

Information Sheet on Ramsar Wetlands (RIS)

2009-2012 version

JIU-DANUBE CONFLUENCE

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

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

25.09.2012

3. Country:

Romania

4. Name of the Ramsar site:

JIU-DANUBE CONFLUENCE (local name: Confluenta Jiu-Dunare)

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**

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site:

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

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

i) a **hard copy** (required for inclusion of site in the Ramsar List): yes ;

ii) an **electronic format** (e.g. a JPEG or ArcView image) yes ;

b) Describe briefly the type of boundary delineation applied:

The site follows the river Jiu starting next to Podari locality in north until the confluence with the Danube in south. In the eastern part the road DN55 often approaches the site boundary. There is one locality inside the site – Bazdana – and many others on both sides of the site. Among these we could mention Radea, Horezu, Comosteni in west and Secui, Bratovoesti, Sadova in east.

The present's site surface covers the lower part of Jiu river, as well as its surroundings to Danube, overriding Nature 2000 ROSPA 0023 Confluenta Jiu-Dunare site perimeter (19800 ha) and following its boundary delineation. The Ramsar Site also includes parts of the Site ROSPA 0135 Nisipurile de la Dabuleni as well as ROSCI0045 Coridul Jiului.

In the South the border with Bulgaria forms the boundary of the site.

8. Geographical coordinates (latitude/longitude, in degrees and minutes):

43°59'38" N, 23°53'48" E

9. General location:

The site is located in the South of Romania, in Dolj County. The nearest large town is Craiova (298.643 inhabitants), 3 km North-East of the site.

10. Elevation: (in metres: average and/or maximum & minimum)

The average elevation is 48 m above the sea.

The minimum altitude is 6 m.

The maximum altitude is 162 m.

11. Area: (in hectares)

19,800 ha

Wetland area: 3,278 ha

12. General overview of the site:

The site covers an important part of the Jiu meadow, a river which springs from the Southern Carpathians and flows into the Danube. A small part of the Danube meadow, situated in the South West of Romania is also included in the site. Because of its length (over 60 km N-S), the site includes a variety of ecosystems: oak forests, poplar forests, small lakes, old branches of the river, sand islands, dunes, sand banks, marshes, riverside coppices, channels, pastures, arable land etc. The complexity of these ecosystems creates the conditions for the existences of a variety of habitats and a high biodiversity. The site is an Important Bird Area and it was declared as a special protection area (SPA) under the Birds Directive in 2007. The SPA was declared for the protection of 34 bird species listed in the Annex I of the Birds Directive, but it is also important because of the high number of species protected by the Bonn Convention. Some of the species that are finding ideal conditions for nesting are *Crex crex*, *Haliaetus*

albicilla, *Ciconia ciconia*, *Burbinus oediconemus*. During the migration period, the site is important for *Tringa glareola*, *Pelecanus crispus*, *Platalea leucorodia*, *Plegadis falcinellus*.

13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

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14. Justification for the application of each Criterion listed in 13 above:

Criterion 1:

The site includes representatives and rare habitats recognised by Habitat Directive 92/43/EEC like: Galleries with *Populus alba* and *salix alba* (92A0), Alluvial forest with *Alnus glutinosa* and *Fraxinus excelsior* (91E0 – priority habitat), Riparian mixed forest of *Quercus robur*, *Ulmus laevis*, *U. minor*, *Fraxinus excelsior* or *F. angustifolia* (91F0), Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea – unijlorae* and/or *Isoeto-Nanojuncetea* (3130), Low landhay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) (6510), Rivers with muddy banks with *Ranunculion fluitantis* and *Callitrichion – Batrachion* vegetation (3270), Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. (3140) and Water courses of plain to mountain levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation (3260).

The wetland has natural origins and it is very little affected by the human intervention.

Criterion 2:

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

| Scientific name (IUCN RED LIST status 2012.1) | Common name | Breeding (pairs) | Winter (individuals) | Migrants (individuals) |
|--|----------------------|------------------|-------------------------|------------------------|
| <i>Alcedo atthis</i> | Common Kingfisher | | | 6-8 |
| <i>Anthus campestris</i> | Tawny Pipit | 10-20 | | |
| <i>Aquila pomarina</i> | Lesser Spotted Eagle | 4-8 | | |
| <i>Ardea purpurea</i> | Purple Heron | | | 10-30 |
| <i>Botaurus stellaris</i> (Bonn) | (Great) Bittern | 2-4 | | |
| <i>Burbinus oediconemus</i> (Bonn) | Stone-curlew | 10-20 | | |
| <i>Buteo rufinus</i> | Long-legged Buzzard | 2-4 | | |
| <i>Caprimulgus europaens</i> | Nightjar | 120-150 | | |
| <i>Chlidonias hybrida</i> | Whiskered Tern | | | 200-300 |
| <i>Chlidonias niger</i> (Bonn) | Black Tern | | | 50-100 |
| <i>Ciconia ciconia</i> (Bonn) | White Stork | 60-80 | | |
| <i>Ciconia nigra</i> | Black stork | 20-30 | | |

| | | | | |
|---|---------------------------|---------|-------|-----------|
| (Bonn) | | | | |
| <i>Circus aeruginosus</i> | Marsh Harrier | 6-10 | | |
| <i>Coracias garrulous</i> (Bonn) | Roller | 46-50 | | |
| <i>Crex crex</i> (Bonn) | Corncrake | 100-150 | | |
| <i>Dendrocopos syriacus</i> | Syrian Woodpecker | 90-120 | | |
| <i>Dendrocopos medius</i> | Middle Spotted Woodpecker | 100-130 | | |
| <i>Egretta (Casmerodius) alba/-us</i> | Great Egret | | | 20-30 |
| <i>Egretta garzetta</i> | Little Egret | | | 150-200 |
| <i>Ficedula albicollis</i> | Collared Flycatcher | 300-400 | | |
| <i>Haliaeetus albicilla</i> (Bonn) | White-tailed Eagle | 1-2 | | |
| <i>Himantopus himantopus</i> | Black-winged Stilt | | | 20-30 |
| <i>Ixobrychus minutus</i> (Bonn) | Little Bittern | 12-20 | | |
| <i>Larus minutus</i> | Little Gull | | | 100-150 |
| <i>Milvus migrans</i> | Black Kite | 2-4 | | |
| <i>Pelecanus crispus</i> (VU) (Bonn) | Dalmatian Pelican | | | 30-70 |
| <i>Pernis apivorus</i> | (European) Honey Buzzard | 12-20 | | |
| <i>Phalacrocorax pygmeus</i> (Bonn) | Pygmy Cormorant | 350-450 | 40-70 | |
| <i>Platalea leucorodia</i> (Bonn) | Spoonbill | | | 150-200 |
| <i>Plegadis falcinellus</i> (Bonn) | Glossy Ibis | | | 750-1000 |
| <i>Recurvirostra avosetta</i> | (Pied) Avocet | | | 30-40 |
| <i>Sterna albifrons</i> | Little Tern | | | 70-140 |
| <i>Sterna hirundo</i> | Common Tern | | | 150-250 |
| <i>Tringa glareola</i> | Wood Sandpiper | | | 1000-2000 |

The site additionally supports a number of species protected in Europe, including species listed in *the EU Habitat Directive*:

Amphibians:

Bombina bombina (II, IV)

Triturus cristatus (II, IV)

In Danube and Jiu river, there are also present fish species listed in Annex II of *the EU Habitat Directive*:

Gobio albipinnatus

Alosa immaculata (VU, IUCN)

Cobitis taenia

Sabanejewia aurata

Gymnocephalus schraetzer

Misgurnus fossilis

Aspius aspius

Pelecus cultratus

Rhodeus sericeus amarus

Zingel streber

Zingel zingel

Gymnocephalus baloni

Reptiles:

Emys orbicularis (II, IV)

Mammals:

Spermophilus citellus (II, IV) (VU, IUCN)

Lutra lutra (II, IV)

In Danube and Jiu river there are also present fish species listed in Annex II of *the EU Habitat Directive*: see justification for criterion 7 for names of species.

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

1. OM 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;

Criterion 4:

Being located on a major migratory route, Confluenta Jiu-Dunare territory represents an important area for resting and feeding of rare bird species. The site is important for breeding populations of the following species: *Anthus campestris*, *Aquila pomarina*, *Botaurus stellaris*, *Buteo rufinus*, *Caprimulgus europaeus*, *Phalacrocorax pygmeus*, *Coracias garrulus*, *Burhinus oedicnemus*, *Dendrocopos medius*, *Ciconia ciconia*, *Ciconia nigra*, *Circus aeruginosus*, *Crex crex*, *Dendrocopos syriacus*, *Ficedula albicollis*, *Haliaeetus albicilla*, *Ixobrychus minutus*, *Milvus migrans* and *Pernis apivorus*.

During migration, the site is important for the following species: *Alcedo atthis*, *Ardea purpurea*, *Chlidonias hybrida*, *Chlidonias niger*, *Egretta (Casmerodius) alba/-us*, *Egretta garzetta*, *Himantopus himantopus*, *Larus minutus*, *Pelecanus crispus*, *Platalea leucorodia*, *Plegadis falcinellus*, *Recurvirostra avosetta*, *Sterna albifrons*, *Sterna hirundo*, *Tringa glareola*. Please see Annex 1 of this document for the list of bird species.

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.

Criterion 5:

During the spring and autumn migration periods, more than 20.000 individuals of waterfowl are visiting the site. Please see Annex 1 of this document for the list of bird species. The most important contribution to this number is assured by *Anas crecca* with an effective varying from 4.000 to 6.000 individuals.

Criterion 6:

Around 450 pairs of Pygmy Cormorant (*Phalacrocorax pygmeus*) are breeding on the mentioned area, which represents over 1 % of the entire world population. They are also present in winter season, in numbers between 40 up to 70 individuals.

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

1. OM 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;

Criterion 8:

The Ramsar site Confluenta Jiu-Dunare includes part of Danube and Jiu rivers acting like feeding places, spawning ground and migratory path for around 15 fish species from which 13 are present in the Annex II of Habitat Directive (see justification of criterion 2).

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

- 1) Europe: Continental
- 2) World: West Palearctic

b) biogeographic regionalisation scheme (include reference citation):

- 1) Habitat Directive 92/43/EEC (1992)
- 2) Donita, N., et al. (2005) Habitatele din Romania, Bucuresti
- 3) Udvardy, 1975

16. Physical features of the site:

Geology and geomorphology:

Downstream Craiova (which is a bit further North than Podari), the valley of the Jiu River is asymmetrically developed having a width of 5–8 km, in which the floodplain has an average width of 4–5 km. The site is a specific meadow landscape with a variety of geomorphological features: old branches of the Jiu river, sand islands, dunes, sand banks, marshes, riverside coppices, channels. A small part of the terraces of Jiu and Danube from Oltenia Plain are included in the site. The altitudes are decreasing from

North to South; the highest elevation is 162 meters, on a terrace. The geology of the area is represented by gravels, sand, loess and alluvia transported by Jiu and Danube.

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. On the terraces, the soils are from the chernozoms class, while in the forest areas some specific forest soils appear (argiloiluvial soils).

Origins:

The wetland has natural origins and it is very little affected by the human intervention.

Hydrology:

The above-ground hydrology is assured by Danube and Jiu rivers. The medium multiannual water reserve in Zaval – Danube section of Jiu River is 2762.2 mil m³ (87.7 m³/s). Unlike other rivers, Jiu river does not have important tributaries, water reserve being uniform along the water course. Downstream Craiova, Jiu river banks are fragmented by a couple of dale created by temporary watercourses, insignificant as importance, which cannot be included in tributaries category. However, there are some abundant streams in Gioroc, Murta and Dobresti areas that are contributing to Jiu river level.

The underground water body is delineated by Jiu and Danube floodplains and terraces being situated almost near the surface of the terrain at 2 – 5 m depth.

Water quality:

The water status is moderate, according with the Water Framework Directive.

Depth, fluctuations and permanence of water:

Maximum depth: 24 m

Wetland area:
3278 ha

Climate:

The climate is temperate continental, with sub Mediterranean and West influences. The temperature annual average is decreasing from north to South the highest in the country, 10-11⁰ C. The coldest month is January with -2⁰ C, while the hottest is in July, 23⁰ – 24⁰ C. In July, the values can very often reach 40-42⁰ C. The annual rainfall average is 500 mm, but in the summer the level of aridity is high and the drought very frequent. The dominant winds are from West and, a local wind is Austral, a dry wind with origins in the Mediterranean area.

17. Physical features of the catchment area:

Area: Terraces of Jiu and Danube rivers.

Geological characteristics:

The terraces were created in the Quaternary period due to the variations of the sea level caused by the Ice Ages. The relief is generally plane with altitudes that overpass 150 m at the contact with the hilly area from the North. The geology is represented by gravels and sand covered by a layer of loess. The existence

of the sand is favourable for the creation of the sand dunes, especially in the south part of Oltenia Plain, which are shaped by the wind action.

Soil type:

The soils are diverse, from chernozems and argiloulivial soils, to the azonal soils, rich in nutrients. The Jiu water is used for diverse purposes, including hydroelectricity, industrial use, irrigations, water supply, fishing, entertainment etc. The groundwater has a quaternary age and it is split in two bodies ROJI05 (which has some risks related to the water quality) and ROJI06.

Land use:

Agriculture, forestry, sand extraction.

Climate:

The climate is temperate continental, with sub Mediterranean and West influences. The temperature annual average is decreasing from South to North, but is still the highest in the country, 10-11^o C, even more than 11^oC. The coldest month is January with -2^o C, while the hottest July, 23^o – 24^o C. In July, the values can very often 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. The rainfall average is decreasing from north to South, because of the altitude and because of the Mediterranean influences. The dominant winds are from West and, a local wind is Austral, a dry wind with origins in the Mediterranean area.

18. Hydrological values:

The Ramsar site has influences on the groundwater level.

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)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

b) dominance:

M- Permanent rivers – 16%

Tp – Permanent freshwater marshes – 2%

20. General ecological features:

The site includes representatives and rare habitats recognised by Habitat Directive 92/43/EEC like: Galleries with *Populus alba* and *salix alba* (92A0), Alluvial forest with *Alnus glutinosa* and *Fraxinus excelsior* (91E0 – priority habitat), Riparian mixed forest of *Quercus robur*, *Ulmus laevis*, *U. minor*, *Fraxinus excelsior* or *F. angustifolia* (91F0), Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea – uniflorae* and/or *Isoeto-Nanojuncetea* (3130), Low landhay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) (6510), Rivers with muddy banks with *Ranunculion fluitantis* and *Callitrichion – Batrachion* vegetation (3270), Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. (3140) and Water courses of plain to mountain levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation (3260).

21. Noteworthy flora: No

22. Noteworthy fauna: No

23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

There are 20 administrative units which have partial land included in the site. Fishing is a traditional occupation in most of them. There are some archaeological sites in Bazdana and Teasc.

24. Land tenure/ownership:

a) within the Ramsar site: most of the land is private property.

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 human activities are related with agriculture, fishing and forestry.

b) in the surroundings/catchment: in the catchment area, most of human activities are also 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: urban expansion, use of fertilisers, destruction of the vegetation by setting fire, waste abandonment, poaching.

b) in the surrounding area: pollution, use of fertilizers.

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.

The site is overlapping 0.19% the natural reserve Locul fosilifer Dranic designated under Law 5/2000. Since 2007, Confluenta Jiu - Dunare is included in the European ecological network Natura 2000, as Special Protection Area - ROSPA0023 site, designated under the Birds Directive. The site also overlaps with ROSCI0045 Coridorul Jiului, designated under the Habitats Directive as well as parts of ROSPA 0135 Nisipurile de la Dabuleni, designated under the Birds Directive. The site is also an Important Bird Area.

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:

N/A

28. Conservation measures proposed but not yet implemented:

The management plan should be developed under SOP Environment project” Conservarea biodiversitatii in aria naturala protejata Confluenta Jiu-Dunare” by the end of 2012.

29. Current scientific research and facilities:

No scientific researches and facilities are in place.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

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
Emilia Nicu
Str. Unirii, Nr. 19, Craiova, Dolj County
Phone no: 0251408252
Email: contact@cjdolj.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. International Union for Conservation of Nature (IUCN);
4. Lars Svensson, Killian Mullarney, Dan Zetterstrom, 2010 – “Collins Bird Guide 2nd Edition”;
5. Legea 5/2000 – Legea privind aprobarea Planului de amenajare a teritoriului national – Sectiunea a III – a – zone protejate.

6. Munteanu, D., (coord.), 2004 – Aree de importanță avifaunistică din România – Documentații. Societatea Ornitologică Română;
7. 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 ;
8. OM 2387/2011 – Ordinul Ministrului Mediului și Padurilor pentru modificarea OM 1964/2007 privind instituirea regimului de arie naturală protejată a siturilor de importanță comunitară, ca parte integrantă a rețelei ecologice europene Natura 2000 în România ;
9. OUG 57/2007 – Ordonanța de urgență privind regimul ariilor naturale protejate, conservarea habitatelor naturale, a florei și faunei sălbatice;
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. “Romanian Ornithological Society” database;

Please return to: **Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
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