

PROTECTION OF THE AVIFAUNA FROM THE DANUBE FLOODPLAIN IN CALAFAT – THE JIU SECTOR (DOLJ COUNTY, ROMANIA)

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Abstract. The study synthesizes qualitative data regarding avifauna from the main important bird areas (IBA) from the Danube Floodplain, between Calafat and the Jiu. On one hand, there are presented the ecologic type of the bird species, their distribution in the main IBA and the IBA designation criteria and on the other hand it is pointed out the protection statute of each species, according to national and international legislation. In the territory studied by us, there were identified three IBA that were designated as special avifaunistic protection areas (ASPAs), integrated through H.G. No. 1284 / 24.X.2007 in Nature 2000 sites network. These are the Jiu - the Danube Confluence (ROSPA0023), Bistreț (ROSPA 0010), Calafat - Ciuperceni - the Danube (ROSPA 0013). For ASPA Bistreț we propose the extension from the actual surface of 1,916 ha to a surface of 21,552 ha, from the eastern point with 43°49'35"N 23°45'35"E coordinates to the western one 43°51'12"N 23°14'44"E. The scientific arguments, for which we consider necessary the ASPA extension, consist in the fact that the proposed territory is important for the nesting, shelter and food supply of many aquatic and terrestrial species of European interest, used as criteria for IBA and ASPA designation.

Keywords: protection, birdfauna, the Danube Floodplain.

Rezumat. Protecția avifaunei din Lunca Dunării, în sectorul Calafat - Jiu (județul Dolj, România). Lucrarea sintetizează date calitative privitoare la avifauna din principalele arii de importanță avifaunistică (AIA) din Lunca Dunării, dintre Calafat și Jiu; sunt prezentate pe de o parte tipul ecologic al speciilor de păsări, distribuția acestora în principalele AIA și criteriile de desemnare a AIA, iar pe de altă parte este evidențiat statutul de protecție al fiecărei specii, în conformitate cu legislația națională și internațională. În teritoriul investigat de noi au fost identificate trei arii de importanță avifaunistică (AIA) și desemnate ca arii de protecție specială avifaunistică (APSA), integrate prin H.G. nr. 1284 / 24.X.2007 în rețeaua de situri Natura 2000; acestea sunt: Confluența Jiu - Dunăre (ROSPA0023), Bistreț (ROSPA 0010), Calafat - Ciuperceni - Dunăre (ROSPA 0013). Pentru APSA Bistreț propunem extinderea de la actuala suprafață de 1.916 ha la o suprafață de 21.552 ha, respectiv de la punctul estic cu coordonatele 43°49'35"N 23°45'35"E la punctul vestic 43°51'12"N 23°14'44"E. Argumentele științifice pentru care considerăm necesară extinderea APSA rezidă din faptul că teritoriul propus este important pentru cuibăritul, refugiu și hrana multor specii acvatice și terestre de interes european, folosite drept criterii pentru desemnarea AIA și APSA.

Cuvinte cheie: protecție, avifaună, Lunca Dunării.

INTRODUCTION

As a result of the embanking, draining and rearranging of the lands from the second half of the 20th century, the landscape from the liable to inundation part of the floodplain, between Calafat and the Jiu, has been modified 80-90%. The old morphology of the Danube Floodplain (with huge accumulations of mobile and immobile sands, with a chaotic relief of dunes placed in fascicles with depressions and marshy basins among them) preserved only in the non-embanked Ghidici - Ciuperceni sector.

Here, the permanent swamps Ciuperceni, Arcer, Lata, Țarova are still natural with vast reed beds and mixed woods with spontaneous vegetation, productive pastures, hayfields and steppe lawns with vegetation specific to sands. The rest of the territory, between Ghidici and the Jiu, was subject to the construction of the protection embankment of the Danube which was accompanied by blurry workings of the lowland areas, dishevelment workings of the landforms, change of former fields in agro-ecosystems, deforestation and replantation with acacia and poplar, climaxing with the disappearance of Rast lake and the reduction of Bistreț - Cârna - Nasta - Nedeia complex with a surface of about 22,000 ha to a fishing farm of about 2,000 ha.

Although, they are modified and reshuffled a lot, the ecosystems from the Danube Floodplain, between Calafat and the Jiu present a large scientific interest triggered by its geographical, hydrographical, pedological, climatological, flora and fauna particularities.

The ornithological importance of this territory consists in the fact that this is the route of migration of birds that fly along the river. The habitats from the sector Calafat - the Jiu, especially the aquatic ones, are points of great concentration of the migratory birds of world and European interest (RIDICHE & MURARIU, 2009; RIDICHE & KISS, 2011).

The program of identification of the avifauna areas, initiated by the BirdLife International and launched in our country in 1994 by the Romanian Ornithological Society (R.O.S.), was the premise of our study, regarding the inventorying and knowing of the distribution and dynamics of the bird species in the environment between Calafat and the Jiu. Our observations from 1995-1997 have contributed to the designation of Bistreț wetland as IBA (IBA RO 036), statute certificated by R.O.S. (***1997) and by BirdLife International (HEATH & EVANS, 2000; BirdLife International, 2001).

After that, as a result of the documentations published by MUNTEANU (2004) and PAPP & FÂNTÂNĂ (2008), it is completed the IBA list, so that in the limits of the floodplain segment studied by us, there are two distinct areas

Calafat - Ciuperceni - the Danube (RO111) and the Jiu - the Danube Confluence (RO113) and it is reconfirmed IBA Bistreț (RO112); in the latest volume, IBA Bistreț is written with RO112 code.

In order to sustain the conservation of the avifauna from these areas, the most important ones have been integrated in Nature 2000 network sites, being designated Areas of Special Protection Avifauna (ASPAs) through H.G. No. 1284 / 2007 (Fig. 1).

ASPAs Calafat - Ciuperceni - the Danube (ROSPA 0013) has a total surface of 29,024 ha and includes the complex of aquatic, semiaquatic biotopes and terrestrial biotopes and from the non-embanked segment of the Danube Floodplain, from the south of Calafat - Ciuperceni - Desa - Poiana Mare - Piscu Vechi - Ghidici till the Danube - the sector included between the 760-714 river km. On the territory of the site, there are three protected natural areas of national interest (Ciuperceni - Desa, Lata Swamp, Black Swamp), declared through Law No. 5 / 2000 (RIDICHE 2008; RIDICHE et al., 2010).

ASPAs Bistreț (ROSPA 0010) includes the lake with the same name, with a total surface of 1,916 ha, being situated in the south of Dolj County (43°51'N 23°36'E), at about 4-5 km from the Danube, the access in the wet area being done through Calafat - Corabia road, along the Danube, with halts in every point from Bistreț, Plosca and Cârna.

Bistreț Lake represents the largest water stretch from the Danube Floodplain between "Porțile de Fier" and the Olt River mouth, and it is the result of the systematization of the old natural lakes from the Danube Floodplain (COTEȚ, 1957). The source of water of the lake is the Desnățui River and the drainage of water towards the Danube is made through Bârzogârla Channel (4-5 km).

The actual aquatic surface is arranged after fish working criteria, being divided through transversal embankments in six main basins that communicate between them through channels.

In Nature 2000 site there are included only the basins I-IV, but in our scientific intercessions, we propose the extension of the site on a surface of 21,552 ha, from the eastern point with the coordinates 43°49'35"N 23°45'35"E to the western point 43°51'12"N 23°14'44"E (Figs. 2 and 3). In the perimeter of the area proposed by us, there are the west, western basins of the lake, Călugăreni Swamp, the adjacent areas of the protection embankment of the Danube Floodplain and the meadow area of Rast, covered before systematization by Rast Lake, which is the communal pasture, today; in the east and south - the territories of the ex-complex Bistreț - Cârna - Nasta - Nedeia to the Danube, on which there are abandoned agricultural lands, old hills, semi-mobile dunes or sandy lands with xerophilous lawns, orchards, acacia woods. The areas included in the limits proposed by us and those proposed by PAPP & FĂNTÂNĂ (2008) represent about 4,600 ha and are intensely exploited agricultural surfaces, without ornithological importance. The area that we proposed is important for the nesting, shelter and food of many terrestrial and aquatic species of European interest, used as criteria for IBA and ASPA designation.

ASPAs the Jiu - the Danube Confluence (ROSPA0023) is situated on the Jiu River, in the area where the river flows into the Danube and it has a surface of 22,000 ha; the most representatives biotopes of the site are the arable lands without irrigation (42.2%), deciduous forests (20.4%), pasture (11.8%) and wet areas (water - 7.2%, marshes - 6.5%); in the west of ASPA, there is a surface of about 550 ha with strong salty lands, from which 4 ha have been included in the list of protected areas (Law No. 5/2000), under the name of "Pajiștea halofilă Gighera"; this pasture is placed in an embanked area, coming through draining channels, where the water table oscillates between 0.2 and 1 m and the water has a high content of aerated salt, chlorides and sodium. The statute of this area allows the protection of the plant species and animals adapted to this type of habitat. Vegetal associations met on these salty lands or in their neighbourhood include some very rare species for our country flora (*Trifolium subterraneum*, *T. orithopodioides*) or less rare species (*Salicornia herbacea*, *Hordeum hystris*, *Chara fragilis*, *Lemna minor*, *L. gibbo*, *Pholurus pannonicus*, *Heleocharis palustris*, *Juncus gerardi* etc.) - LAZĂR et al., 2001.

For IBA designation it has been taken into account, especially the endangered bird (A1 criterion), species with limited distribution in a biome (A3 criterion), migratory gregarious species during the passage, nestling or in hibernation period (A4 criterion), gregarious species of European importance (B1 criterion), species with an unfavourable conservation statute in Europe, species in numerical decline, vulnerable, rare or with limited nestling areas (B2 criterion); B3 criteria represents the species with a favourable conservation statute, but concentrated in Europe. Some species may represent many IBA criteria, for example *Pelecanus crispus* is a gregarious species with an unfavourable conservation statute in Europe and endangered in the world.

MATERIAL AND METHODS

The avifaunistic list was written on the basis of the research and observations made by us in this area, starting with 1995 up to present and on the basis of the ornithological material drawn and preserved in the Museum of Oltenia patrimony (RIDICHE, 1999, 2004, 2007a, 2007b, 2010; RIDICHE & BĂLESCU, 2001; RIDICHE & ORZAȚĂ, 2004; RIDICHE & LICURICI, 2009; RIDICHE et al., 2006). The systematic order of the bird species was made after SZABÓ-SZELEY & BACZÓ (2006). The IBA designation criteria were taken after MUNTEANU (2004) and the protection statute of the species was established after the present legislation. In order to draw the maps regarding the special avifaunistic protection, we used Arc G.I.S. 9.3 program.

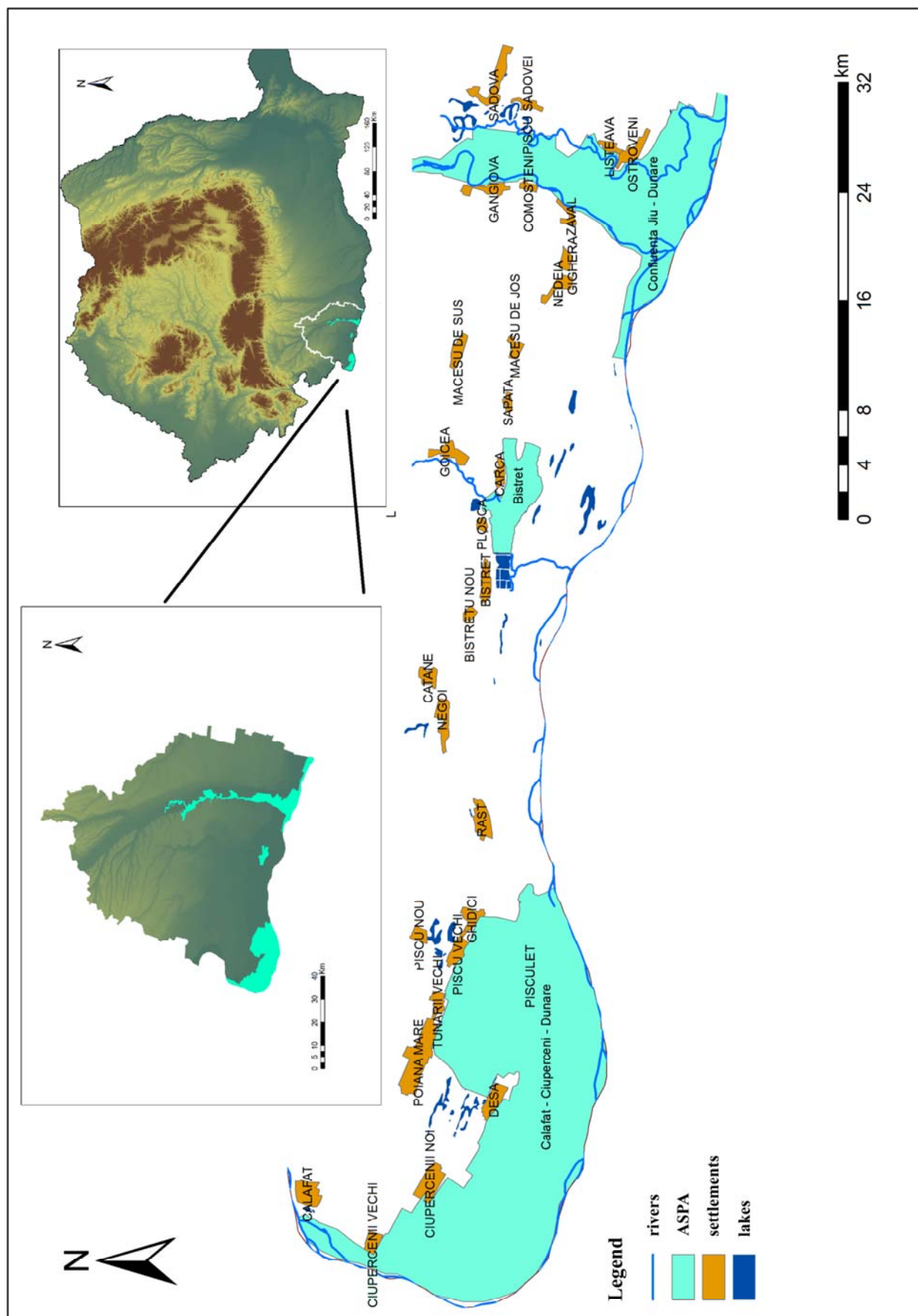


Figure 1. The areas of special avifaunistic protection (ASPA) from the Danube Floodplain, the sector Calafat - the Jiu.
 Figura 1. Ariile de protecție specială avifaunistică (APSA) din Lunca Dunării, sectorul Calafat - Jiu.

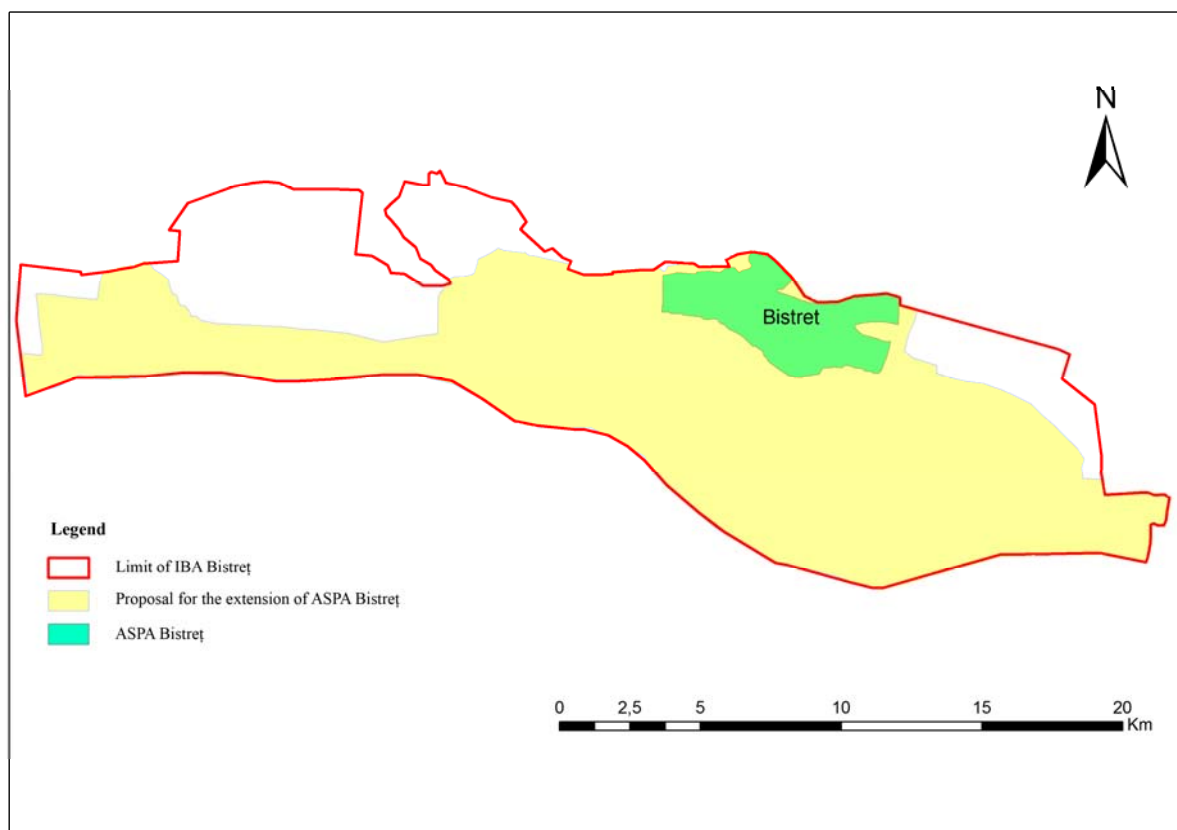


Figure 2. IBA limits, extension proposal of the ASPA and the existent ASPA.
 Figura 2. Limite AIA, propunere extindere APSA și APSA existent.

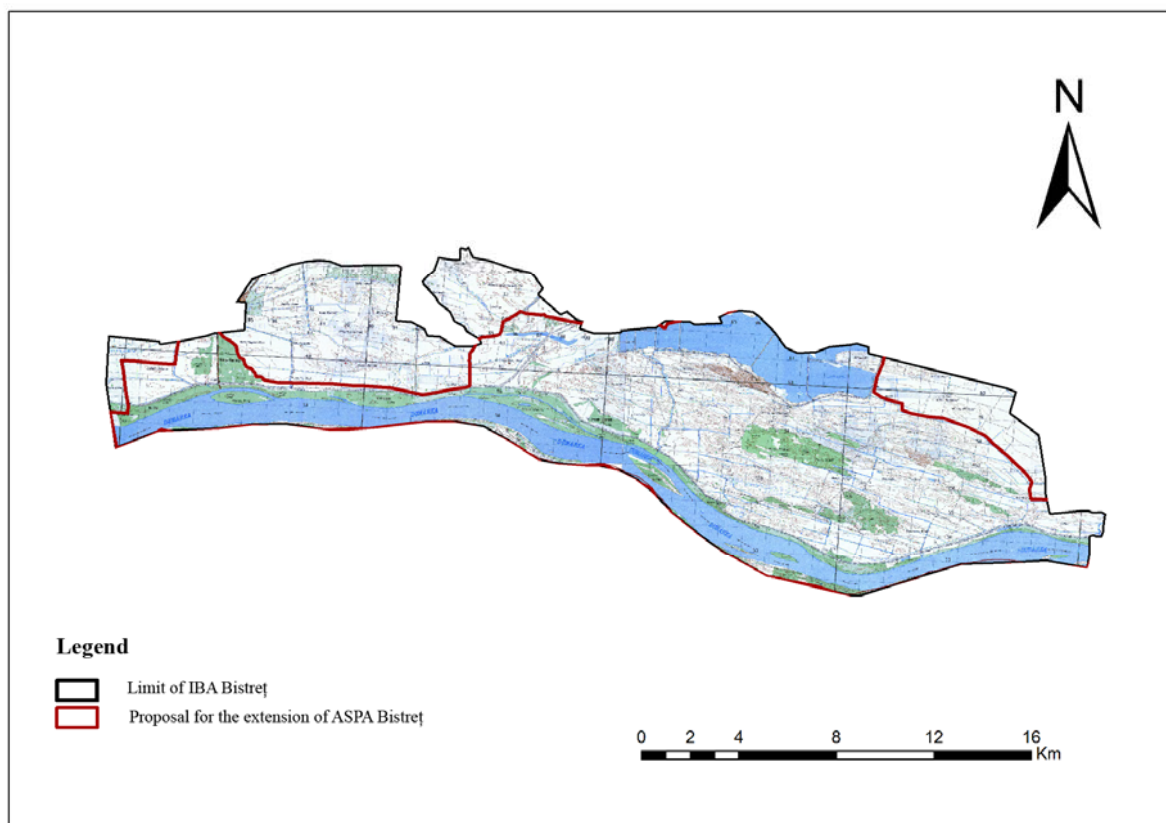


Figure 3. Topographical map with IBA Bistret limits and ASPA proposal of extension.
 Figura 3. Harta topografică cu limitele AIA Bistret și propunerea de extindere APSA.

RESULTS AND DISCUSSIONS

In Table 1 it can be seen: the avifauna list inventoried by us, the ecological types of bird species, the way of distribution in the sites of the studied territory, the AIA designation criteria and the protection statute of bird species both at national and European level.

The data gathered in the table may contribute to the improvement of the standard sheets of Nature 2000 sites that we referred to, through updating the list of species used for ASPA designation and at the same time it may contribute to the development of the managerial plans for the maintenance of the avifauna diversity.

A synthesis of the results regarding the qualitative and quantitative distribution of bird species in AIA/ASPA from the studied territory is rendered in figure 4.

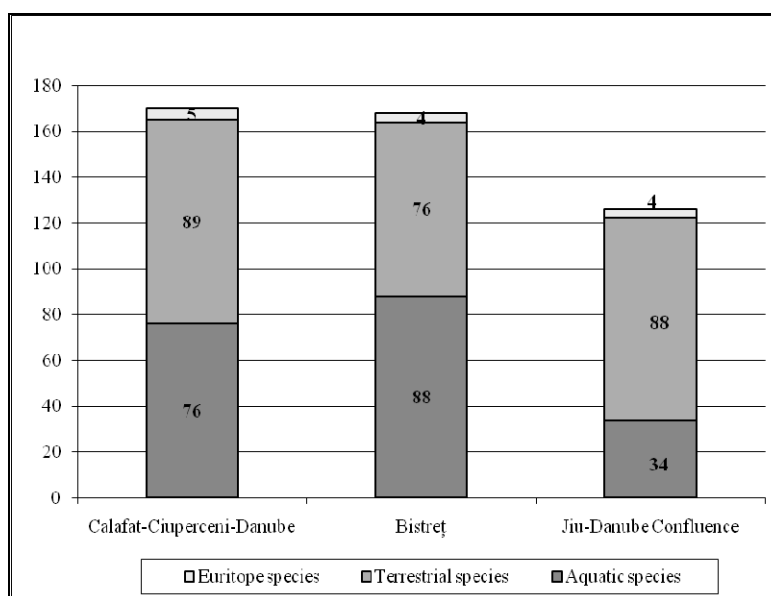


Figure 4. The graphic representation of the avifauna in IBA/ASPA, depending on the ecologic type.

Figura 4. Reprezentarea grafică a avifaunei în AIA/APSA, în funcție de tipul ecologic.

According to the results from the Fig. 4, we observe:

1. in Calafat - Ciuperceni - the Danube site, we identify 170 species, that represent 89.47 % from the total inventoried avifauna, from these, 76 are aquatic species, 89 are terrestrial species, and 5 are eurytopic species.

2. in the area that we propose as IBA, respective ASPA Bistret, we have listed 168 species, that represent 88.42% from the total inventoried avifauna, from these 88 are aquatic species, 76 are terrestrial species and 4 are eurytopic. A large number of species of European interest (ex. *Haliaeetus albicilla*, *Buteo rufinus*, *Aquila pomarina*, *Burhinus oedicephalus*, *Sterna hirundo*, *Chlidonias hybrida*, *C. niger*, *Alcedo atthis*, *Coracias garrulus*, *Dendrocopos syriacus*, *Anthus campestris*, *Ficedula parva*, *Lanius collurio*, etc.) have been identified by us in the west, south and south-east surroundings of Nature 2000 site. These species satisfy at least one of the criteria of IBA designation and represent the scientific argument for which we consider necessary the extension, according to the limits previously mentioned.

3. in the Jiu - the Danube Confluence site and in its western neighbourhoods, we have identified 126 species, that represent 65.78% from the total catalogued avifauna, from these 34 are aquatic species, 88 are terrestrial species and 4 are eurytopic.

A simple comparison of the way of distribution discloses quality and quantity differences regarding the composition of the avifauna in those sites. These differences have been generated by physical-geographic and biotic factors: the configuration of the terrestrial and aquatic surfaces, the configuration of the substratum and banks of the aquatic basins, hydric regime and floods duration, eutrophication degree of swamps/lakes, the composition of the herbaceous and woody, vegetal associations, the quality and availability of the trophic sources, the presence of the atrophic factors.

From the aquatic species, the great majority, use trophic resources of the basins from Bistret and of the swamps and from the easy flooded area (Ciuperceni, Arcer, Lata, Lunga, etc.) and the shelter and nesting places of these, while in the Jiu - the Danube Confluence area, the presence of aquatic birds is considerably lower. In exchange, the situation is different in the case of the terrestrial species, which are much better represented in the Jiu - the Danube Confluence area and in the non-embanked floodplain between Ciuperceni and Ghidici. In these sites, the existence of the mixed woods and coppice on more extended areas determines a bigger density and a more intense frequency of some species: Accipitriformes, Falconiformes, Columbiformes, Strigiformes, Coraciiformes, Piciformes, Passeriformes Orders (Turdidae, Sylviidae, Muscicapidae, Paridae, Laniidae, Fringillidae, Emberizidae Families). At the same time,

the surfaces with wet pastures from these two sites, which are more isolated and less exposed to the anthropogenic factor, are determinant for the presence of *Crex crex*, which is a relatively rare summer guest in the mentioned areas.

From the point of view of the criteria used for the IBA designation, the situation is presented in this way (Fig. 5).

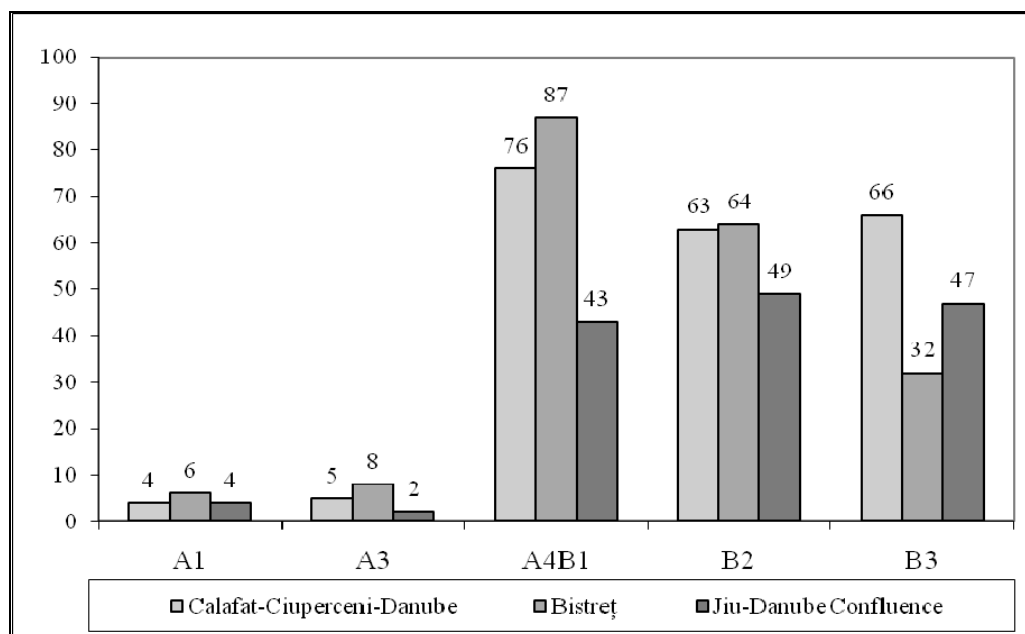


Figure 5. The distribution of the bird species qualified for IBA from the Danube Floodplain, in Calafat - the Jiu sector.

Figura 5. Distribuția speciilor de păsări calificate pentru AIA din Lunca Dunării, în sectorul Calafat - Jiu.

A1 criterion species have the best representation in Bistreț site - 6 species: *Anser erythropus*, *Branta ruficollis* accidentally winter guests, *Pelecanus crispus* - passage species, relatively constant and sometimes numerous, *Phalacrocorax pygmaeus* - numerous in passage and *Aythya nyroca* - summer guest, frequently nesting, *Haliaeetus albicilla* - rare species looking for food; in Calafat - Ciuperceni - the Danube site, we identified 4 species in danger in the world (*Phalacrocorax pygmaeus* and *Aythya nyroca*, frequently nesting, rare *Haliaeetus albicilla* and *Crex crex* - summer nesting guest, but less frequent), three of these (*Phalacrocorax pygmaeus*, *Haliaeetus albicilla*, *Crex crex*) being found as nesting species in the Jiu - the Danube Confluence area, at which it is added *Pelecanus crispus*.

A3 criterion species are 8 in Bistreț site (4 winter quests and/or passage species - *Anser albifrons*, *A. erythropus*, *Mergus albellus*, *Buteo lagopus* and 4, exclusively passage species: *Pluvialis squatarola*, *Calidris minuta*, *C. temminckii*, *Tringa erythropus*), 5 in ASPA Calafat - Ciuperceni - Danube (*Anser albifrons*, *Mergus albellus*, *Buteo lagopus*, *Calidris minuta*, *Tringa erythropus*) and in ASPA the Jiu - the Danube Confluence we have noticed the least species with restrictive biome (*Anser albifrons*, *Buteo lagopus*), noticed in passage or as winter guests.

A4B1 criterion species are the best representative category in Bistreț site (87 species) and Calafat - Ciuperceni - the Danube site (76 species) while in the Jiu - the Danube Confluence site, we have identified 43 species. This category includes the majority of the aquatic birds (Podicediformes, Pelecaniformes, Ciconiiformes, Anseriformes and Charadriiformes Orders) and some terrestrial species (Accipitriformes, Falconiformes, Coraciiformes - *Merops apiaster* and Passeriformes - *Riparia riparia* Orders). The most numerous concentration of these species is in spring - autumn passage period, especially in Bistreț site; some species form nesting colonies in the habitat of the studied area (*Phalacrocorax pygmaeus*, *Nycticorax nycticorax*, *Ardeola ralloides*, *Egretta garzetta*, *Platalea leucorodia*, *Glareola pratincola*, *Himantopus himantopus*, *Recurvirostra avosetta*, *Vanellus vanellus*, *Tringa totanus*, *Larus ridibundus*, *Sterna hirundo*, *S. albifrons*, *Chlidonias hybrida*, *C. niger*, *Merops apiaster*, *Riparia riparia*), and others (especially Anatidae and Phalacrocoracidae) make constant crowds during winter with bigger or smaller effectives depending on the existent climatic conditions and on the availability of trophic resources.

Criterion B2 species are equally distributed in Calafat - Ciuperceni - the Danube site (63 species, from which 28 are aquatic, 32 are terrestrial and 3 are eurytopic) and in Bistreț (64 species, from which 32 are aquatic, 29 terrestrial and 3 are eurytopic), while in the Jiu - the Danube Confluence site, we identified 49 species, disadvantaged from the point of view of conservation in Europe; from these, 15 are aquatic, 31 are terrestrial and 3 are eurytopic.

Some species of criterion B2 frequent with equal or different intensity all the sites from the studied territory: the majority of the Ciconiiformes (*Ixobrychus minutus*, *Nycticorax nycticorax*, *Ciconia* sp., *Plegadis falcinellus* and *Platalea leucorodia*), the majority of the diurnal birds of prey (*Circus cyaneus*, *Buteo rufinus*, *Aquila pomarina*, *F. tinnunculus*), galinacee (*Perdix perdix*, *Coturnix coturnix*), some waders birds (*Philomachus pugnax*, *Scolopax rusticola*, *Numenius arquata*, *Tringa totanus*, *T. glareola*), some Lariformes (*Larus minutus* and *L. canus*) and Sternidae (*Sterna albifrons*, *S. hirundo*), *Streptopelia turtur*, *Cuculus canorus*), Strigiformes (*Tyto alba*, *Otus scops*, *Athene noctua*), Coraciiformes (*Alcedo atthis*, *Merops apiaster*, *Coracias garrulus*), some Piciformes (*Picus viridis*,

Dendrocopos syriacus) and Passeriformes (*Galerida cristata*, *Alauda arvensis*, *Riparia riparia*, *Hirundo rustica*, *Anthus campestris*, *Phoenicurus phoenicurus*, *Hippolais* sp., *Muscicapa stia*, *Ficedula parva*, *Lanius* sp., *Emberiza hortulana*). Others have been identified by us only in the wet areas and their surroundings from Bistreț and Calafat - Ciuperceni - the Danube sites (*Botaurus stellaris*, *Ardeola ralloides*, *Ardea purpurea*, *Anas strepera*, *A. acuta*, *A. querquedula*, *Mergus albellus*, *Falco columbarius*, *Himantopus himantopus*, *Recurvirostra avosetta*, *Charadrius alexandrinus*, *Calidris alpina*, *Limosa limosa*, *Chlidonias hybrida*, *C. niger*); some species of B2 criterion have been identified only at Bistreț (*Pelecanus onocrotalus*, *Glareola pratincola*, *Calidris ferruginea*, *Sterna caspia*) or in the mixed woods from the Jiu - the Danube Confluence area and in Calafat - Ciuperceni - the Danube Flooded area (*Falco vespertinus*, *Jynx torquilla*, *Picus canus* și *Dryocopus martius*).

A great number of the populations of B2 species nests in the studied territory.

B3 criterion species do not have problems regarding the conservation throughout Europe; there have been inventoried 66 species in Calafat - Ciuperceni - the Danube site, 32 in Bistreț area, 47 in the Jiu - the Danube Confluence sit. Most of these species belong to Passeriformes and nest in the studied areas.

From the point of view of protective legislation analysed by us the repartition of the species is rendered in figure 6.

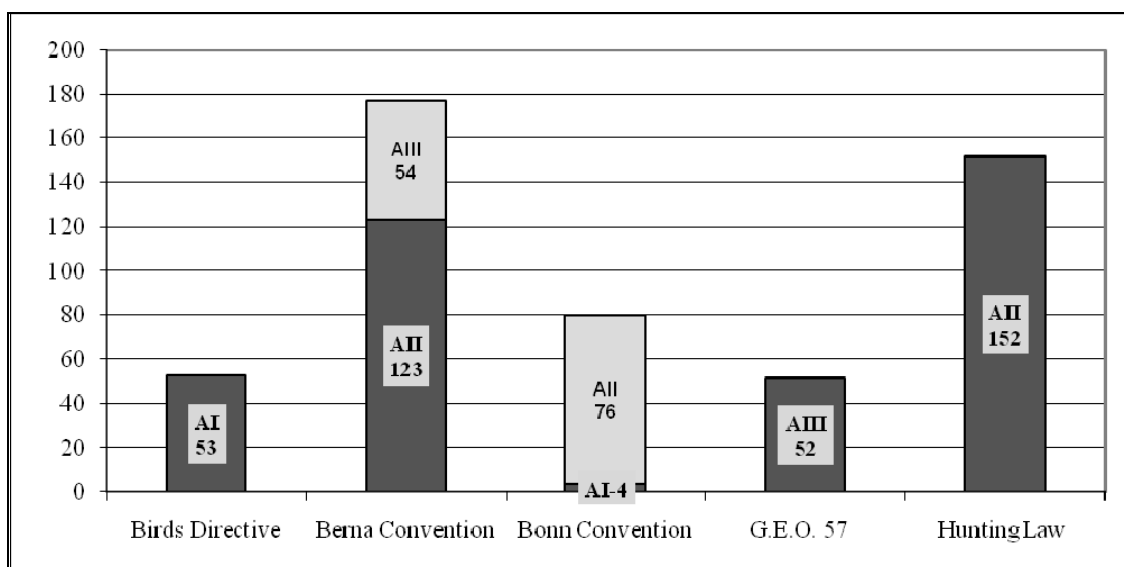


Figure 6. The graphic repartition of the avifauna from the Danube Floodplain (Calafat - the Jiu sector), from the point of view of the protection statute.

Figura 6. Repartizarea grafică a avifaunei din Lunca Dunării (sectorul Calafat - Jiu), din punct de vedere al statutului de protecție.

- 53 species need measures of conservation regarding the habitat, according to Birds Directive of Europe Council;

- 123 species are strictly protected according to 2nd Annex (AII) and 54 species are protected according to 3rd Annex (AIII) from Law No. 13/1993 for Romania adhesion to the Convention regarding the conservation of wildlife and natural habitats from Europe, adopted at Berne on 19th September 1979;

- 4 migratory species with unfavourable state of conservation for which the countries must assure immediate protection (AI/1st Annex) and 76 migratory species with unfavourable state of conservation for which the countries must assure conservation and management (AII) according to Law No. 13/1998 for Romania adhesion to the Convention regarding the conservation of the migratory species from wild animals, adopted at Bonn on 23rd June 1979;

- 52 species are written in the 3rd Annex (AIII) of Government Emergency Ordinance No. 57 /2007, according to which the conservation of these needs the designation of the special areas of conservation and of avifaunistic special protection areas (ASPAs);

- 152 species are forbidden for hunting according to the 2nd Annex (AII) of Law No. 407/2006 - Hunting Law; according to the 1st Annex (AI) of Hunting Law, 33 species may be taken from nature, after it is established a quantum of compensatory financing by the authorized organisms.

Some of the species present in the studied areas (*Pelecanus onocrotalus*, *P. crispus*, *Egretta alba*, *E. garzetta*, *Platalea leucorodia*, *Tadorna tadorna*, *Recurvirostra avosetta*, *Himantopus himantopus*) have statute of Nature Monuments and are included in the Red List of vertebrates from Romania (MUNTEANU, 2005).

Because the great majority of the bird species analysed by us have an unfavourable state of conservation throughout Europe and are under the incidence of many laws and of Birds Directive, it is necessary an adequate management of protection of the ecosystems from the studied territory, ecosystems included in Nature 2000 sites network (** 2007).

CONCLUSIONS

The majority of the bird species from this area represents the subject of the measures of conservation, imposed at European level, thus the results of personal research, together with the ones of other specialists lie at the basis of identification of three IBA designated as ASPA (Nature 2000 sites) through H.G. No.1284/24.10.2007.

We propose and sustain with scientific arguments the ASPA extension to a surface of about 21,552 ha, which will assure protection for the species with unfavourable state of conservation, identified outside the Nature 2000 site (1,916 ha).

As far as the qualitative and quantitative distribution of the bird species in IBA/ASPA from the studied territory is concerned, we have the following situation:

- in Calafat - Ciuperceni - the Danube site, we have identified 170 species, of which 75 are aquatic species, 90 are terrestrial species and 5 eurytopic species;

- in the area proposed as ASPA Bistreț, there are 169 species, of which 89 are aquatic species, 76 are terrestrial species and 4 are eurytopic species;

- in the Jiu - the Danube Confluence area we registered 125 species, of which 33 are aquatic species, 88 are terrestrial species and 4 are eurytopic species;

According to the criteria used for IBA designation, the situation is as it follows:

- in Calafat - Ciuperceni - the Danube site, we identified 4 species A1 criterion, 5 species criterion A3, 76 species criterion A4B1, 64 species criterion B2 and 66 species criterion B3;

- in Bistreț site and in its surroundings (proposed for their including in Nature 2000) we have identified 6 species criterion A1, 8 species criterion A3, 88 species criterion A4B1, 64 species criterion B2 and 32 species criterion B3;

- in the Jiu - the Danube Confluence site we have identified 3 species criterion A1, 2 species criterion A3, 42 species criterion A4B1, 48 species criterion B2 and 47 species criterion B3.

The majority of the bird species analysed by us are under the incidence of national and international laws and conventions and of Birds Directive, and this fact implies the adoption of an adequate management of protection of the studied area.

Seven of the studied bird species are Nature Monuments (*Pelecanus onocrotalus*, *P. crispus*, *Egretta alba*, *E. garzetta*, *Platalea leucorodia*, *Tadorna tadorna*, *Himantopus himantopus*).

REFERENCES

- COTEȚ P. 1957. *Câmpia Olteniei*. Edit. Științifică. București. 270 pp.
- HEATH M. F. & EVANS M. I. 2000. *Important Birds Areas in Europe: Priority sites for conservation. 2. Southern Europe*. BirdLife International (BirdLife Conservation series no. 8). Cambridge UK: 481, 497, 751-765.
- LAZĂR V., NĂSTASE A., NICOLI V. 2001. *Ocotirea naturii în județul Dolj*. Edit. Genessa. Craiova. 121 pp.
- MUNTEANU D. 2004. *Arii de importanță avifaunistică din România*. Edit. Alma Mater. Cluj-Napoca. 307 pp.
- MUNTEANU D. 2005. *Păsări (Aves)* In: Botnariuc N. & Tatole Viorica (Eds.). *Cartea Roșie a Vertebratelor din România*. Edit. Academia Română și Muzeul Național de Istorie Naturală „Grigore Antipa”. Tipografia „Curtea Veche”. București: 85-172.
- PAPP T. & FĂNTÂNĂ C. (Eds). 2008. *Ariile de Importanță Avifaunistică din România*. Publicație comună a Societății Ornitologice Române și a Asociației „Grupul Milvus”. Târgu-Mureș. 319 pp.
- RIDICHE MIRELA. 1999. *Catalogul colecției de ornitologie a Muzeului Olteniei (1978-1998)*. Oltenia. Studii și comunicări. Științele Naturii. Muzeul Olteniei Craiova. **15**: 136-165.
- RIDICHE MIRELA SABINA. 2004. *Statutul de conservare al avifaunei acvatice din bazinele piscicole Dunăreni - Bistreț (Dj.) în raport cu legislația europeană*. Oltenia. Studii și comunicări. Științele Naturii. Muzeul Olteniei Craiova. **20**: 285-290.
- RIDICHE MIRELA SABINA. 2007a. *Results regarding the winter monitoring of the birds species within the wetland Bistreț-Carna (Dolj County)*. Oltenia. Studii și comunicări. Științele Naturii. Muzeul Olteniei Craiova. **23**: 167-170.
- RIDICHE MIRELA SABINA. 2007b. *New mentions regarding the nesting of the species *Burhinus oedipnemus* (L.) within the Danube alluvial plain*. Drobeta. Științele Naturii. Muzeul Regiunii Porților de Fier. Drobeta-Turnu Severin. **17**: 246-249.
- RIDICHE MIRELA SABINA. 2008. *The easily flooded area of the Danube (Dolj county, Romania), reference site for the preservation of community interest species*. Natura Montenegrina. Podgorica. **7**(2): 261-273.
- RIDICHE MIRELA SABINA. 2010. *The catalogue of birds introduced in the patrimony of the Museum of Oltenia, between 1999 and 2009 (Craiova, Romania)*. Oltenia. Studii și comunicări. Științele Naturii. Muzeul Olteniei Craiova. **26**(2): 183-194.
- RIDICHE MIRELA & BĂLESCU CARMEN. 2001. *Considerații ecologice privind avifauna acvatică din bazinele piscicole de la Dunăreni-Bistreț*. Oltenia. Studii și comunicări. Științele Naturii. Muzeul Olteniei Craiova. **16**: 127-130.
- RIDICHE MIRELA SABINA & NARCISA ORZAȚĂ. 2004. *Analiză de ansamblu asupra ornitofaunei din zona umedă Dunăreni-Bistreț (Dolj)*. Drobeta. Științele Naturii. Muzeul Regiunii Porților de Fier. Drobeta-Turnu Severin. **14**: 213-222.

- RIDICHE MIRELA SABINA, ORZAȚĂ NARCISA, ȘTEFĂNESCU D. 2006. *Cârna (Dunăreni)-Bistreț Lake (Dolj, Romania), Important Bird Area and a potential Ramsar site*. Proceedings of the International Symposium of Ecologists of the Republic of Montenegro - Kotor. Podgorica: 203-212.
- RIDICHE MIRELA SABINA & LICURICI MIHAELA. 2009. *Assessment and protection of the aquatic bird species with unfavourable preservation status, which are present in the Natura 2000 site Bistreț (Dolj county)*. Oltenia. Studii și comunicări. Științele Naturii. Muzeul Olteniei Craiova. **25**: 259-267.
- RIDICHE MIRELA SABINA & MURARIU D. 2009. *Importanța zonelor umede din Lunca Dunării (sectorul Calafat-Jiu, România) ca medii de viață pentru păsări*. Diversitatea, valorificarea rațională și protecția lumii animale. Simpozion internațional consacrat celei de-a 70 - a aniversări din ziua nașterii profesorului universitar Andrei Munteanu. Edit. Știința. Chișinău: 95-100.
- RIDICHE MIRELA SABINA, MATEESCU MONICA DANIELA, VIȘAN CORINA LEILA. 2010. *Anthropic activities and their effects on the birdfauna in the Natura 2000 Calafat-Ciupercești-Danube sit (Dolj county, Romania)*. Oltenia. Studii și comunicări. Științele Naturii. Muzeul Olteniei Craiova. **26**(1): 192-198.
- RIDICHE MIRELA SABINA & KISS J. B. 2011. *Data regarding ringed bird species found in the Danube meadow between Calafat and Jiu (Dolj county, Romania)*. Journal of Wetlands Biodiversity. Museum of Brăila. Department of Natural Sciences. Brăila. **1**: 119-126.
- SZABÓ-SZELEY L. & BACZÓ Z. 2006. *Nomenclatorul păsărilor din România - Nomenclator Avium Romaniae*. Edit. Aves. Odorheiu Secuiesc. 117 pp.
- ***. 1993. *Legea nr. 13 din 11 martie 1993, pentru aderarea României la Convenția privind conservarea vieții sălbatice și a habitatelor naturale din Europa* adoptată la Berna, la 19 septembrie 1979. M. Of. nr. 62/ 25 martie/1993.
- ***. 1997. *Buletin A.I.A. Buletin informativ asupra Ariilor de Importanță Avifaunistică din România*. Publicațiile Societății Ornitologice Române. Cluj-Napoca. **6**: 1-4.
- ***. 1998. *Legea nr. 13 din 8 ianuarie 1998 pentru aderarea României la Convenția privind conservarea speciilor migratoare de animale sălbatice*, adoptată la Bonn la 23 iunie 1979. M. Of. nr. 24/26 ianuarie/1998.
- ***. *Legea nr. 5/2000 privind aprobarea Planului de amenajare a teritoriului național - Secțiunea a III a - zone protejate*. M. Of. nr. 152/12 aprilie/2000.
- ***. 2001. *Legea nr. 654 din 2001 pentru modificarea și completarea Legii fondului cinegetic și a protecției vânatului, nr.103/1996*. M. Of. nr. 749/23 noiembrie/2001.
- ***. Birdlife International. 2001. *Important Bird Areas and potential Ramsar Sites in Europe*. BirdLife International Wageningen. The Netherlands: 85-86.
- ***. 2007. *Ordonanță de urgență nr. 57 din 20 iunie 2007 privind regimul ariilor naturale protejate, conservarea habitatelor naturale, a florei și faunei sălbatice*. M. Of. nr. 442/29 iunie/ 2007.
- ***. *H.G. nr. 1284/24 X. 2007 privind declararea ariilor de protecție specială avifaunistică, ca parte integrantă a rețelei ecologice Natura 2000 în România*. M. Of. nr. 739/31 octombrie/2007.
- ***. *Birds Directive 2009/147/EC of the European Parliament and of the Council of 30 november 2009 on the conservation of wild birds*.
- ***. 2011. *Legea nr. 49/2011 pentru aprobarea Ordonanței de urgență a Guvernului nr. 57/2007 privind regimul ariilor naturale protejate, conservarea habitatelor naturale, a florei și faunei sălbatice*. M. Of. nr. 262/13 aprilie/2011.

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Table 19. The avifauna list from the Danube floodplain, between Calafat and the river Jiu, the ecologic type, the distribution of the species, IBA designation criteria and the protection statute of the birds species. / Tabel 19. Lista avifaunei din Lunca Dunării, dintre Calafat și râul Jiu, tipul ecologic, distribuția speciilor, criteriile de desemnare a AIA și statutul de protecție al speciilor de păsări.

No.	Species	Ecologic type	Distribution in IBA and/or ASPA			IBA Criteria	Protection statute				
			Calafat – Ciupereni – the Danube	Bistret	the Jiu–the Danube Confluence		Birds Directive (Annex I)	Berna Conv.	Bonn Conv.	G.E.O. 57	Hunting Law
1.	<i>Tachybaptus ruficollis</i> (PALLAS, 1764)	Aev.	+	+		A4/B1	-	AII	-	-	AII
2.	<i>Podiceps cristatus</i> (LINNAEUS, 1758)	Aev.	+	+		A4/B1	-	AIII	-	-	AII
3.	<i>Podiceps grisegena</i> (BODDAERT, 1783)	Aev.	+			A4/B1	-	AII	AII	-	AII
4.	<i>Podiceps nigricollis</i> C.L. BREHM, 1831	Aev.	+	+		A4/B1	-	AII		-	AII
5.	<i>Phalacrocorax carbo</i> (LINNAEUS, 1758)	Aev.	+	+	+	A4/B1		AIII	-	-	AI
6.	<i>Phalacrocorax pygmaeus</i> (PALLAS, 1773)	Aev.	+	+	+	A1, A4/B1	AI	AII	AII	A III	AII
7.	<i>Pelecanus onocrotalus</i> LINNAEUS, 1758	Aev.		+		A4/B1, B2	AI	AII	AI	A III	AII
8.	<i>Pelecanus crispus</i> BRUCH, 1832	Aev.		+	+	A1, A4/B1, B2	AI	AII	AI	A III	AII
9.	<i>Botaurus stellaris</i> (LINNAEUS, 1758)	Aev.	+	+		B2	AI	AII	AII	A III	AII
10.	<i>Isobrychus minutus</i> (LINNAEUS, 1766)	Aev.	+	+	+	B2	AI	AII	AII	A III	AII
11.	<i>Nycticorax nycticorax</i> (LINNAEUS, 1758)	Aev.	+	+	+	A4/B1, B2	AI	AII	-	A III	AII
12.	<i>Ardeola ralloides</i> (SCOPOLI, 1769)	Aev.	+	+		A4/B1, B2	AI	AII	-	A III	AII
13.	<i>Bubulcus ibis</i> (LINNAEUS, 1758)	Aev.		+		A4/B1	-	AII		-	AII
14.	<i>Egretta garzetta</i> (LINNAEUS, 1766)	Aev.	+	+	+	A4/B1	AI	AII	-	A III	AII
15.	<i>Egretta alba</i> (LINNAEUS, 1758)	Aev.	+	+	+	A4/B1	AI	AII	AII	A III	AII
16.	<i>Ardea cinerea</i> LINNAEUS, 1758	Aev.	+	+	+	A4/B1	-	AIII	-	-	AII
17.	<i>Ardea purpurea</i> LINNAEUS, 1766	Aev.	+	+		B2	AI	AII	AII	A III	AII
18.	<i>Ciconia nigra</i> (LINNAEUS, 1758)	Ter.		+	+	A4/B1, B2	AI	AII	AII	A III	AII
19.	<i>Ciconia ciconia</i> (LINNAEUS, 1758)	Aev.	+	+	+	A4/B1, B2	AI	AII	AII	A III	AII
20.	<i>Plegadis falcinellus</i> (LINNAEUS, 1766)	Aev.	+	+	+	A4/B1, B2	AI	AII	-	A III	AII
21.	<i>Platalea leucorodia</i> LINNAEUS, 1758	Aev.	+	+	+	A4/B1, B2	AI	AII	AII	A III	AII
22.	<i>Cygnus olor</i> (GMELIN 1789)	Aev.	+	+		A4/B1	-	AIII	AII	-	AII
23.	<i>Cygnus cygnus</i> (LINNAEUS, 1758)	Aev.	+	+	+	A4/B1	AI	AII	AII	A III	AII
24.	<i>Anser fabalis</i> (LATHAM, 1787)	Aev.	+	+	+	A4/B1		AIII	AII		AII
25.	<i>Anser albifrons</i> (SCOPOLI, 1769)	Aev.	+	+	+	A3, A4/B1		AIII	AII	-	AI
26.	<i>Anser erythropus</i> (LINNAEUS, 1758)	Aev.		+		A1, A3, A4/B1	AI	AII	AII	A III	AII
27.	<i>Anser anser</i> (LINNAEUS, 1758)	Aev.	+	+	+	A4/B1		AIII	AII	-	AI
28.	<i>Branta ruficollis</i> (PALLAS, 1769)	Aev.		+		A1, A4/B1	AI	AII	AI	A III	AII
29.	<i>Tadorna tadorna</i> (LINNAEUS, 1758)	Aev.		+		A4/B1	-	AII	AII	-	AII
30.	<i>Anas penelope</i> LINNAEUS, 1758	Aev.	+	+		A4/B1	-	AIII	AII	-	AI
31.	<i>Anas strepera</i> LINNAEUS, 1758	Aev.	+	+		A4/B1, B2	-	AIII	AII	-	?
32.	<i>Anas crecca</i> LINNAEUS, 1758	Aev.	+	+	+	A4/B1	-	AIII	AII	-	AI
33.	<i>Anas platyrhynchos</i> LINNAEUS, 1758	Aev.	+	+	+	A4/B1	-	AIII	AII	-	AI
34.	<i>Anas acuta</i> LINNAEUS, 1758	Aev.	+	+		A4/B1, B2	-	AIII	AII	-	AI
35.	<i>Anas querquedula</i> LINNAEUS, 1758	Aev.	+	+		A4/B1, B2	-	AIII	AII	-	AI
36.	<i>Anas clypeata</i> LINNAEUS, 1758	Aev.	+	+		A4/B1	-	AIII	AII	-	AI
37.	<i>Netta rufina</i> (PALLAS, 1773)	Aev.		+		A4/B1, B2	-	AIII	AII	-	AII
38.	<i>Aythya ferina</i> (LINNAEUS, 1758)	Aev.	+	+	+	A4/B1, B3		AIII	AII	-	AI
39.	<i>Aythya nyroca</i> (GÜLDENSTADT, 1770)	Aev.	+	+		A1, A4/B1	AI	AIII	AII	A III	AII
40.	<i>Aythya fuligula</i> (LINNAEUS, 1758)	Aev.	+	+		A4/B1		AIII	AII	-	AI
41.	<i>Bucephala clangula</i> (LINNAEUS, 1758)	Aev.	+	+		A4/B1		AIII	AII	-	AI

42.	<i>Mergus albellus</i> LINNAEUS, 1758	Acv.	+	+	+			A3, A4/B1, B2	AI	AII	AII	-	AII
43.	<i>Mergus merganser</i> LINNAEUS, 1758	Acv.			+			A4/B1	-	AIII	AII	-	AI
44.	<i>Pernis apivorus</i> (LINNAEUS, 1758)	Ter.				+		A4/B1, B3	AI	AII	AII	A III	AII
45.	<i>Haliaeetus albicilla</i> (LINNAEUS, 1758)	Acv.	+	+	+			A1	AI	AII	AI	A III	AII
46.	<i>Circus aeruginosus</i> (LINNAEUS, 1758)	Acv.	+	+	+			A4/B1	AI	AII	AII	A III	AII
47.	<i>Circus cyaneus</i> (LINNAEUS, 1766)	Ter.	+	+	+			A4/B1, B2	AI	AII	AII	A III	AII
48.	<i>Accipiter gentilis</i> (LINNAEUS, 1758)	Ter.	+	+	+			A4/B1	-	AII	AII	-	AII
49.	<i>Accipiter nisus</i> (LINNAEUS, 1758)	Ter.	+	+	+			A4/B1	-	AII	AII	-	AII
50.	<i>Buteo buteo</i> (LINNAEUS, 1758)	Ter.	+	+	+			A4/B1	-	AII	AII	-	AII
51.	<i>Buteo rufinus</i> (CRETZSCHMAR, 1827)	Ter.	+	+	+			B2	AI	AII	AII	A III	AII
52.	<i>Buteo lagopus</i> (PONTOPPIDAN, 1763)	Ter.	+	+	+			A3, A4/B1	-	AII	AII	-	AII
53.	<i>Aquila pomarina</i> C.L. BREHM, 1831	Ter.	+	+	+			A4/B1, B2	AI	AII	AII	A III	AII
54.	<i>Falco tinnunculus</i> LINNAEUS, 1758	Ter.	+	+	+			A4/B1, B2	-	AII	AII	-	AII
55.	<i>Falco vespertinus</i> LINNAEUS, 1766	Ter.	+	+	+			A4/B1, B2	AI	AII	AII	A III	AII
56.	<i>Falco columbarius</i> LINNAEUS, 1758	Ter.	+	+	+			A4/B1, B2	AI	AII	AII	-	AII
57.	<i>Falco subbuteo</i> LINNAEUS, 1758	Ter.	+	+	+			A4/B1	-	AII	AII	-	AII
58.	<i>Perdix perdix</i> (LINNAEUS, 1758)	Ter.	+	+	+			B2	-	AIII	-	-	AI
59.	<i>Coturnix coturnix</i> (LINNAEUS, 1758)	Ter.	+	+	+			B2	-	AII	AII	-	AI
60.	<i>Phasianus colchicus</i> LINNAEUS, 1758	Ter.	+	+	+			-	-	AIII	-	-	AI
61.	<i>Rallus aquaticus</i> LINNAEUS, 1758	Acv.	+	+	+			B3	-	AIII	-	-	AII
62.	<i>Porzana porzana</i> (LINNAEUS, 1766)	Acv.	+	+	+			B3	AI	AII	AII	A III	AII
63.	<i>Porzana parva</i> (SCOPOLI, 1769)	Acv.	+	+	+			B3	AI	AII	AII	A III	AII
64.	<i>Crex crex</i> (LINNAEUS, 1758)	Acv.	+	+	+			A1	AI	AII	-	A III	AII
65.	<i>Gallinula chloropus</i> (LINNAEUS, 1758)	Acv.	+	+	+			A4/B1	-	AIII	-	-	AI
66.	<i>Fulica atra</i> LINNAEUS, 1758	Acv.	+	+	+			A4/B1	-	AIII	-	-	AI
67.	<i>Haematopus ostralegus</i> LINNAEUS, 1758	Acv.	+	+	+			A4/B1	-	AIII	-	-	AII
68.	<i>Himantopus himantopus</i> (LINNAEUS, 1758)	Acv.	+	+	+			A4/B1	AI	AII	AII	A III	AII
69.	<i>Recurvirostra avosetta</i> LINNAEUS, 1758	Acv.	+	+	+			A4/B1, B2, B3	AI	AII	AII	A III	AII
70.	<i>Burhinus oedienemus</i> (LINNAEUS, 1758)	Ter.	+	+	+			B2	AI	AII	AII	A III	AII
71.	<i>Glareola pratincola</i> (LINNAEUS, 1766)	Ter.	+	+	+			A4/B1, B2	AI	AII	AII	A III	AII
72.	<i>Charadrius dubius</i> SCOPOLI, 1786	Acv.	+	+	+			A4/B1	-	AII	AII	-	AII
73.	<i>Charadrius hiaticula</i> LINNAEUS, 1758	Acv.	+	+	+			A4/B1	-	AII	-	-	AII
74.	<i>Charadrius alexandrinus</i> LINNAEUS, 1758	Acv.	+	+	+			A4/B1, B2	-	AII	-	A III	AII
75.	<i>Pluvialis squatarola</i> (LINNAEUS, 1758)	Acv.			+			A3, A4/B1	-	AIII	AII	-	AII
76.	<i>Vanellus vanellus</i> (LINNAEUS, 1758)	Acv.	+	+	+			A4/B1	-	AIII	AII	-	AII
77.	<i>Calidris minuta</i> (LEISLER, 1812)	Acv.	+	+	+			A3, A4/B1	-	AII	AII	-	AII
78.	<i>Calidris temminckii</i> (LEISLER, 1812)	Acv.	+	+	+			A3, A4/B1	-	AII	AII	-	AII
79.	<i>Calidris ferruginea</i> (PONTOPPIDAN, 1763)	Acv.	+	+	+			A4/B1, B2	-	-	-	-	AII
80.	<i>Calidris alpina</i> (LINNAEUS, 1758)	Acv.	+	+	+			A4/B1, B2	-	AII	AII	A III	AII
81.	<i>Philomachus pugnax</i> (LINNAEUS, 1758)	Acv.	+	+	+			A4/B1, B2	AI,	AIII	AII	-	AII
82.	<i>Gallinago gallinago</i> (LINNAEUS, 1758)	Acv.	+	+	+			A4/B1	-	AIII	AII	-	AI
83.	<i>Scolopax rusticola</i> LINNAEUS, 1758	Acv.	+	+	+			A4/B1	-	AIII	AII	-	AI
84.	<i>Limosa limosa</i> (LINNAEUS, 1758)	Acv.	+	+	+			A4/B1, B2	-	AIII	AII	-	AI
85.	<i>Numenius phaeopus</i> (LINNAEUS, 1758)	Acv.	+	+	+			A4/B1	-	AIII	-	-	AII
86.	<i>Numenius arquata</i> (LINNAEUS, 1758)	Acv.	+	+	+			A4/B1, B2	-	AIII	AII	-	AII
87.	<i>Tringa erythropus</i> (PALLAS, 1764)	Acv.	+	+	+			A3, A4/B1	-	AIII	AII	-	AII
88.	<i>Tringa totanus</i> (LINNAEUS, 1758)	Acv.	+	+	+			A4/B1, B2	-	AIII	AII	-	AII
89.	<i>Tringa stagnatilis</i> (BECHSTEIN, 1803)	Acv.	+	+	+			A4/B1	-	AII	AII	-	AII
90.	<i>Tringa ochropus</i> LINNAEUS, 1758	Acv.	+	+	+			A4/B1	-	AII	AII	-	AII

91.	<i>Tringa glareola</i> LINNAEUS, 1758	Acv.	+	+	+	+	+	+	A4/B1, B2	AI	AII	AII	A III	AII
92.	<i>Actitis hypoleucos</i> (LINNAEUS, 1758)	Acv.	+	+	+	+	+	+	A4/B1	-	AII	AII	-	AII
93.	<i>Larus minutus</i> PALLAS, 1776	Acv.	+	+	+	+	+	+	A4/B1, B2	-	AII	-	A III	AII
94.	<i>Larus ridibundus</i> LINNAEUS, 1758	Acv.	+	+	+	+	+	+	A4/B1	-	AIII	-	-	AII
95.	<i>Larus canus</i> LINNAEUS, 1758	Acv.	+	+	+	+	+	+	A4/B1, B2	-	AIII	-	-	AII
96.	<i>Larus cachinnans</i> PALLAS, 1811	Acv.	+	+	+	+	+	+	A4/B1	-	-	-	-	AII
97.	<i>Sterna caspia</i> PALLAS, 1770	Acv.	+	+	+	+	+	+	A4/B1, B2	AI	AII	AII	A III	AII
98.	<i>Sterna hirundo</i> LINNAEUS, 1758	Acv.	+	+	+	+	+	+	A4/B1	AI	AII	AII	A III	AII
99.	<i>Sterna albifrons</i> PALLAS, 1764	Acv.	+	+	+	+	+	+	A4/B1, B2	AI	AII	AII	A III	AII
100.	<i>Chlidonias hybrida</i> (PALLAS, 1811)	Acv.	+	+	+	+	+	+	A4/B1, B2	AI	AII	-	A III	AII
101.	<i>Chlidonias niger</i> (LINNAEUS, 1758)	Acv.	+	+	+	+	+	+	A4/B1, B2	AI	AII	AII	A III	AII
102.	<i>Chlidonias leucopterus</i> (TEMMINCK, 1815)	Acv.	+	+	+	+	+	+	A4/B1	-	AII	AII	-	AII
103.	<i>Columba oenas</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AIII	-	-	AI
104.	<i>Columba palumbus</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	-	-	-	AI
105.	<i>Streptopelia decaocto</i> (FRIVALDSZKI, 1838)	Ter.	+	+	+	+	+	+	B3	-	AIII	-	-	AI
106.	<i>Streptopelia turtur</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B2	-	AIII	-	-	AI
107.	<i>Cuculus canorus</i> LINNAEUS, 1758	Eur.	+	+	+	+	+	+	B3	-	AIII	-	-	AII
108.	<i>Tyto alba</i> (SCOPOLI, 1769)	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII
109.	<i>Otus scops</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII
110.	<i>Athene noctua</i> (SCOPOLI, 1769)	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII
111.	<i>Srix aluco</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
112.	<i>Asio otus</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
113.	<i>Apus apus</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AIII	-	-	AII
114.	<i>Alcedo atthis</i> (LINNAEUS, 1758)	Acv.	+	+	+	+	+	+	B2	AI	AII	-	A III	AII
115.	<i>Merops apiaster</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	A4/B1, B2	-	AII	AII	-	AII
116.	<i>Coracias garrulus</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B2	-	AII	AII	A III	AII
117.	<i>Upupa epops</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
118.	<i>Jynx torquilla</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII
119.	<i>Picus canus</i> GMELIN, 1788	Ter.	+	+	+	+	+	+	B2	AI	AII	-	A III	AII
120.	<i>Picus viridis</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII
121.	<i>Dryocopus martius</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B2	AI	AII	-	A III	AII
122.	<i>Dendrocopos major</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
123.	<i>Dendrocopos syriacus</i> (HEMPRICH et EHRENBERG, 1833)	Ter.	+	+	+	+	+	+	B2	AI	AII	-	A III	AII
124.	<i>Dendrocopos medius</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	AI	AII	-	A III	AII
125.	<i>Dendrocopos minor</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
126.	<i>Galerida cristata</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B2	-	AIII	-	-	AII
127.	<i>Alauda arvensis</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B2	-	AIII	-	-	AII
128.	<i>Riparia riparia</i> (LINNAEUS, 1758)	Eur.	+	+	+	+	+	+	A4/B1, B2	-	AII	-	-	AII
129.	<i>Hirundo rustica</i> LINNAEUS, 1758	Eur.	+	+	+	+	+	+	B2	-	AII	-	-	AII
130.	<i>Delichon urbicum</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	-	-	AII	-	-	AII
131.	<i>Anthus campestris</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B2	AI	AII	-	A III	AII
132.	<i>Anthus trivialis</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
133.	<i>Anthus praensis</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
134.	<i>Anthus spinoletta</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
135.	<i>Motacilla flava</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
136.	<i>Motacilla alba</i> LINNAEUS, 1758	Eur.	+	+	+	+	+	+	B3	-	AII	-	-	AII
137.	<i>Troglodytes troglodytes</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
138.	<i>Erihacus rubecula</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
139.	<i>Luscinia luscinia</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII

140.	<i>Luscinia megarhynchos</i> C.L. BREHM, 1831	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
141.	<i>Phoenicurus ochruros</i> (S.G. GMELIN, 1774)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
142.	<i>Phoenicurus phoenicurus</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII
143.	<i>Oenanthe oenanthe</i> (LINNAEUS, 1758)	Eur.	+	+	+	+	+	+	B3	-	AII	-	-	AII
144.	<i>Turdus merula</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AIII	-	-	AII
145.	<i>Turdus pilaris</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AIII	-	-	AI
146.	<i>Turdus philomelos</i> C. L. BREHM, 1831	Ter.	+	+	+	+	+	+	B3	-	AIII	-	-	AI
147.	<i>Turdus viscivorus</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AIII	-	-	AI
148.	<i>Locustella luscinioides</i> (SAVI, 1824)	Acv.	+	+	+	+	+	+	B3	-	AII	-	-	AII
149.	<i>Acrocephalus schoenobaenus</i> (LINNAEUS, 1758)	Acv.	+	+	+	+	+	+	B3	-	AII	-	-	AII
150.	<i>Acrocephalus palustris</i> (BECHSTEIN, 1798)	Acv.	+	+	+	+	+	+	B3	-	AIII	-	-	AII
151.	<i>Acrocephalus scirpaceus</i> (HERMANN, 1804)	Acv.	+	+	+	+	+	+	B3	-	AII	-	-	AII
152.	<i>Acrocephalus arundinaceus</i> (LINNAEUS, 1758)	Acv.	+	+	+	+	+	+	B2	-	AII	-	-	AII
153.	<i>Hippolais pallida</i> (HEMPRICH et EHRENBURG, 1831)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
154.	<i>Hippolais icterina</i> (VIEILLOT, 1817)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
155.	<i>Sylvia communis</i> LATHAM, 1787	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
156.	<i>Sylvia atricapilla</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
157.	<i>Sylvia curruca</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
158.	<i>Phylloscopus collybita</i> (VIEILLOT, 1817)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
159.	<i>Muscicapa striata</i> (PALLAS, 1764)	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII
160.	<i>Ficedula parva</i> (BECHSTEIN, 1794)	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII
161.	<i>Aegithalos caudatus</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
162.	<i>Parus palustris</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
163.	<i>Parus caeruleus</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
164.	<i>Parus major</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
165.	<i>Sitta europaea</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
166.	<i>Certhia familiaris</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
167.	<i>Remiz pendulinus</i> (LINNAEUS, 1758)	Acv.	+	+	+	+	+	+	B3	-	AII	-	-	AII
168.	<i>Oriolus oriolus</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
169.	<i>Lanius collurio</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII
170.	<i>Lanius minor</i> GMELIN, 1788	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII
171.	<i>Lanius excubitor</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII
172.	<i>Garrulus glandarius</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	-	-	-	AI
173.	<i>Pica pica</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	-	-	-	AI
174.	<i>Corvus monedula</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	-	-	-	AI
175.	<i>Corvus frugilegus</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	-	-	-	AI
176.	<i>Corvus corone</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	-	-	-	AI
177.	<i>Sturnus vulgaris</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	-	-	-	AI
178.	<i>Passer domesticus</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	-	-	-	-
179.	<i>Passer hispaniolensis</i> (TEMMINCK, 1820)	Ter.	+	+	+	+	+	+	B3	-	AIII	-	-	-
180.	<i>Passer montanus</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AIII	-	-	-
181.	<i>Fringilla coelebs</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AIII	-	-	AII
182.	<i>Carduelis chloris</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
183.	<i>Carduelis carduelis</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
184.	<i>Carduelis cannabina</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
185.	<i>Pyrrhula pyrrhula</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AIII	-	-	AII
186.	<i>Coccothraustes coccothraustes</i> (LINNAEUS, 1758)	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
187.	<i>Emberiza citrinella</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B3	-	AII	-	-	AII
188.	<i>Emberiza hortulana</i> LINNAEUS, 1758	Ter.	+	+	+	+	+	+	B2	-	AII	-	-	AII

Legend:
Ecologic type: Acv. – aquatic; Ter. – terrestrial; Eur. – euriope.
IIBA Criteria: A1 – species in danger in the world (species of conservative interest); A3 – species with limited distribution in a biome/restrictive biome species; A4 – gregarious species during the passage, nesting or wintering period; B1 – gregarious species of European importance; B2 – species with unfavourable conservation statute in Europe (species in numerical decline, vulnerable, rare or with small nesting areas); B3 – species with favourable conservation statute in Europe.
Birds Directive: A1 – Annex 1 – species that are the subject of special conservation measures regarding the habitat.
Berna Conv. (Convention): AII – Annex II – strictly protected fauna species; AIII – Annex III – protected fauna species.
Bonn Conv. (Convention): AI – Annex I – migratory species with unfavourable conservation statute, for which the countries must assure immediate protection; AII – Annex II – migratory species with unfavourable conservation statute, for which the countries must assure conservation and management.
G.G.E.O. 57: Government Emergency Ordinance No. 57 / 2007: AIII – Annex 3 – plants and animals species, whose conservation requires the designation of special conservation areas and of special avifaunistic protection areas.
Hunting Law 407 / 2006: AII – Annex II – wild fauna of hunting interest, at which hunting is forbidden; AI – Annex I – wild fauna of hunting interest at which hunting is allowed in some periods.

Ecologic

IBA Criteria: A1 - species in danger in the world (species of

Birds Directive: AI - Annex 1 - species that

Berna Conv. (Convention): AII - Annex II - strictly protected fauna species; AIII - Annex III - protected fauna species

Bonn Conv. (Convention: AI - Annex I migratory species with unfavourable conservation statute, for which the c

G.F.O. 57: Government Emergency Ordinance No. 57 / 2007: AIII - Annex 3 - plants and animals species, whose conservation requires the designation of special conservation areas and of special avifaunistic protection

Hunting law 407 / 2006: All - Annex II - wild fauna of hunting interest at which hunting is allowed in some periods

Tip ecolog

Criterii AIA: A1 - specii amenintate pe plan global (spec

Directiva Păsări: Al - Anexa I - specii care fac obiectul măsurilor speciale de conservare privind habitatul.

Conv. (Convenția) Berna: All - Anexa II - specii de faună strict protejate; AIII - Anexa III - specii de faună protejate.

Conv. (Convenția) Bonn: Al - Anexa I - specii migratoare cu stare de conservare nefavorabilă, pentru care statele trebuie să asigure protecția imediată; All - Anexa II - specii migratoare cu stare de conservare nefavorabilă,

pentru care statele trebuie să asigure conservarea și gestionarea.

O.U.G. 57: Ordonanță de urgență nr. 57 / 2007: AIII - Anexa 3 -

Legea vânătorii 407 / 2006: All - Anexa II - fauna sălbatică de interes vânătoresc la care vânarea este permisă în anumite perioade; Al - Anexa I - fauna sălbatică de interes vânătoresc la care vânarea este interzisă; Al - Anexa I - fauna sălbatică de interes vânătoresc la care vânarea este permisă în anumite perioade