

Information Sheet on Ramsar Wetlands (RIS)

2009-2012 version

Bistret

1. Name and address of the compiler of this form:

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2. Date this sheet was completed/updated:

07 February 2012

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Designation date

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Site Reference Number

3. Country:

Romania

4. Name of the Ramsar site:

Bistret

5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

- a) Designation of a new Ramsar site ; or
b) Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area

The Ramsar site boundary and site area are unchanged:

or

If the site boundary has changed:

- i) the boundary has been delineated more accurately ; or
ii) the boundary has been extended ; or
iii) the boundary has been restricted**

and/or

If the site area has changed:

- i) the area has been measured more accurately ; or
- ii) the area has been extended ; or
- iii) the area has been reduced**

7. Map of site:

a) A map of the site, with clearly delineated boundaries, is included as:

- i) **hard copy** (required for inclusion of site in the Ramsar List): yes
- ii) **digital (electronic) format** (optional): yes

b) Describe briefly the type of boundary delineation applied:

The southern boundary of the site is determined by the state border with Bulgaria. The northern boundary goes near the road DN55A, which links from west to east the localities Rast, Negoii, Bistret, Plosca, Carca and then is following the defence dyke of Sapata town. The eastern defence dyke of Nedeia- Bistret-Jiu precinct, near Macesu de Jos town, represents the eastern limit of the site.

The present's site surface covers Bistret Lake, as well as its surroundings to Danube, overriding Nature 2000 ROSPA 0010 Bistret site perimeter (1916 ha).

8. Geographical coordinates (latitude/longitude):

43°52'34" N, 23°34'40" E

9. General location:

South Romania

Large administrative unit: Dolj County.

The Lake Bistreț is situated in the South of Romania, near the villages Rast (3750 inhabitants), Bistret (4616 inhabitants) and Macesu de Jos (1673 inhabitants).

10. Elevation (m):

Min: 9, Max 44, Med: 27.

11. Area: (in hectares)

27482 ha

12. Overview:

Being located in South of Oltenia region and Dolj County, the proposed site integrates the Dunareni-Bistreț fishery complex (2030 ha), part of the Bistret-Carna-Nasta-Nedeia lagoon complex (22000 ha), having an abundant flora and fauna diversity. It also represents a great scientific and ornithological spot,

due to its aviary diversity. It is also situated on an important migratory route, while the present pools offer a great place for temporary or occasionally resting of migratory or sedentary waterfowl species.

Bistreț Lake provides very important places for birds that are breeding, resting and nesting. Bistreț Lake is sheltering around 24 species that can be found on Annex I of Birds Directive, and 4 that are globally threatened.

13. Ramsar Criteria:

1	2	3	4	5	6	7	8	9
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14. Justification for the application of each Criterion listed in 11 above:

Criterion 2:

The site supports the following species of the Bird Directive Annex I:

Scientific name	Common name	Breeding (pairs)	Winter (individuals)	Migrants (individuals)
<i>Alcedo atthis</i>	Common Kingfisher	12		
<i>Anser erythropus</i>	Lesser White-fronted Goose		4	4
<i>Ardea purpurea</i>	Purple Heron	16		
<i>Ardeola ralloides</i>	Squacco Heron	50		70
<i>Aythya nyroca</i>	Ferruginous Duck	25-34	75	15
<i>Botaurus stellaris</i>	(Great) Bittern	20		
<i>Branta ruficollis</i>	Red-breasted Goose		2-8	20
<i>Chlidonias hybridus</i>	Whiskered Tern	25-80		
<i>Ciconia ciconia</i>	White Stork	6		180
<i>Ciconia nigra</i>	Black Stork			48
<i>Circus aeruginosus</i>	Marsh Harrier	12-24	4	
<i>Circus cyaneus</i>	Hen Harrier		1	
<i>Cygnus cygnus</i>	Whooper Swan			20
<i>Egretta (Casmerodius) alba/-us</i>	Great Egret	11	26	
<i>Egretta garzetta</i>	Little Egret	75		
<i>Himantopus himantopus</i>	Black-winged Stilt	3-6		78-90
<i>Ixobrychus minutus</i>	Little Bittern			20
<i>Mergus albellus</i>	Smew		14-40	

<i>Nycticorax nycticorax</i>	Black-crowned Night Heron			4-150
<i>Pelecanus crispus</i>	Dalmatian Pelican			31-59
<i>Phalacrocorax pygmeus</i>	Pygmy Cormorant	70-80	240	1000
<i>Platalea leucorodia</i>	Eurasian Spoonbill	120-166		400-450
<i>Plegadis falcinellus</i>	Glossy Ibis	34-41		180-211
<i>Recurvirostra avosetta</i>	Avocet			44-77

Some of the endangered, vulnerable and near threatened bird species occurring on this lake are: the Red-breasted Goose (*Branta ruficollis*), the Lesser White-fronted Goose (*Anser erythropus*), the Dalmatian Pelican (*Pelecanus crispus*), and the Ferruginous Duck (*Aythya nyroca*).

Scientific name	Common name	Breeding (pairs)	Passage migrant (individuals)	Winter (individuals)	2011.2 Global IUCN Red List Category	Birds Directive
<i>Branta ruficollis</i>	Red-breasted Goose		20	2-8	EN	I
<i>Anser erythropus</i>	Lesser White-fronted Goose		4	4	VU	I
<i>Pelecanus crispus</i>	Dalmatian Pelican		31-59		VU	I
<i>Aythya nyroca</i>	Ferruginous Duck	25-34	15	75	NT	I

The data presented above was collected between 2000 and 2010, referenced from the following bibliography:

1. Munteanu, D., (coord.), 2004 – Aree de importanță avifaunistică din România – Documentații. Societatea Ornitologică Română;
2. H.G. 971/2011 – Hotărâre de Guvern pentru modificarea și completarea H.G. nr. 1284/2007 privind declararea ariilor de protecție specială avifaunistică ca parte integrantă a rețelei ecologice europene Natura 2000 în România;
3. Papp, T., Fantana, C., - editors (2008) – Important Bird Areas in Romania – published in cooperation by the Romanian Ornithological Society and Association “Milvus Group”;
4. “Romanian Ornithological Society” database;

Criterion 4:

Being located on a major migratory route, Bistreț territory represents an important area for resting and feeding of rare and very rare bird species. Protected bird species effectiveness were recorded as following:

- a) Annex I Bird Directive species: 24;
- b) Globally threatened species: 5;

The site is important for breeding populations of the following species: *Ardea purpurea*, *Ardeola ralloides*, *Aythya nyroca*, *Botaurus stellaris*, *Ciconia ciconia*, *Circus aeruginosus*, *Egretta (Casmerodius) alba/-us*, *Egretta garzetta*, *Platalea leucorodia*, and *Plegadis falcinellus*.

During migration, the site is important for the following species: *Anas acuta*, *Anas chipeata*, *Anas penelope*, *Aythya nyroca*, *Limosa limosa*, *Larus ridibundus*, *Pelecanus crispus*, *Phalacrocorax carbo*, *Phalacrocorax pygmeus*, *Platalea leucorodia*, *Plegadis falcinellus*, as well as for over 20,000 individuals of other migratory waterfowl.

The Red-breasted Goose (*Branta ruficollis*) migrates in number of 20 individuals over the site.

The site is highly important for waterfowl's habitat, sheltering sedentary wild birds on one hand, as well as northern population that rest during migration periods.

Please see justification of criterion 2 for the list of bird species.

Criterion 5:

In winter the number of *Anser albifrons* roosting on the lake varied from 500 up to 2000 individuals. Red-breasted Goose (*Branta ruficollis*) gathers in number of approximately 2 to 8 individuals.

The Lake Bistreț represents an important staging area for most of migratory species on their way from Russia to Mediterranean and Africa. During migration in spring and autumn, over 20000 birds can be recorded. For further details and bird counts, please refer to Annex I.

Criterion 6:

During migration, a number between 31 up to 59 (individuals) of the Dalmatian Pelican (*Pelecanus crispus*) can be found here. Around 1000 individuals of Pygmy Cormorant (*Phalacrocorax pygmeus*) are present on the lake during migration, which represents more than 1 % of the entire world population. Also, 15 individuals occur on the mentioned area during winter season.

The data presented above was collected between 2000 and 2008, referenced from the following bibliography:

1. H.G. 971/2011 – Hotarare de Guvern pentru modificarea si completarea H.G. nr. 1284/2007 privind declararea ariilor de protectie speciala avifaunistica ca parte integranta a retelei ecologice europene Natura 2000 în Romania;
2. Papp, T., Fantana, C., - editors (2008) – Important Bird Areas in Romania – published in cooperation by the Romanian Ornithological Society and Association “Milvus Group”;
3. “Romanian Ornithological Society” database;

15. Biogeography

a) biogeographic region:

Europe: Continental
World: West Palearctic

b) biogeographic regionalisation scheme (include reference citation):

Habitat Directive 92/43/EEC (1992)
Donita, N., et al. (2005) Habitatele din Romania, Bucuresti

16. Physical features of the site:

Geology and geomorphology:

Bistret lake is situated at the contact of the ex-flooding meadow of the Danube and its first terrace. The entire area was created by the Danube through alluviation and because is directly affected by the Danube water, it bears the name of Danube Floodplain. Some changes appear locally, generated by enhanced alluviation and by the presence of sand dunes and of alluvial fans. The wind has a very important role in shaping the sand dunes. The basin of the lake was created in the Quaternary Period, in Holocene.

Soil type and chemistry range:

The soils are from the azonal soil class: they are formed from flood sediments; they are recent and have increased moisture.

Origins: Natural and anthropic

Hydrology:

Bistret lake is the result of the former systematizations of the natural lakes from the flooded meadow of the Danube and of Bistret-Carna-Nasta-Nedeia Complex of lakes which, until 1970-1975, had a total surface of 22000 ha. It is the largest lake of the Dolj County. Today, Bistret lake is splited in 6 basins organised for pisciculture purpose. Desnatui river is flowing in Bistret lake and a drain connects the lake with the Danube. The water level is depending on the seasonal variations of the rainfall and on the management of the fish farm. During the summer, the surface can be much reduced because of the drought.

Water quality:

Desnatui river and Bistret lake have a good quality water.

Depth, fluctuations and permanence of water:

Maximum depth: 5m medium depth: 1.5m

Water area: 2006 ha

Climate:

The climate is temperate continental, with sub Mediterranean influences. The temperature annual average is the highest in the country, over 11^o C, while the January average is -2^o C. In the summer, the temperature can reach 40-42^o C. The annual rainfall average is 500 mm, but in the summer the level of aridity is high and the drought very frequent.

17. Physical features of the catchment area:

Area: Danube floodplain

Geological characteristics:

Bistret is situated in the Danube Floodplain, an area created by the Danube during Holocen trough the alluviation of the sediments. The general geology is represented by the sand and the gravel layers, covered sometimes by a thin layer of loess. From geomorphological point of view the catchment area is characterized by a diversity of micro-relief features: the sandbank located near the riverbed (the highest part), the middle alluvial plain (partially swampy) and the depressions (swamps and lakes, most of them

drained in the past). The sand dunes, shaped by the winds are another geomorphological feature specific to this area.

Soil type:

The soils are recent; some of them are rich in nutrients because they are formed from the alluvia transported by the Danube. On the Danube terraces, the soil belong to the chernozems class, they are rich in humus and appropriate for the agriculture.

Land use:

Agriculture, forestry

Climate:

The climate is temperate continental, with sub Mediterranean influences. The temperature annual average is the highest in the country, 11.4^o – 11.8^o C, while the January average is -2^o C. There are three months with negative temperature values (December-February). In the summer, the temperature can reach 40-42^o C. The annual rainfall average is 500 mm, but in the summer the level of aridity is high and the drought very frequent.

18. Hydrological values:

Before the embanking of the Danube, Bistret was very important because of its role in reducing the effects of the flood. Today, Bistret is a reservoir that collects the water and the sediments transported by Desnauti river. It has also some influences on the groundwater level, which is located 5 m of depth.

19. Wetland Types

a) presence:

Inland:

L	M	N	O	P	Q	R	Sp	Ss	TP	Ts	U	Va	Vt	W	Xf	Xp	Y	Zg	Zk(b)
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Human-made:

1	2	3	4	5	6	7	8	9	Zk(c)
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b) dominance:

TP - Permanent freshwater marshes – 27.8%

M - Permanent rivers – 7.5%

1 – Aquaculture ponds – 7.4%

O - Permanent freshwater lakes – 7.3%

3 – Irrigated land – 3.64%

9 - Canals and drainage channels

20. General ecological features:

Bistret is a lake situated in the Danube meadow, in the south of Oltenia Plain. It has a natural origin, being created by the Danube regular flood, before the damming of the river, but its surface was influenced by

the human intervention. Meadows (smooth or rippled), old grinds, cultivated lands (orchards, cultures of cereals and others), curtains of poplars and acacia forests are the main characteristics of the landscape. Two islands exist inside basins I and II and they are covered with thick aquatic vegetation in which the species *Typha angustifolia*, *Salix sp.* are dominant. The palustrine macrophytes (*Phragmites communis*, *Typha sp.*, *Scirpus lacustris*, *Carex sp.*, *Equisetum palustre*, *Lythrum salicaria*, *Iris pseudacorus*) and the submerged vegetation formed by: *Lemna sp.*, *Salvinia natans*, *Hydrocharis sp.*, *Potamogeton sp.*, *Nuphar luteum* are also specific to this area. The macrophytes represent an optimal habitat for nesting and breeding of the bird species.

21. Noteworthy flora: No

22. Noteworthy fauna: No

23. Social and cultural values:

In the surroundings of the Bistret lake there are a few archaeological sites with objects dating from the Bronze Age. The cemeteries from Ostrovogania and Grindu Tomii and the settlement from the point Prundu magarilor, form one of the most important Bronze Age complexes on the Low Danube.

The fishing activities had along the time a high importance for the local communities because it was source of food for the inhabitants.

24. Land tenure/ownership:

a) within the Ramsar site:

75 % of the land are private property and 25 % is public.

b) in the surrounding area:

Most of the land in the surrounding area is private.

25. Current land (including water) use:

a) within the Ramsar site:

Most of the land use is aquatic – 90 % (rivers, lakes), marshes (8 %) and pastures (2%). The site is used for fishing and agriculture.

b) in the surroundings/catchment:

In the surrounding area the most important human activities are related with agriculture, fishing and forestry.

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) within the Ramsar site:

Management of the fish farm because of the emptying of the lake basins, cutting of the small trees used for nesting, destruction of the islands or of the vegetation, the abandonment of the waste, the poaching.

b) in the surrounding area:

Use of fertilizers, cutting of the small trees used for nesting, poaching.

27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

It has no other national designation. Since 2007, Bistret lake is included in the European ecological network Natura 2000, as a special protection area, designated under the Birds Directive as ROSPA0010 site.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ; Ib ; II ; III ; IV ; V ; VI

c) Does an officially approved management plan exist; and is it being implemented?:

It has no management plan developed.

d) Describe any other current management practices:

None

28. Conservation measures proposed but not yet implemented:

A management plan should be developed in 2012.

29. Current scientific research and facilities:

No scientific researches and facilities are in place.

30. Current conservation education:

There are no specific activities regarding conservation education.

31. Current recreation and tourism:

The site offers recreational and visiting possibilities especially on weekends. The frequency grows during summer for fishing or recreation.

32. Jurisdiction:

Ministry of Environment and Forests
B-dul.Libertatii nr.12, sector 5, Bucuresti

33. Management authority:

County Council Dolj

Str. Unirii, Nr. 19, Craiova, Dolj County
Phone no: 0251408252
Email: contact@cidolj.ro

34. Bibliographical references:

1. BirdLife International, 2001, Important Bird Areas and potential Ramsar sites in Europe, BirdLife International, Wageningen, The Netherlands;
2. Council Directive 79/409/EEC on the Conservation of Wild Birds, "Bird Directive";
3. Gaina, F., 2001. Contribuții la cunoașterea pasarilor rapitoare din zona Bistreț-Dunareni (Dolj). Oltenia, St. Com. Șt. Nat., 17:123-126;
4. H.G. 971/2011 – Hotarare de Guvern pentru modificarea si completarea H.G. nr. 1284/2007 privind declararea ariilor de protectie speciala avifaunistica ca parte integranta a retelei ecologice europene Natura 2000 în Romania
5. International Union for Conservation of Nature (IUCN);
6. Lars Svensson, Killian Mullarney, Dan Zetterstrom, 2010 – "Collins Bird Guide 2nd Edition";
7. Munteanu, D., Toniuc, N., Weber, P., Szabo, J. & Marinov, M., 1989 Evaluarea efectivelor pasarilor acvatice în cartierele lor de iernare din Romania (1988, 1989). *Ocot. Nat.* 33, 105-112;
8. Munteanu, D., (coord.), 2004 – Arii de importanța avifaunistica din Romania – Documentații. Societatea Ornitologica Romana;
9. OUG 57/2007 – Ordonanta de urgenta privind regimul ariilor naturale protejate, conservarea habitatelor naturale, a florei si faunei salbatice;
10. Papp, T., Fantana, C., - editors (2008) – Important Bird Areas in Romania – published in cooperation by the Romanian Ornithological Society and Association "Milvus Group";
11. Ridiche, Mirela, 2001. Considerații ecologice asupra avifaunei acvatice din bazinele piscicole de la Dunareni-Bistreț (Dolj). Oltenia, St. Com. Șt. Nat., 17:127-130;
12. Ridiche, Mirela, 2002. Ardeidae din bazinele piscicole de la Dunareni-Bistret (jud. Dolj). An. Banat. Șt. Nat. 147-152;
13. Ridiche, Mirela, Dîrjan, S., 1997. Acumularea agro-piscicola Bistreț-Dunareni. SOR Bul. AIA 6: 1;
14. "Romanian Ornithological Society" database;
15. Talpeanu, M., 1965. Avifaune de la region inondable du Danube en Oltenie. Trav. Mus. Hist. Nat. "Gr. Antipa", 5:293-317.