocnionego	0.1	necessary to be added			<i>Barbastella barbastellus</i>		elaborated especially for this list, the following previously proposed sites are include in this site: "Punkty Oporu Anusin" and "Moszczona"
193	PL0B	Bagna Izbickie	807.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
194	PL0B	Białe Błoto	10.5	in the governmental proposal (2004)					according to the governmental proposal (2004)

195	PL0B	Białogóra	1019.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
196	PL0B	Bór Chrobotkowy	41.5	in the governmental proposal (2004)					according to the governmental proposal (2004)
197	PL0B	Bytowskie jeziora lobeliowe	2625.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
198	PL0B	Dobromyśl	383.6	necessary to be added			<i>Phoxinus phoxinus</i>		according to the additional elaboration of INC (2003)
199	PL0B	Dolina Górnej Łeby	2465.9	in the governmental proposal (2004)					according to the governmental proposal (2004)
200	PL0B	Dolina Kłodawy	10.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
201	PL0B	Dolina Łupawy	5963.8	necessary to be added	91E0				according to WWF proposal (2004)
202	PL0B	Dolina Reknicy	66.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
203	PL0B	Dolina Słupi	14839.7	necessary to be added			<i>Cobitis taenia, Cottus gobio, Lamperta planeri, Lamperta fluviatilis, Salmo salar, Rhodeus sericeus amarus</i>		according to the first concept of NFEP and INC developed and completed by WWF PL (2004). It includes the sites previously proposed as: "Dolina Brodka", "Herta", "Dolina Słupi k. Soszycy"
204	PL0B	Dolina Stropnej	944.0	necessary to be added	7230				according to The Naturalist Club proposal, more elaborated in the WWF proposal (2004)
205	PL0B	Dolina Środkowej Więcisy	362.8	in the governmental proposal (2004)					according to the governmental proposal (2004)

206	PL0B	Dolina Wieprzy i Studnicy	13815.2	necessary to be added	3260, 7220, 7230		<i>Cobitis taenia, Cottus gobio, Lamperta planeri, Lamperta fluviatilis, Salmo salar, Rhodeus sericeus amarus</i>		according to The Naturalist Club proposal, more elaborated in the WWF proposal (2004)
207	PL0B	Dolna Wisła	9181.0	necessary to be added	3150, 3270, 6210, 91E0				according to the proposal of NFEP and INC (2003)
208	PL0B	Hopowo	3.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
209	PL0B	Jar Rzeki Raduni	84.2	in the governmental proposal (2004)					according to the governmental proposal (2004)
210	PL0B	Jeziora Raduńsko-Ostrzyckie	5876.4	necessary to be added	9150	<i>Cypridium calceolus</i>			according to the proposal of NFEP and INC (2003)
211	PL0B	Jeziora Wdzydzkie	12919.1	necessary to be added	3110, 3160	<i>Luronium natans</i>			according to the proposal of NFEP and INC (2003)
212	PL0B	Jeziorka Chośnickie	193.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
213	PL0B	Jeziro Bobęcińskie	3375.1	necessary to be added	3110	<i>Luronium natans</i>			according to Naturalist Club proposal (2003)
214	PL0B	Jeziro Krasne	94.7	necessary to be added	3110	<i>Luronium natans</i>			according to the proposal of NFEP and INC (2003)
215	PL0B	Jeziro Piasek	63.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
216	PL0B	Kurze Grzędy	1478.5	in the governmental proposal (2004)					according to the governmental proposal (2004)
217	PL0B	Lubnia	0.1	in the governmental proposal (2004)					according to the governmental proposal (2004)

218	PL0B	Łebskie Bagna	771.1	necessary to be added	91D0, 7120				prepared especially for this list
219	PL0B	Mawra-Bagno Biała	300.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
220	PL0B	Mechowiska Sulęczyńskie	64.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
221	PL0B	Miasteczko Lobeliowe Jeziora	1363.5	necessary to be added	3110				according to the Naturalist Club proposal (2003)
222	PL0B	Mierzeja Sarbska	1086,6 + 757,9	in the governmental proposal (2004), but the borders' modification is needed.	1150			Sarbsko Lake should be included in this site.	according to the governmental proposal (2004) with the borders correction The enlargement of this site has been elaborated for the purpose of this list
223	PL0B	Młosino	729.6	necessary to be added	3110				according to the proposal of NFEP and INC (2003)
224	PL0B	Orle	257.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
225	PL0B	Paraszyńskie Buczyny	3125.8	necessary to be added	9110, 9130				according to the proposal of NFEP and INC (2003)
226	PL0B	Pełcznica	271.8	in the governmental proposal (2004)					according to the governmental proposal (2004)
227	PL0B	Piaśnickie Łąki	79,3 + 0,5	in the governmental proposal (2004), but the borders' modification is needed.	1130			The site should be enlarged by the river Piaśnica estuary	according to the governmental proposal (2004) with the borders' change. The enlargement of this site was proposed during the works on this list

228	PL0B	Pływające Wyspy pod Rekowem	81.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
229	PL0B	Pobrzeże Słowińskie	18618 + 11176,3	in the governmental proposal (2004), but the borders' modification is needed.	1130		<i>Phocoena phocoena</i>	The site should be enlarged by the coastal waters and Leba and Łupawa estuaries.	according to the governmental proposal (2004) with the borders' correction proposed during the work on this list
230	PL0B	Przymorskie Błota	1590.9	in the governmental proposal (2004)					according to the governmental proposal (2004)
231	PL0B	Przywidz	5.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
232	PL0B	Sandr Brdy	6837.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
233	PL0B	Staniszewskie Błoto	853.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
234	PL0B	Studzienickie Torfowiska	190.2	in the governmental proposal (2004)					according to the governmental proposal (2004)
235	PL0B	Trzy Młyny	774.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
236	PL0B	Twierdza Wisłoujście	16.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
237	PL0B	Ujście Wisły	936.3	necessary to be added	1130				prepared especially for this list preparation

238	PL0B	Waćmierz	23.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
239	PL0B	Zatoka Pucka i Półwysep Helski	26484,8 + 10527,7	in the governmental proposal (2004), but the borders modification os needed			<i>Phocoena phocoena</i>	The site should be extended by the water area to the South from the Hel Peninsula.	according to the governmental proposal (2004) with the borders' change during the works on this list
240	PL0C	Beskid Śląski	38800.2	necessary to be added	9410	<i>Aconitum firmum subsp. moravicum</i>	<i>Barbus meridionalis, Canis lupus</i>		according to the proposal of NFEP and INC (2003)
241	PL0C	Beskid Żywiecki	35637.1	necessary to be added	3220, 4070, 9140, 8310, 9180	<i>Aconitum firmum subsp. moravicum, Cypripedium calceolus</i>	<i>Ursus arctos, Lynx lynx, Canis lupus, Microtus tatricus, Triturus montandoni</i>		according to the proposal of NFEP and INC (2003) enlarged by the Grojec Mountain
242	PL0C	Cieszyńskie Źródła Tufowe	268.9	in the governmental proposal (2004)					according to the governmental proposal (2004)
243	PL0C	Kościół w Górkach Wielkich	0.1	necessary to be added			<i>Rhinolophus hipposideros, Myotis myotis</i>		according to "Salamandra" proposal (2003)
244	PL0C	Kościół w Radziechowach	0.1	necessary to be added			<i>Rhinolophus hipposideros</i>		according to "Salamandra" proposal (2003)
245	PL0C	Las k. Tworkowa	125.9	necessary to be added	91F0				proposed by the Society BIOS in 2001
246	PL0C	Madahora	71.8	in the governmental proposal (2004)					according to the governmental proposal (2004)
247	PL0C	Młyn w Pierścicu	0.1	necessary to be added			<i>Rhinolophus hipposideros</i>		according to "Salamandra" proposal (2003)
248	PL0C	Ostoja Olsztyńsko-Mirowska	2290.1	necessary to be added	6210, 8210, 8310, 9150	<i>Galium cracoviense</i>	<i>Rhinolophus hipposideros, Myotis dasycneme, M. myotis, Barbastella barbastellus, Maculinea teleius</i>		according to the proposal of NFEP and INC (2003) , corrected and complemented during the elaboration of this list (enlargement by Zielona Góra site)

249	PL0C	Ostoja Śródkowojurajska	5643.6	necessary to be added	6210, 8310, 9180	<i>Cochlearia polonica</i>	<i>Rhinolophus hipposideros, Myotis dasycneme, M. myotis, Barbastella barbastellus, Colias myrmidone, Maculinea teleius</i>		according to the proposal of NFEP and INC (2003)
250	PL0C	Ostoja Złotopotocka	4931.1	necessary to be added	8210, 9130, 9150		<i>Rhinolophus hipposideros, Myotis bechsteinii, M. emarginatus, M. dasycneme, M. myotis</i>		according to the proposal of NFEP and INC (2003)
251	PL0C	Podziemia Tarnogórsko-Bytomskie	3401.2	in the governmental proposal (2004)					according to the governmental proposal (2004)
252	PL0C	Stawy Łęczok	583.1	necessary to be added	3130		<i>Misgurnus fossilis</i>		according to the proposal of NFEP and INC (2003)
253	PL0C	Suchy Młyn	531.1	necessary to be added		<i>Ligularia sibirica</i>			according to the proposal of NFEP and INC (2003)
254	PL0C	Szachownica	12.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
255	PL0D	Dolina Krasnej	1732.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
256	PL0D	Lasy Cisowsko-Orłowińskie	16563.2	necessary to be added	9130				according to the proposal of NFEP and INC (2003)
257	PL0D	Lasy Suchedniowskie	19527.9	necessary to be added	9110, 9130				according to the proposal of NFEP and INC (2003)
258	PL0D	Łysogóry	5592.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
259	PL0D	Ostoja Nidziańska	30633.9	in the governmental proposal (2004)					according to the governmental proposal (2004)

260	PL0D	Ostoja Przedborska	11568.8	in the governmental proposal (2004)					according to the governmental proposal (2004)
261	PL0D	Wzgórza Kieleckie Chęcińsko-	8208.5	necessary to be added	8310, 9150				according to the proposal of NFEP and INC (2003) completed by inclusion of several caves: Jaskinia Jaworznicka-Chelosiowa Jama site
262	PL0E	Bieńkowo	110.9	necessary to be added	91D0				according to WWF PL proposal (2004)
263	PL0E	Budwity	443.5	necessary to be added	7110, 91D0				according to WWF PL proposal (2004)
264	PL0E	Dolina Drwęcy	2369,6 + 52,9	in the governmental proposal (2004), but the change of borders is necessary.	3110			The borders' correction is necessary to include the Czarne lake.	according to the governmental proposal (2004) with the modification of borders
265	PL0E	Dolina Rzeki Wel k. Kopaniarzy	181.8	necessary to be added	3260, 7230	<i>Saxifraga hirculus</i>			prepared especially for this list. In concept of NFEP and INC it was the part of the bigger proposed site "Zakole Rzeki Wel"
266	PL0E	Gązwa	457.7	necessary to be added	7110, 91D0				according to WWF PL proposal (2004)
267	PL0E	Gierłoż	0.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
268	PL0E	Jezioro Drużno	3148.5	in the governmental proposal (2004)					according to the governmental proposal (2004)
269	PL0E	Jezioro Karaś	815.5	in the governmental proposal (2004)					according to the governmental proposal (2004)

270	PL0E	Mamerki	0.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
271	PL0E	Nowa Wieś	167.5	necessary to be added	91D0				according to WWF PL proposal (2004)
272	PL0E	Ostoja Borecka	25291.4	necessary to be added	9170		<i>Lynx lynx, Canis lupus, Bison bonasus</i>		according to the proposal of NFEP and INC (2003)
273	PL0E	Ostoja Napiwodzko-Ramucka	19914.8	necessary to be added			<i>Canis lupus, Emys orbicularis</i>		according to the proposal of NFEP and INC (2003) completed by Torfowisko Sołtysek site elaborated by WWF PL (2004)
274	PL0E	Ostoja Piska	52530.5	necessary to be added			<i>Gobio albipinnatus, Canis lupus, Lynx lynx, Emys orbicularis</i>		according to the proposal of NFEP and INC (2003) enlarged by Dolina Pisy
275	PL0E	Puszcza Romincka	14620.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
276	PL0E	Rzeka Pasłęka	6233.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
277	PL0E	Wysoczyzna Elbląska	5219.5	necessary to be added	9130, 91E0				according to the proposal of NFEP and INC (2003)
278	PL0E	Zalew Wiślany i Mierzeja Wiślana	40729.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
279	PL0F	Biedrusko	10245.5	in the governmental proposal (2004)					according to the governmental proposal (2004)
280	PL0F	Dąbrowy Krotoszyńskie	37835.8	in the governmental proposal (2004)					according to the governmental proposal (2004)

281	PL0F	Dąbrowy Obrzyckie	960.9	in the governmental proposal (2004)					according to the governmental proposal (2004)
282	PL0F	Dolina Noteci	47658,0 + 2893,9	in the governmental proposal (2004), lecz konieczna zmiana granic	6210			The site should be enlarged by the northern slope of the valley with dry grasslands and forest and dry grasslands complex in the area of Góra, Pianówka i Goraja ("Morena Czarnkowska").	according to the governmental proposal (2004) with the borders' correction which is proposed in this list. The site "Morena Czarnkowska", proposed by the Naturalist Club in 2003 ,has been included in this site.
283	PL0F	Dolina Welny	2082.4	necessary to be added			<i>Cobitis taenia, Misgurnus fossilis, Cottus gabis, Rhodeus sericeus amarus, Salmo salar</i>		according to WWF PL proposal (2004)
284	PL0F	Fortyfikacje w Poznaniu	0.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
285	PL0F	Jezioro Brenno	83.7	necessary to be added		<i>Apium repens</i>			prepared especially for this list.
286	PL0F	Jezioro Kubek	986.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
287	PL0F	Jezioro Zgierzynieckie	544.8	in the governmental proposal (2004)					according to the governmental proposal (2004)
288	PL0F	Kopanki	0,1	in the governmental proposal (2004), lecz konieczna zmiana granic				The localisation of the site on the map from governmental proposal needs to be corrected.	according to the governmental proposal (2004). The necessity of the borders' correction has occurred during the works on this list.
289	PL0F	Lasy Czeszewskie Żerkowsko-	10131.2	necessary to be added	3150, 3270, 91F0		<i>Cerambyx cerdo</i>		according to the proposal of NFEP and INC (2003)

290	PL0F	Ostoja Nadwarciańska	26971.2	in the governmental proposal (2004)					according to the governmental proposal (2004)
291	PL0F	Ostoja Wielkopolska	10048.4	in the governmental proposal (2004)					according to the governmental proposal (2004)
292	PL0F	Pojezierze Gnieźnieńskie	32342.6	necessary to be added	3140	<i>Apium repens, Liparis loeseli</i>			according to the proposal of NFEP and INC (2003)
293	PL0F	Puszcza Bieniszewska	952.5	in the governmental proposal (2004)					according to the governmental proposal (2004)
294	PL0F	Rogalińska Dolina Warty	13043.5	in the governmental proposal (2004)					according to the governmental proposal (2004)
295	PL0F	Sieraków	0,1	in the governmental proposal (2004), but the borders' correction is needed.				The localization of the site on the map from governmental proposal needs to be corrected.	according to the governmental proposal (2004). The necessity of the borders' correction has been noticed during the works on this list.
296	PL0F	Torfowisko Rzezińskie	1862.2	necessary to be added	7230				according to the proposal of NFEP and INC (2003)
297	PL0F	Wrzosowiska Bornego-Sulinowa i Okonka	6499.6	necessary to be added	4030	<i>Dytiscus latissimus</i>			prepared especially for this list to replace the following sites: Dolina Płytnicy (NFOŚ & IOP 2003), Dolina Piławy (NFEP & INC 2003), Wrzosowiska Bornego Sulinowa i Okonka (The Naturalist Club 2003)

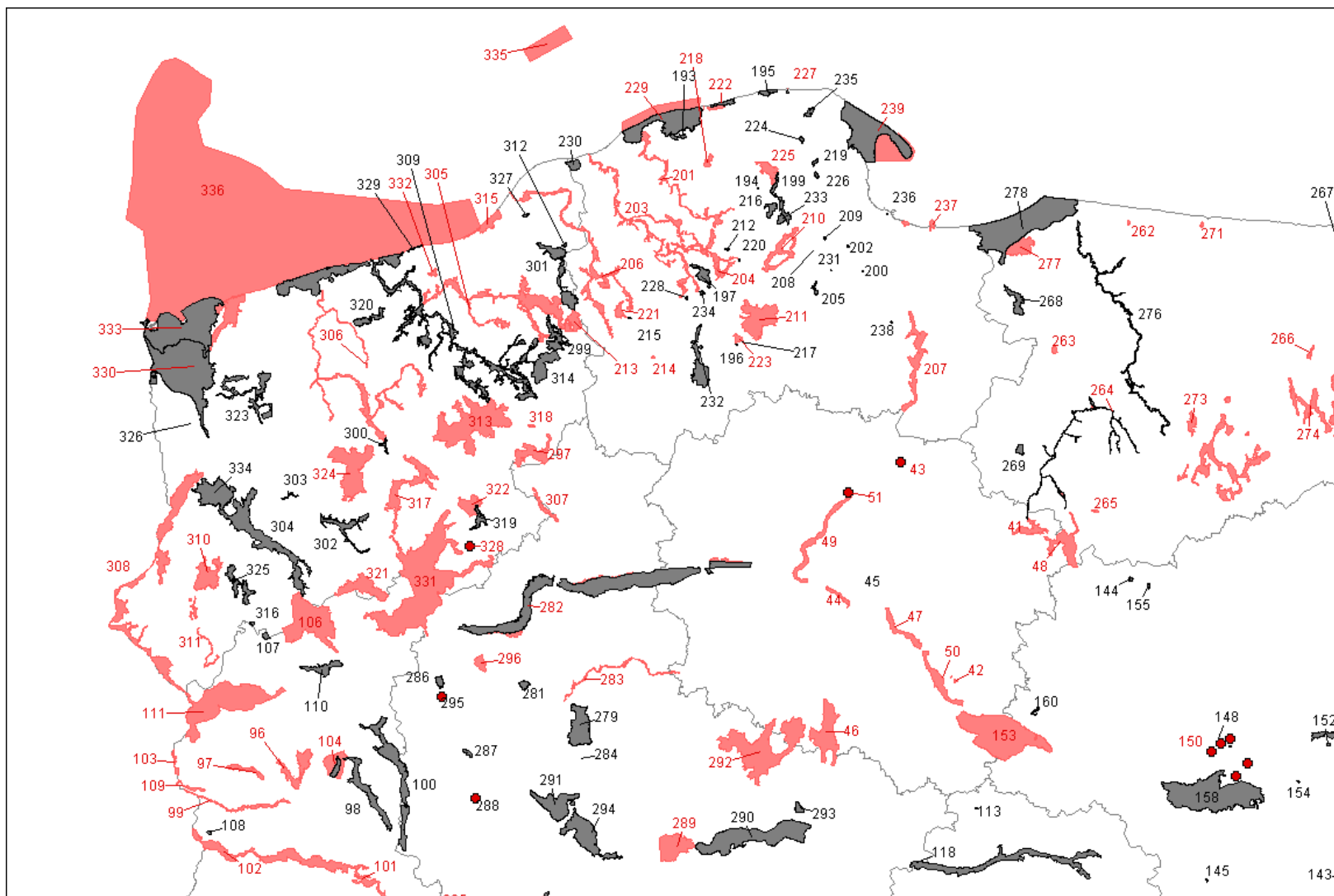
298	PL0F	Zachodnie Krzywińskie Pojezierze	4776,19 + 942,5	in the governmental proposal (2004), but the borders' modification is necessary			<i>Emys orbicularis</i>	The site should be extended by the adjacent area from the western side nearby Drzeczkowo - the key are for the <i>Emys orbicularis</i> protection.	according to the governmental proposal (2004) with the borders' modification that has been proposed during the work on this list.
299	PL0G	Bobolickie Jeziora Lobeliowe	4424.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
300	PL0G	Brzeźnicka Węgorza	433.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
301	PL0G	Dolina Grabowej	8030.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
302	PL0G	Dolina Iny koło Recza	4503.2	in the governmental proposal (2004)					according to the governmental proposal (2004)
303	PL0G	Dolina Krąpieli	229.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
304	PL0G	Dolina Płoni i Jezioro Miedwie	21253.9	in the governmental proposal (2004)					according to the governmental proposal (2004)
305	PL0G	Dolina Radwi, Chotli i Chocieli	21162.6	necessary to be added	7220, 7230, 9250	<i>Cypripedium calceolus, Saxifraga hirculus</i>			according to the proposal of NFEP and INC (2003) corrected and completed in the WWF proposal (2004)
306	PL0G	Dolina Regi	12792.9	necessary to be added			<i>Cobitis taenia, Cottus gobio, Lamperta planeri, Lamperta fluviatilis, Salmo salar, Rhodeus sericeus amarus</i>		according to the WWF proposal (2004)

307	PL0G	Dolina Rurzycy	1715.3	necessary to be added	3260, 7220, 7230				prepared especially for this list to replace previously proposed site in NFEP and INC concept "Lasy Waleckie"
308	PL0G	Dolina Odra	29552.7	necessary to be added	3150, 3270, 6210, 91i0			<i>Lampetra planneri,</i> <i>Misgurnus fossilis,</i> <i>Anisus vorticulus</i>	according to the proposal of NFEP and INC (2003) modified during the elaboration of this list by the inclusion of "Rezerwat Bielinek" site. It has been also elaborated by WWF (2004) but within different borders.
309	PL0G	Dorzecze Parsęty	28010.8	in the governmental proposal (2004)					according to the governmental proposal (2004)
310	PL0G	Dziczy Las i Dolina Tywy	7805.1	necessary to be added	9130, 91E0				according to the proposal of NFEP and INC (2003)
311	PL0G	Gogolice - Kosa	1277.8	necessary to be added				<i>Emys orbicularis</i>	prepared especially for this list; it includes the fragment of the previously proposed site "Lasy Witnicko-Dębnieńskie" (NFEP & INC 2003)
312	PL0G	Janiewickie Bagno	162.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
313	PL0G	Jeziora Czaploneckie	31497.6	necessary to be added	3110, 3140, 3160, 9110				prepared especially for this list to replace the previously proposed site "Pojezierze Drawskie" in the NFEP and INC concept (2003)
314	PL0G	Jeziora Szczecineckie	6391.7	in the governmental proposal (2004)					according to the governmental proposal (2004)

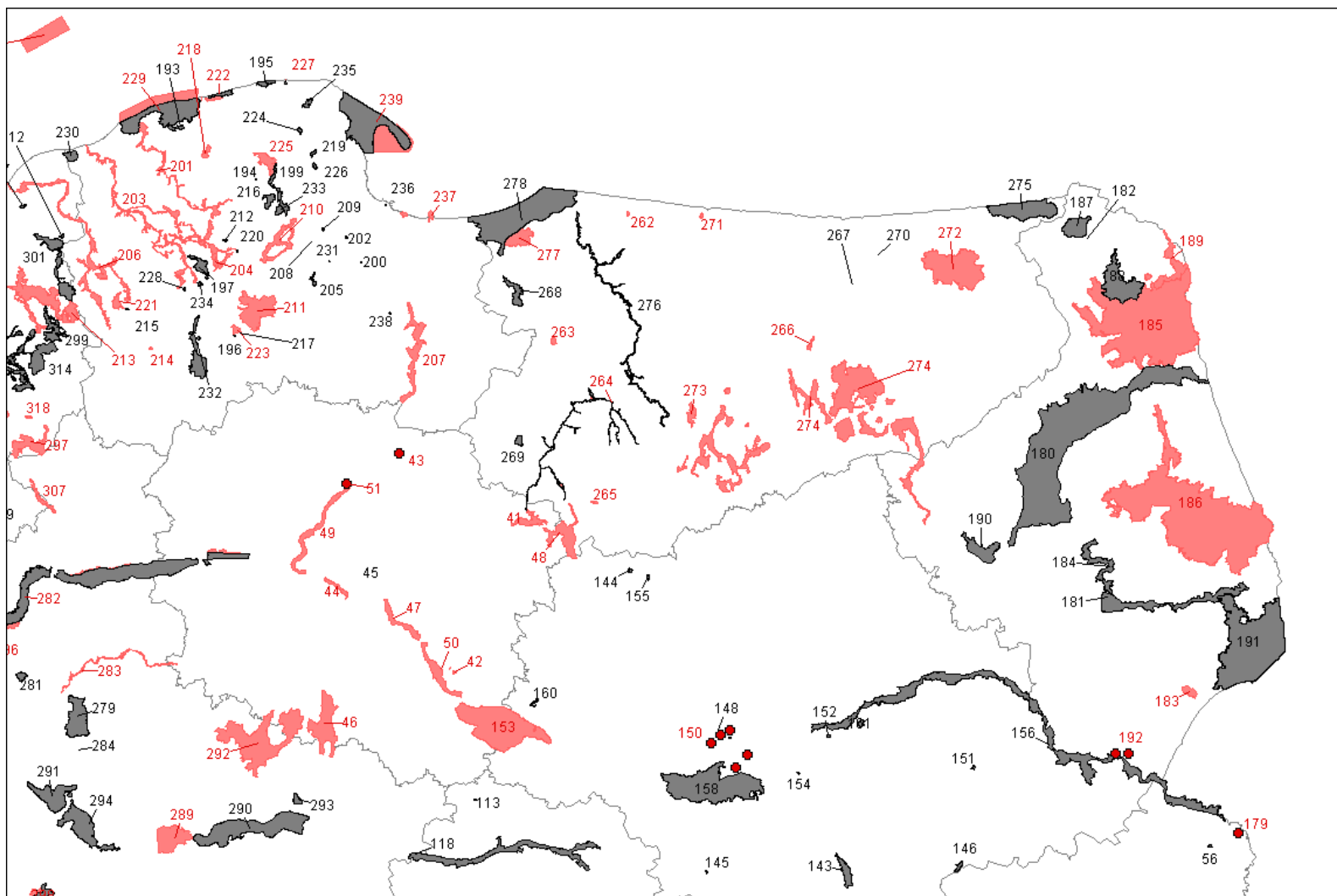
315	PL0G	Jezioro Bukowo	3362.6	necessary to be added	1150, 2160, 2180, 9190	<i>Linaria loeseli</i>			according to the Naturalist Club proposal (2003), it is completed by "Mierzeja Jeziora Jamno" proposed in the additional elaboration of INC (2003), it has been also corrected during the works on this list
316	PL0G	Jezioro Kozie	184.3	in the governmental proposal (2004)					according to the governmental proposal (2004)
317	PL0G	Jezioro Lubie i Dolina Drawy	11174.2	necessary to be added	3140, 3260, 4030	<i>Rhodeus sericeus amarus, Cottus gobio, Salmo salar, Emys orbicularis</i>			according to the proposal of NFEP and INC (2003)
318	PL0G	Jezioro Śniadowo	177.7	necessary to be added	3110				prepared especially for this list.
319	PL0G	Jezioro Wielki Bytyń	1826.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
320	PL0G	Kemy Rymańskie	2624.0	in the governmental proposal (2004)					according to the governmental proposal (2004)
321	PL0G	Lasy Bierzwnickie	8429.8	necessary to be added	7210	<i>Emys orbicularis, Lucanus cervus</i>			according to the proposal of NFEP and INC (2003) modified during this list elaboration
322	PL0G	Mirostławiec	4439.4	necessary to be added		<i>Bison bonasus</i>			prepared especially for this list.
323	PL0G	Ostoja Goleniowska	8453.6	in the governmental proposal (2004)					according to the governmental proposal (2004)
324	PL0G	Pojezierze Ińskie	17763.2	necessary to be added	3140				according to the proposal of NFEP and INC (2003)
325	PL0G	Pojezierze Myśluborskie	4262.8	in the governmental proposal (2004)					according to the governmental proposal (2004)

326	PL0G	Police - kanały	0.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
327	PL0G	Słowińskie Błoto	228.1	in the governmental proposal (2004)					according to the governmental proposal (2004)
328	PL0G	Strzaliny koło Tuczna	0.1	necessary to be added			<i>Myotis bechsteinii, M. myotis</i>		according to the proposal of NFEP and INC (2003) the data has been corrected during the works on this list
329	PL0G	Trzebiatowsko-Koło-brzeski Pas Nadmorski	18017.7	in the governmental proposal (2004)					according to the governmental proposal (2004)
330	PL0G	Ujście Odry i Zalew Szczeciński	44743,7 + 7780,4	in the governmental proposal (2004), lecz konieczna zmiana granic	1150, 1330			The "Zalew Kamieński" and "Wyspa Chrząszczewska" sites should be included in this site.	according to the governmental proposal (2004) with the borders' correction introduced during this list elaboration
331	PL0G	Uroczyska Drawskiej Puszczy	65513.7	necessary to be added	3140, 3160, 3260, 7210, 9110, 9130	<i>Luronium natans</i>	<i>Emys orbicularis, Cerambyx cerdo, Lucanus cervus, Osmoderma eremita</i>		prepared especially for this list to replace "Puszcza Drawska" site proposed previously by NFEP and INC
332	PL0G	Warnie Bagno	557.8	necessary to be added	7120, 91D0				according to the proposal of NFEP and INC (2003)
333	PL0G	Wolin i Uznam	35132,9 + 975,9	in the governmental proposal (2004), lecz konieczna zmiana granic	1150			The Koprowo Lake is needed to be added.	according to the governmental proposal (2004) with the borders' correction proposed during this list elaboration
334	PL0G	Wzgórza Bukowe	11651.1	in the governmental proposal (2004)					according to the governmental proposal (2004)

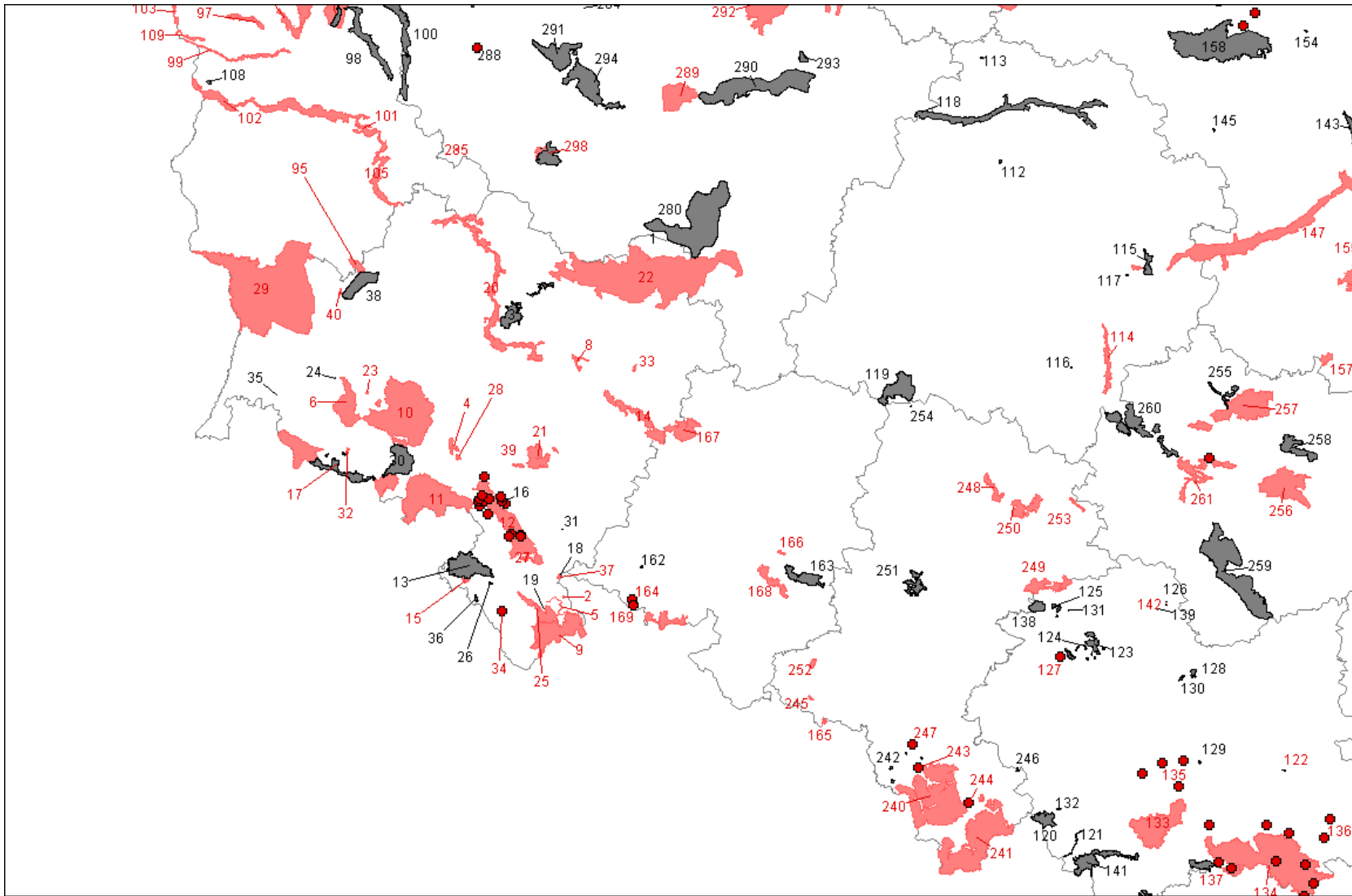
335	Baltic Sea	Ławica Słupska	10667.2	necessary to be added	1110, 1170			prepared especially for this list.
336	Baltic Sea	Zatoka Pomorska	583607.5	necessary to be added	1110		<i>Phocoena phocoena</i>	prepared especially for this list



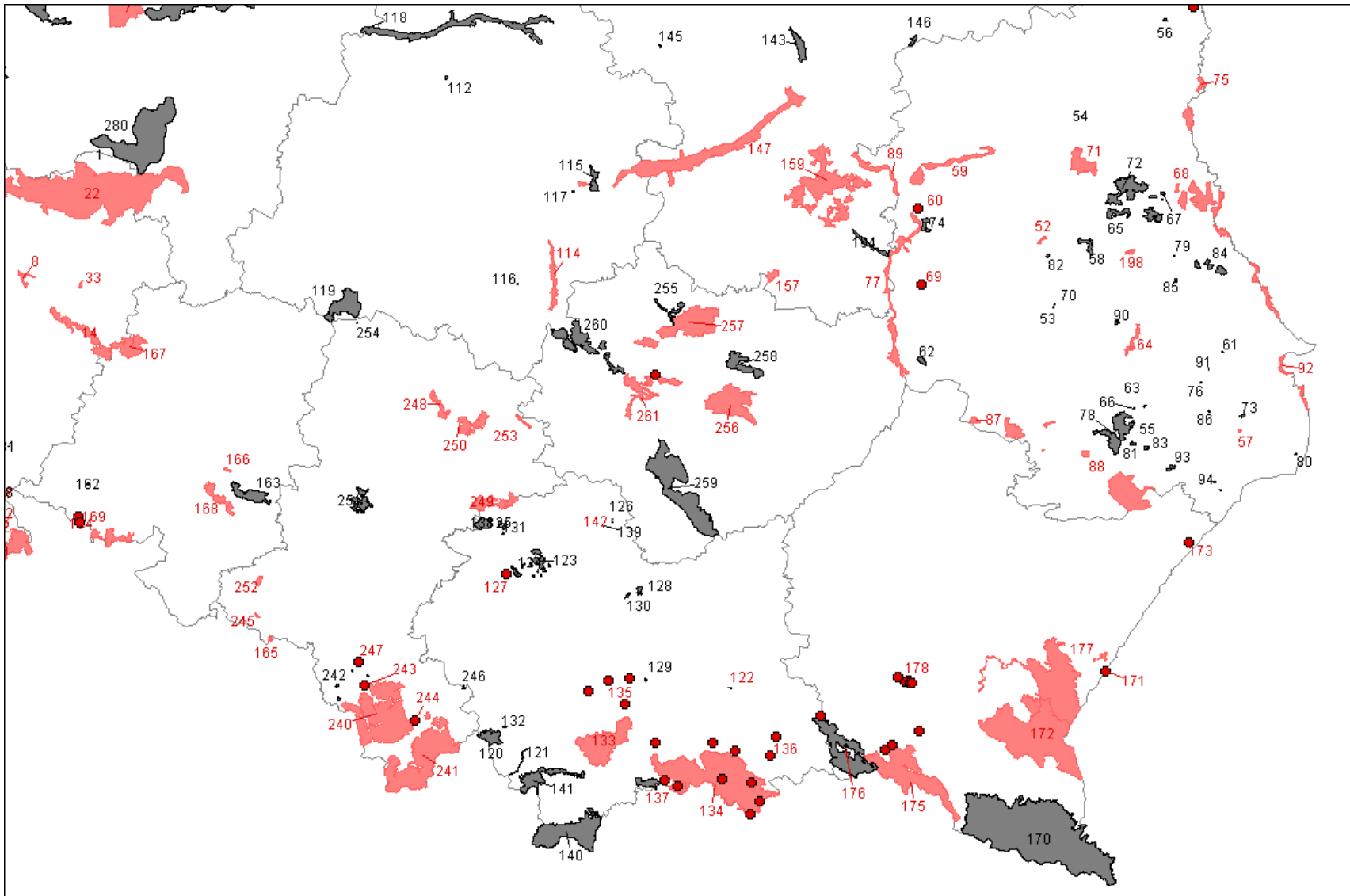
North-western Poland. Black colour -sites from the governmental proposal, red colour – proposed sites in this report. The numbers on the map correspond to numbers in the table



North-eastern Poland. Black colour -sites from the governmental proposal, red colour – proposed sites in this report. The numbers on the map correspond to numbers in the table



South-western Poland. Black colour -sites from the governmental proposal, red colour – proposed sites in this report. The numbers on the map correspond to numbers in the table



South-eastern Poland. Black colour -sites from the governmental proposal, red colour – proposed sites in this report. The numbers on the map correspond to numbers in the table

Part II

SYNTHETIC APPROACH TO BIRD DIRECTIVE IMPLEMENTATION

1. SPECIAL PROTECTION AREAS AND IMPORTANT BIRD AREAS IN POLAND

Special Protection Areas (SPAs) are established according to the occurrence of bird species listed in Annex I and Annex II of the Bird Directive. Annex I contains a list of bird species that are threatened at the European Union level and Annex II concerns migratory species for which Europe is a very important resting and foraging place. However, the Bird Directive does not clarify how such sites should be established, which has led to a significant delays in its implementation in European Union member states. Only since 1998 it has been stated, that the Important Bird Areas should constitute the base for the SPAs designation process. This method is a result of the European Court of Justice ruling in the case against Holland (case C-3/96 of May 19th, 1998), which used the report *Important Bird Areas in Europe* (Grimmet & Jones, 1989) to state that the number of sites designated by Holland for the protection of birds and their habitats was insufficient. Other cases – against Italy, France and Finland, have confirmed that rule.

Designation of SPAs does not require analyses during bio-geographic seminars, simply the acceptance of the European Commission.

2. METHODS OF DESIGNATION OF IMPORTANT BIRD AREAS IN POLAND

All the data needed for the list of Important Bird Areas in Poland has been collected by OTOP – BirdLife Poland in co-operation with professional and amateur ornithologists and other non-governmental organisations. The database form contained questions concerning the numbers of birds from the Annex I of the Bird Directive, as well as those of species migrating through Poland, including unthreatened ones.

Important Bird Areas in Poland have been carried out on the basis of “C” criteria implemented by BirdLife International for the European Union member states (Heath, Evans 2000):

C1 – Species of global conservation concern. The site regularly holds significant numbers of a globally threatened species. This criterion refers to species which status was qualified by IUCN (1994) as: Critical (CR), Endangered (EN), Vulnerable (VU), Conservation Dependent (LR:cd), Data Deficient (DD) and Near-threatened (LR:nt).

C2 – Concentrations of a species threatened at the European Union level (listed on Annex I and referred to in Article 4.1 of the EC Birds Directive). The site is known to regularly hold at least 1% of a flyway population or of the EU population of a species threatened at the EU level.

C3 – Congregations of migratory species not threatened at the EU level. The site is known to regularly hold at least 1% of a flyway population of a migratory species not considered threatened at the EU level (as referred to in Article 4.2 of the EC Birds Directive, not listed in Annex I). The term “migratory species” is used according to the Bonn Convention (Article 1.1.a). This criterion covers also with the category 6 of the Ramsar Convention.

C4 – Large congregations. The site is known to regularly hold at least 20,000 migratory waterbirds and/or 10,000 pairs of migratory seabirds of one or more species.

C5 – Congregatory – bottleneck sites. The site is a ‘bottleneck’ site where at least 5,000 storks (Ciconidae) and/or at least 3,000 raptors (Accipitriformes and Falconiformes) and/or 3,000 cranes (Gruidae) regularly pass on spring or autumn migration.

C6 – Species threatened at the European Union level. The sites holds at least 1% of a total Poland’s population of species threatened at the European Union level (listed in the Annex I of the Birds Directive). A general description of this criterion says that the site is one of the five most important in the European region (NUTS region) in question for a species or subspecies considered threatened in the European Union (i.e. listed in Annex I of the EC Birds Directive). For the IBA selection there was accepted that Poland will be treated as one NUTS region. Thus a higher number of best IBAs for a species, i.e. 10 best sites in Poland, was accepted.

3. PROPOSAL OF SPECIAL PROTECTION AREAS FOR NATURA 2000 NETWORK IN POLAND

Governmental proposal of Special Protection Areas presents 72 sites, including 3 marine sites. The surface of land Special Protection Areas constitutes ca. 8% of the country territory. The list of Important Bird Areas, which have been designated by Polish Society for the Protection of Birds - BirdLife Poland as Special Protection Areas, includes 140 sites including 3 marine sites. It constitutes ca. 15 % of the territory of Poland (marine sites are not counted).

TABLE – THE LIST OF IMPORTANT BIRD AREAS, WHICH SHOULD BE DESIGNATED AS SPECIAL PROTECTION AREAS IN NATURA 2000 NETWORK.

Source of documentation:

IBA – *Ostoje ptaków w znaczeniu międzynarodowym w Polsce* (IBA – Important Bird Areas in Poland) - editors: Sidło P.O., Błaszowska B., Chylarecki P., Gromadzki M., 2004. Polish Society for the Protection of Birds – Birdlife Poland, Warszawa, in printing).

Standard Data Forms from the governmental proposal (2004)

Voivodship (NUTS Codes)	IBA Codes	Polish names of IBAs	Codes of SPAs in governmental proposal	SPAs' names in governmental proposal	Proposed corrections
PL0G	PL001	Delta Świny	PLB320002	Delta Świny	–
PL0G	PL002	Zalew Szczeciński	PLB320007	Łąki Skoszewskie	-
PL0G	PL002	Zalew Szczeciński	PLB320009	Zalew Szczeciński	-
PL0G	PL003	Ostoja Wkrzańska	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0G	PL004	Jezioro Świdwie	PLB320006	Jezioro Świdwie	SPA should be enlarged to the borders of IBA
PL0G, PL04	PL005	Dolina Dolnej Odry	PLB320003	Dolina Dolnej Odry	SPA should be enlarged to the borders of IBA
PL0G	PL006	Jeziora Wełtyńskie	PLB320004	Jeziora Wełtyńskie	SPA should be enlarged to the borders of IBA
PL0G	PL007	Jezioro Miedwie i okolice	PLB320005	Jezioro Miedwie i okolice	–
PL0G	PL008	Ostoja Cedyńska	---	IBA not included in governmental proposal	IBA should be included in N2000 network as SPA
PL0G	PL009	Puszcza Goleniowska	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0G	PL010	Bagna Rozwarowskie	PLB320001	Bagna Rozwarowskie	–

PL0G	PL011	Zalew Kamieński i Dziwna	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0G	PL012	Wybrzeże Trzebiatowskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0G, PL04	PL013	Ostoja Witnicko-Dębnieńska	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0G, PL04	PL014	Puszcza Barłinea	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0G	PL015	Ostoja Ińska	PLB320008	Ostoja Ińska	–
PL0G	PL016	Ostoja Drawska	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0G, PL04, PLOF	PL017	Lasy Puszczy nad Drawą	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PLOF, PLOG	PL018	Puszcza nad Gwdą	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0B	PL019	Ostoja Słowińska	PLB220003	Ostoja Słowińska	–
PL0B	PL020	Dolina Słupi	PLB220002	Dolina Słupi	–
PL0B	PL021	Lasy Łębarskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0B	PL022	Bielawskie Błota	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0B	PL023	Puszcza Darżłubska	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0B	PL024	Zatoka Pucka	PLB220005	Zatoka Pucka	–
PL0B	PL025	Lasy Mirachowskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0B, PL02	PL026	Bory Tucholskie	PLB220001	Wielki Sandr Brdy	SPA should be enlarged to the borders of IBA
PL0B	PL027	Ujście Wisły	PLB220004	Ujście Wisły	–
PL0B	PL028	Dolina Dolnej Wisły	PLB040003	Dolina Dolnej Wisły	–
PL0E	PL029	Zalew Wiślany	PLB280010	Zalew Wiślany	–
PL0E	PL030	Jezioro Drużno	PLC280001	Jezioro Drużno	SPA should be enlarged to the borders of IBA
PL0E, PL0B	PL031	Lasy Iławskie	PLB280005	Lasy Iławskie	–
PL0E	PL032	Dolina Pasłęki	PLB280002	Dolina Pasłęki	–
PL0E	PL033	Warmińskie Bociany	PLB280009	Warmińskie Bociany	SPA should be enlarged to the borders of IBA
PL0E	PL034	Jezioro Oświn i okolice	PLB280004	Jezioro Oświn i okolice	–
PL0E	PL035	Jezioro Dobskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0E	PL036	Lasy Skaliskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0E	PL037	Puszcza Borecka	PLB280006	Puszcza Borecka	–
PL0E	PL038	Puszcza Napiwodzko-Ramucka	PLB280007	Puszcza Napiwodzko-Ramucka	–
PL0E, PLOA	PL039	Puszcza Piska	PLB280008	Puszcza Piska	–
PL0E	PL040	Jezioro Łuknajno	PLB280003	Jezioro Łuknajno	–
PL0E	PL041	Ostoja Poligon Orzysz	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0E	PL042	Bagna Nietlickie	PLB280001	Bagna Nietlickie	SPA should be enlarged to the borders of IBA
PL0A	PL043	Puszcza Augustowska	PLB200002	Puszcza Augustowska	SPA should be enlarged to the borders of IBA
PL0A	PL044	Dolina Biebrzy	PLC200001	Dolina Biebrzy	Zmienić granice według granic IBA
PL0A	PL045	Puszcza Knyszyńska	PLB200003	Puszcza Knyszyńska	SPA should be enlarged to the borders of IBA

PL0A	PL046	Puszcza Białowieska	PLC200004	Puszcza Białowieska	SPA should be enlarged to the borders of IBA
PL0A	PL047	Niecka Gródecko-Michałowska	PLB200003	Part of this IBA is included in SPA from governmental proposal – Puszcza Knyszyńska	This IBA should be included in N2000 network as SPA
PL0A	PL048	Dolina Górnej Narwi	PLC200002	Dolina Górnej Narwi	–
PL0A	PL049	Bagienna Dolina Narwi	PLB200001	Bagienna Dolina Narwi	–
PL0A	PL050	Bagno Wizna	PLC200001	Small part of this IBA is included in SPA Dolina Biebrzy	This IBA should be included in N2000 network as SPA
PL0A	PL051	Przełomowa Dolina Narwi	PLC200003	Przełomowa Dolina Narwi	–
PL0A, PL07	PL052	Dolina Dolnej Narwi	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL07, PLOE	PL053	Doliny Omulwi i Płodownicy	PLB140005	Doliny Omulwi i Płodownicy	SPA should be enlarged to the borders of IBA
PL07, PLOE	PL054	Doliny Wkry i Mławki	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL02	PL055	Bagienna Dolina Drwęcy	PLB040002	Bagienna Dolina Drwęcy	–
PL0A	PL056	Dolina Górnego Nurca	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03, PL07, PL0A	PL057	Dolina Dolnego Bugu	PLB140001	Dolina Dolnego Bugu	SPA should be enlarged to the borders of IBA
PL07	PL058	Puszcza Biała	PLB140007	Puszcza Biała	SPA should be enlarged to the borders of IBA
PL07	PL059	Dolina Liwca	PLB140002	Dolina Liwca	SPA should be enlarged to the borders of IBA
PL07	PL060	Dolina Kostrzynia	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03, PL07	PL061	Lasy Łukowskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL04	PL062	Ujście Warty	PLB080001	Ujście Warty	–
PL04	PL063	Dolina Dolnej Noteci	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0F	PL064	Nadnoteckie Łęgi	PLB300003	Nadnoteckie Łęgi	–
PL02, PLOF	PL065	Dolina Środkowej Noteci	PLB300001	Dolina Środkowej Noteci i Kanału Bydgoskiego	–
PL02, PLOF	PL066	Dolina Środkowej Noteci	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0F, PL04	PL066	Puszcza Notecka	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0F	PL067	Dolina Samicy	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0F	PL068	Dolina Małej Wełny pod Kiszkowem	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL04, PLOF	PL069	Jeziora Pszczewskie i dolina Obry	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0F	PL070	Jezioro Zgierzynieckie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL04	PL071	Dolina Środkowej Odry	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0F	PL072	Wielki Łęg Obrzański	PLB300004	Wielki Łęg Obrzański	–
PL0F, PL04	PL073	Pojezierze Sławskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0F	PL074	Zbiornik Wonieść	PLB300005	Zbiornik Wonieść	SPA should be enlarged to the borders of IBA
PL0F	PL075	Ostoja Rogalińska	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA

PL0F, PL05	PL076	Dolina Środkowej Warty	PLB300002	Dolina Środkowej Warty	SPA should be enlarged to the borders of IBA
PL02, PL0F	PL077	Ostoja Nadgoplańska	PLB040004	Ostoja Nadgoplańska	–
PL05, PL0F	PL078	Zbiornik Jeziorsko	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL05, PL0F	PL079	Dolina Neru	PLB100001	Part of this IBA is included in SPA - Pradolina Warszawsko-Berlińska	SPA should be enlarged to the borders of IBA
PL05	PL080	Dolina Bzury	PLB100001	Part of this IBA is included in SPA - Pradolina Warszawsko-Berlińska	SPA should be enlarged to the borders of IBA
PL02	PL081	Błota Rakutowskie	PLB040001	Błota Rakutowskie	–
PL02	PL082	Żwirownia Skoki	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL07, PL03	PL083	Dolina Środkowej Wisły	PLB140004	Dolina Środkowej Wisły	–
PL07	PL084	Puszcza Kampinoska	PLC140001	Puszcza Kampinoska	SPA should be enlarged to the borders of IBA
PL07	PL085	Bagno Całowanie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL01, PL04	PL086	Bory Dolnośląskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL01, PL04	PL087	Stawy Przemkowskie	PLB020003	Stawy Przemkowskie	–
PL01	PL088	Zbiornik Mietkowski	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL01, PL04	PL089	Łęgi Odrzańskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL01, PL08	PL090	Grądy Odrzańskie	PLB020002	Grądy Odrzańskie	–
PL08	PL091	Jezioro Turawskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL01, PL0F	PL092	Dolina Baryczy	PLB020001	Dolina Baryczy	–
PL0F	PL093	Dąbrowy Krotoszyńskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL07, PL05	PL094	Dolina Pilicy	PLB140003	Dolina Pilicy	SPA should be enlarged to the borders of IBA
PL07	PL095	Ostoja Kozienicka	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03, PL07, PL0D	PL096	Małopolski Przełom Wisły	PLB140006	Małopolski Przełom Wisły	–
PL0D	PL097	Dolina Nidy	PLB260001	Dolina Nidy	SPA should be enlarged to the borders of IBA
PL03	PL098	Dolina Tyśmienicy	PLB060004	Dolina Tyśmienicy	–
PL03	PL099	Lasy Parczewskie	PLB060006	Lasy Parczewskie	–
PL03	PL100	Zbiornik Podedworze	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03	PL101	Uroczystko Mosty-Zahajki	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03	PL102	Polesie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03	PL103	Bagno Bóbnów	PLB060001	Bagno Bóbnów	–
PL03	PL104	Dolina Środkowego Bugu	PLB060003	Dolina Środkowego Bugu	SPA should be enlarged to the borders of IBA
PL03	PL105	Chełmskie Torfowiska Węglanowe	PLB060002	Chełmskie Torfowiska Węglanowe	The borders of SPA should be corrected according to IBA

PL03	PL106	Lasy Strzeleckie	PLB060007	Lasy Strzeleckie	–
PL03	PL108	Dolina Poru i staw Boćków	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03	PL108	Zbiornik w Nieliszu	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03, PL09	PL109	Lasy Janowskie	PLB060005	Lasy Janowskie	–
PL03, PL09	PL110	Puszcza Solska	PLB060008	Puszcza Solska	SPA should be enlarged to the borders of IBA ptasiej
PL03, PL09	PL111	Roztocze	---	nie włączona do propozycji rządowej	This IBA should be included in N2000 network as SPA
PL03	PL112	Dolina Górnej Łabuńki	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03	PL113	Ostoja Tyszowiecka	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03	PL114	Zlewnia Górnej Huczwy	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03	PL115	Dolina Szyszły	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL03	PL116	Dolina Solokiji	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL01	PL117	Karkonosze	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL01	PL118	Góry Stołowe	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL08	PL119	Jezioro Otmuchowskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL08	PL120	Jezioro Nyskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0C	PL121	Stawy Wielikąt i Ligota Tworkowska	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL0C	PL122	Dolina Górnej Wisły	PLB240001	Dolina Górnej Wisły	–
PL06, PL0C	PL123	Stawy w Brzeczach	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL06	PL124	Dolina Dolnej Soły	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL06	PL125	Dolina Dolnej Skawy	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL06	PL126	Puszcza Niepołomska	PLB120002	Puszcza Niepołomska	–
PL0C	PL127	Beskid Żywiecki	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL06	PL128	Babia Góra	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL06	PL129	Pasma Policy	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL06	PL130	Torfowiska Orawsko-Nowotarskie	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL06	PL131	Tatry	PLC120001	Tatry	–
PL06	PL132	Gorce	PLB120001	Gorce	–
PL06	PL133	Pieniny	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL09	PL134	Beskid Niski	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL09	PL135	Pogórze Przemyskie	PLB180001	Pogórze Przemyskie	–
PL09	PL136	Góry Słonne	---	IBA not included in governmental proposal	This IBA should be included in N2000 network as SPA
PL09	PL137	Bieszczady	PLC180001	Bieszczady	–
	PLM1	Ławica Słupska	PLB990001	Ławica Słupska	–
	PLM2	Przybrzeżne Wody Bałtyku	PLB990002	Przybrzeżne Wody Bałtyku	–
	PLM3	Zatoka Pomorska	PLB990003	Zatoka Pomorska	–

MAP OF PROPOSED IMPORTANT BIRD AREAS WHICH SHOULD BE INCLUDED AS SPECIAL PROTECTION AREAS IN NATURA 2000 NETWORK



Source: Polish Society for the Protection of Birds

The map was prepared on a digital topographic map of Poland issued by IMAGIS Co. in the scale 1:500 000.

MAP OF SPECIAL PROTECTION AREAS IN GOVERNMENTAL PROPOSAL



Source map: Department on Nature Protection, Ministry of Environment.
The map was published on a CD *A guide to the Natura 2000 network. Habitats and Important Bird Areas of threatened birds in Poland*. Issued by OTOP, 2004.