

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.

2. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Bureau. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

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:

4 January 2006

3. Country: Romania

4. Name of the Ramsar site:

Dumbrăvița Fishpond Complex (Complexul Piscicol Dumbrăvița)

5. Map of site included:

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

a) **hard copy** (required for inclusion of site in the Ramsar List): *yes* x -or- *no*

b) **digital (electronic) format** (optional): *yes* x -or- *no*

6. Geographical coordinates (latitude/longitude):

N: 45° 46' 9.76"N V: 45° 45' 52"N S: 45° 45' 25.31"N E: 45° 45' 39.28"N
25° 27' 9.97"E 25° 26' 45"E 25° 27' 17 "E 25° 30' 45.34"E

central:: 45° 45' 46.47"N
25° 28' 39.95"E

7. General location:

Braşov County (District), Transylvania, Romania, central part of the country. The distance to the nearest large town (Codlea, 20 000 people, Braşov County, Codlea Administrative region – 30 000 people) is 10 Km by road. The compass bearing from Codlea town is N (north)

8. Elevation: (average and/or max. & min.)

max: 540.9 m
min: 498.8 m

9. Area: (in hectares)

413.5 ha total; 389.65 ha wetland area
and 23.86 ha non wetland areas

10. Overview:

The complex of reservoir and a fish pond system in the middle valley of the Hamaradia rivulet surrounded by crops, meadows and other grasslands. It is an important breeding site for over 30 water bird species from which the most important are Bittern, Little Bittern, Purple Heron, Corncrake, Spotted Crake, Little Crake ; the site is also important as a stop over area for more than 100 bird species (very important for species, such as: Black Stork, Great White Egret).

11. Ramsar Criteria: sloughs

1 • 2 • 3 • 4 • 5 • 6 • 7 • 8

12. Justification for the application of each Criterion listed in 11. above:

Criteria 2

This criteria is applied for this site for water birds species.

Concerning birds populations, there are species vulnerable, endangered and critically based on SPEC Category, European Threat Status, Birds Directive. Thus the most important species (breeding – Br or non breeding – NB) are (All data are available for 2004 season; the total number or pairs is presented): *Gavia stellata* – NB (7 ind.), *G. arctica* – NB (20 ind.), *Botaurus stellaris* – Br (2 pairs), *Ixobrychus minutus* – Br (10 pairs), *Nycticorax nycticorax* – NB (40 ind.), *Ardea purpurea* – Br (10 pairs, > 1 % of the Romanian breeding population), *Egretta garzetta* – NB (20 ind.), *E. alba* – NB (150 ind.), *Ciconia nigra* – NB (40 ind.), *C. ciconia* – NB (15 ind.), *Aythya nyroca* – Br (2 pairs), *Mergus albellus* – NB (30 ind.), *Circus aeruginosus* – Br (5 pairs), *Crex crex* – Br (20 pairs, very high breeding density), *Porzana porzana* – Br (25 pairs), *P. parva* - Br (20 pairs), *P. pusilla* – Br (2 pairs), *Tringa totanus* – NB (15 ind.), *T. glareola* – NB (25 ind.), *Larus minutus* – NB (20 ind.), *Chlidonias niger* – NB (200 ind.), *C. hybridus* – NB (30 ind.).

Among the most important bird species included in annex I of the Birds Directive are:

- *Botaurus stellaris*. Dumbravita is an old breeding site for this species; the specific habitat is very good (it could breeds in 4 -5 different reed beds from fish ponds at least Dumbravita is the only one breeding place of this species from Brasov County and maybe from a large area of the central part of Romania)
- *Ixobrychus minutus*. The reed mace and the reed beds provide very good breeding conditions for this species. This is the most important breeding population from Brasov County.
- *Ardea purpurea*. This is the largest colony from Transylvania (central part of Romania). This is one of the largest colony from Romania except Danube Delta, Danube floodplain and the eastern part of Romania (Moldavia)
- *Egretta alba*. More than 2 % of the central European population (Austria, Hungary, Latvia, Poland) passes each autumn from here as a population which could passing during autumn migration on Dumbravita site. The calculation is based on the BirdLife International publication (2004), Birds in Europe: population estimates, trends and conservation status
- *Ciconia nigra*. Tens of individuals stop-over during autumn migration and pre-nuptial migration. Sometimes solitary individuals forage here during breeding season
- *Aythya nyroca*. It breeds on small ponds. The breeding and foraging conditions could be improved in the next years due to the Management Plan
- *Porzana porzana*. Regularly breeding species in the emergent and marsh vegetation on the reservoir and fish ponds. Relative high density occurs.
- *Porzana parva*. It breeds in permanent flooded reed beds and reed mace. Relative high density occurs.
- *Porzana pusilla*. 1 or 2 pairs are breeding here. This is one of the single breeding site from Romania. Calling males were detected on both reservoir and fish ponds vegetation.

- *Crex crex*. High breeding density of these species occurs on the western shore of the reservoir. The habitats, such as: moist regularly cut meadows and marshlands provide very good conditions for this species

A table of all bird species from Annex I of Birds Directive (including European Threat Status, SPEC category and Bern Convention) is added as Annex to the RIS.

The birds species from annex I of the Birds Directive are listed in a table as an annex to the RIS. The batrachians are represented by 5 species and the most important is *Bombina variegata*, species listed in EC Habitat Directive. 15 species of fish were identified in the area and *Rhodeus sericeus* is also listed in Habitat Directive. Mammals are represented by 15 species and the most important is Otter (*Lutra lutra*), species listed in Habitat Directive and Bern Convention.

Criteria 4

There is no other wetland with such habitats complex and security for water birds in the whole Transylvania Province (central part of Romanian) and this site is considered one of the most important wetland from Romania as stop over point for migratory water birds. Dumbrăvița wetland is a high concentration point during migration and also an obliged point for water birds that follow a central Romanian migratory route from NW to SE crossing Transylvania and Bârsei Depression and the Carpathians. This is a very important site especially for water birds due to its singleness at the internal curvature of Carpathian Mountains. The well security conditions for water birds and the total surface of water deprive from other wetlands from the central part of Romanian. More than 70 water birds species (without passerines) are migratory (staging) on Dumbrăvița wetland (see criteria 2 and 5). Due to the fish harvest during autumn and sometimes in spring tens hectares of mud arise annually by the decreasing of water level. This temporary habitat provides a good food supply and secures resting places for many migratory water birds, mainly waders. Thus, 70 – 150 *Egretta alba* (> 2.5 – 5.5% from the minimum European population, Hagemeyer & Blair, 1997) annually stop over between September and December; many species of waders and gulls also feed on mud. Large flocks of *Anser albifrons* (more than 500 – 1000 birds in a flock), *Ciconia nigra* (tens of birds are annually feeding and resting during autumn migration), *Anas platyrhynchos* (thousands of birds in both spring and autumn migration), *Vanellus vanellus* (hundreds of individuals), *Gallinago gallinago* (tens of individuals) *Philomachus pugnax* (hundreds of individuals), *Calidris alpina*, *Tringa nebularia*, and *Larus ridibundus* also occur in different habitats.

Beside the most frequently and abundant species there are some rare or vagrant water birds for internal side of Romania, such as: *Platalea leucorodia*, *Plegadis falcinellus*, *Cygnus cygnus*, *Branta ruficollis*, *Clangula hyemalis*, *Melanitta fusca*, *Haliaeetus albicilla*, *Arenaria interpres*, *Limicola falcinellus*, *Calidris alba*, *Phalaropus lobatus*, *Stercorarius parasiticus*, *Larus fuscus*, *L. melanocephalus*, *Gelochelidon nilotica*, *Sterna caspia*.

The actual conditions for migratory water birds could be improved in the future by management actions and conservation activities imposed by the status of region as Special Protection Area at the national level.

Criteria 5

For this criteria there are presented below the total counted or estimated number of water birds for three different years (2002, 2003, 2004) as a sum of each species number.

No.	Species	The number for year:			The average total number for these three years
		2002	2003	2004	
1	<i>Gavia stellata</i>	5	4	7	5
2	<i>G. arctica</i>	25	15	20	23
3	<i>Tachybaptus ruficollis</i>	35	20	15	23
4	<i>Podiceps nigricollis</i>	10	18	25	18
5	<i>P. cristatus</i>	150	200	230	193
6	<i>Phalacrocorax carbo</i>	50	100	200	116
7	<i>Botaurus stellaris</i>	4	6	6	5
8	<i>Ixobrychus minutus</i>	10	20	25	18
9	<i>Nycticorax nycticorax</i>	25	30	40	32
10	<i>Egretta garzetta</i>	35	15	20	23
11	<i>E. alba</i>	100	120	150	123
12	<i>Ardea cinerea</i>	300	200	300	267
13	<i>A. purpurea</i>	10	10	25	15
14	<i>Ciconia nigra</i>	20	30	40	30
15	<i>C. ciconia</i>	25	15	15	18
16	<i>Anser albifrons</i>	400	800	1500	900
17	<i>Tadorna tadorna</i>	-	10	80	30
18	<i>Anas penelope</i>	400	300	200	300
19	<i>A. strepera</i>	25	10	5	13
20	<i>A. crecca</i>	500	400	100	333
21	<i>A. platyrhynchos</i>	15000	18000	17000	16667
22	<i>A. acuta</i>	40	15	20	25
23	<i>A. querquedula</i>	500	450	300	417
24	<i>A. clypeata</i>	50	40	25	38
25	<i>Aythya ferina</i>	450	250	200	300
26	<i>A. nyroca</i>	10	25	30	22
27	<i>A. fuligula</i>	25	30	15	23
28	<i>A. marila</i>	5	4	4	4
29	<i>Bucephala clangula</i>	25	20	10	18
30	<i>Mergus albellus</i>	20	45	30	32
31	<i>Rallus aquaticus</i>	30	45	50	42
32	<i>Porzana porzana</i>	30	40	50	40
33	<i>P. parva</i>	25	15	45	28
34	<i>Crex crex</i>	10	15	40	22
35	<i>Gallinula chloropus</i>	50	40	65	52
36	<i>Fulica atra</i>	600	500	250	450
37	<i>Charadrius dubius</i>	20	15	35	23
38	<i>C. hiaticula</i>	5	5	10	7
39	<i>Vanellus vanellus</i>	2000	2000	3000	2333
40	<i>Calidris minuta</i>	50	20	25	32
41	<i>C. alpina</i>	80	55	20	52
42	<i>Philomachus pugnax</i>	250	300	300	283
43	<i>Gallinago gallinago</i>	75	40	50	55
44	<i>Limosa limosa</i>	55	20	10	28
45	<i>Numenius arquata</i>	15	20	20	18
46	<i>Tringa erythropus</i>	30	25	15	23
47	<i>T. totanus</i>	20	20	15	18

48	<i>T. nebularia</i>	45	20	10	25
49	<i>T. ochropus</i>	15	5	10	10
50	<i>T. glareola</i>	60	40	25	42
51	<i>T. hypoleucos</i>	20	20	10	17
52	<i>Larus minutus</i>	20	20	20	20
53	<i>L. ridibundus</i>	3000	3000	5000	3667
54	<i>Larus canus</i>	20	15	10	15
55	<i>Larus cachinnans</i>	120	150	200	157
56	<i>Sterna hirundo</i>	20	20	20	20
57	<i>Chlidonias niger</i>	300	200	200	233
58	<i>C. hybridus</i>	40	40	30	37
59	<i>C. leucopterus</i>	10	10	15	12
	TOTAL				27789

13. 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: West Palearctic, Continental

b) biogeographic regionalisation scheme (include reference citation): According to the map provided by the European Topic Center regarding the biogeographical areas in Europe, the location belongs to the Continental biogeographical region.

Reference: Indicative Map of Biogeographical Regions EUR 15+11 / EMERALD map adopted by the Standing Committee of the Bern Convention in December 1997. The Biogeographical map developed under Council Directive 92 / 43 / CEE.

Please use and refer to the Biogeographic regionalisation scheme of the EU Habitats Directive/ NATURA 2000. Thank you

14. Physical features of the site:

The Dumbrăvița Fishing Complex (Reservoir and fish ponds) is of the artificial origin is a man-made wetland but a part of the area has a natural origin. This area is a sedimentary layer as a depression included in Bârsei Depression, Valley of Hamaradia rivulet. The main soil type is alluvial with different sediments, such as: sand and fine gravel. Humico – gleic soils also occurs with pH .around 7. The site is annually affected by a seasonal water balance that not exceed 40 – 50 cm on the reservoir. Especially during spring (March – April) there are inflow and outflow due to the rivulet and snow melting. Between March and September (water birds breeding season) there is no important fluctuation of water level in the fish pond complex, only some natural fluctuation during dry summer (maximum 30 cm on the reservoir). There are two water sources for fish ponds complex: the reservoir and a small rivulet (Holbosel). The water level in the reservoir has an average of 1 m and a maximum of 3 m. The average yearly temperature is + 7.6 ° C. The average annually temperature of the warmest month (July) is + 17.9 ° C, while the average temperature of the coldest month (January) is – 5.1 ° C. The average amount of precipitation is 647.6 mm. The most recent major flood was registered during spring of 1990 when the water level in reservoir was increased with 1.0 – 1.5 m and over – flowed the dam.

15. Physical features of the catchment area:

The catchment surface area of the Hamaradia rivulet is 322 km square and the catchment area strictly for this wetland has about 35 ha. The geology is the same as the Bârsei Depression has. This rivulet springs on Peșani Mountains. There are alluvial, mollisoils and Humico – gleic soils. The catchment area is formed by hilly areas and is covered by grasslands (especially pastures), agriculture lands, small patches of woods (oak – *Quercus robur* woodlands, two areas on the left shore of Hamaradia rivulet. These forests have more than 150 years old) and small areas of

scrublands (*Crataegus monogyna*, *Prunus spp.*). Near the area there is the county road Codlea – Dumbrăvița and the railway Brașov – Sibiu and the village of Dumbravita. The land is used for haymaking, grazing, agriculture and forestry. The climate is not different from the general climate of the Bârsei Depression, thus is one temperate more excessive continental.

16. Hydrological values:

This wetland was built for social and economical aims. The principal hydrological values were for the reservoir: flood control downstream the dam (protection of Satu Nou village), water source for irrigation of a big green house center from Codlea town and angling. Nowadays the reservoir is using for water retention, flood control, angling and aquaculture. The fish ponds system has a unique value for aquaculture.

17. Wetland Types

a) presence:

Marine/coastal: A • B • C • D • E • F • G • H • I • J • K •
Zk(a)

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:

1 – 181.7 ha (%);

6 – 122 ha (%);

Ts – 41 ha (%);

Tp – 39 ha (%);

9 – 2.4 ha (< 1 %);

M – 2 ha (< 1 %);

Xf – 1 ha (< 1 %);

Y – 0.5 ha (< 1 %).

The total wetland area is 389.6 ha.

Non – wetland area is 24 ha and represent:

Crops – 11 ha

Hay field – 7 ha

Dams, roads, narrow roads, paths, buildings – 4 ha

Pasture – 2 ha

18. General ecological features:

For the reservoir the main habitat is the open water but the western shore is covered by dense emergent vegetation with Typhaetum - Phragmitetum, Scirpo - Phragmitetum dominant plant community. The most important plant species are: *Phragmites australis*, *Typha latifolia*, *T. angustifolia*, *Phalaris arundinacea*, *Glyceria maxima* etc. On the same shore there is a marsh area and wet grasslands as flood plain very rich in plant species (some of these rare for Romania), such as: *Pedicularis sceptrum – carolinum*, *Ligularia sibirica*, *Comarum palustre*, *Menyanthes trifoliata*, *Valeriana simplicifolia*, *Senecio fluviatilis*, *S. paludosus*, *Carex davalliana*, *Fritilaria meleagris*, *Trolius europaeus*. Submerged and floating communities occur between the margin of reed beds and 40 – 50 m to the free vegetation water surface (*Elodea canadensis*, *Ceratophyllum demersus*, *Potamogeton spp.*, *Hydrocaris morsus – raene*, *Myrriophyllum spicatum* etc.). The Hamaradia rivulet is represented by tree – dominated habitats with *Salix spp.* and *Alnus glutinosa*. Another isolated or groups of *Salix cinerea* and *S. fragilis* are characteristic for reed beds and marsh of the reservoir. The other shores of the reservoir are almost nude.

The fish pond system has unstable hydrological conditions especially during autumn fish harvest (September – November), high productivity and mudflats. The habitats diversity is also a characteristic of this part of the wetland. All ponds are used for aquaculture and there is no abandoned pond. The largest fish ponds (over 35 ha) are well covered by reed beds, represented by *Phragmites australis*, *Typha latifolia*, *T. angustifolia* and other emergent vegetation. These plant communities cover almost or more than half of these ponds. The reed beds have also shrubs or trees (*Salix spp.*). The small fish ponds has only little surface of reed or reed mace.

19. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Some information about flora are noted in 18.

20. Noteworthy fauna:

Beside this site is very important for water birds populations another vertebrate groups are important. The amphibians are represented by 5 species and the most important is *Bombina variegata*, species listed in EC Habitat Directive. 15 species of fish were identified in the area and *Rhodeus sericeus* is also listed in Habitat Directive. Mammals are represented by 15 species and the most important is Otter (*Lutra lutra*), species listed in Habitat Directive and Bern Convention – 1-2 pairs living in the Hamaradia rivulet area. Otters usually feed on fish ponds.

21. Social and cultural values:

The site is of major value for biodiversity preservation in the central part of Romania and for education and scientific research, but has also a high socio – economical value. Thus, the most important economical value is the fish production, especially at the fish ponds system but sometimes on the reservoir (one fish harvest at 4 – 5 years). The aquaculture could be considered important for the maintenance of water birds populations, because of its food supply and variety and due to the annually cycle of fish production with fish harvest during autumn. For the reservoir the main social value is its fish population for angling. Other social and economical activities are recreation, hay harvesting, grazing, agriculture, all of these only on the reservoir area. The hay harvesting and cattle grazing also contribute to the annually well regeneration of grasslands and marshes and to avoid the overgrowing.

22. Land tenure/ownership:

(a) within the Ramsar site:

The site is of the state owner (the reservoir – water surface and 6 m from the shore line; the fish ponds system entirely but purposed for privatisation); private landowners for the shores of the reservoir (including marshes and floodplains on the western shore)

(b) in the surrounding area:

Private Landowners

23. Current land (including water) use:

(a) within the Ramsar site:

The human population in the surrounding area counts about 8000 people that live in two villages: Dumbrăvița and Satu Nou.

Current land use within the area are: aquaculture, angling, recreation, hay making, cattle grazing, cultivation of land. Conservation research and education activities are also achieved.

The aquaculture is applying on the fish ponds but the fish harvest and repopulation occur on the reservoir. The trend of aquaculture is constant.

The angling takes place only on two shores of the reservoir from spring (April) to autumn (November) and the intensity is highest during summer (May – August).

The hay making is practicing on the western shore of the reservoir especially manual, on some lots mechanized.

The cattle grazing is a local community occupation after hay harvesting season (after September). Both hay harvesting and cattle grazing are not intensive and destructive for habitats and birds populations.

The land are cultivated in highest area of the site and on the slopes with potatoes, corn, barley, oats. These crops are extensive on small lots in mosaic.

The tourism is in fact the angling activities.

Research activities are current applied by specialists of Forestry Faculty from Braşov and Romanian Ornithological Society (especially for ornithology).

The public awareness and education are also applied by the same institution and organisation.

(b) in the surroundings/catchment area:

Current land use in the surroundings are: hay harvesting, cattle grazing, cultivation of land

24. 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:

- reed burning: an illegal uncontrolled and annually action to the reservoir and fish ponds. About 5 – 10 hectares of vegetation are annually burnt. The result is a habitat fragmentation and damage at the beginning of the breeding season. This action has a decreasing trend and will be included in the further management plan as “reed bed and aquatic vegetation management”.

- illegal waste deposition and the waste transportation by Hamaradia rivulet inside the reservoir. Dumbrăvița village has no waste gathering system and the people cast a part of the waste directly in the rivulet and on the western shore of the reservoir. This is a negative factor for suitable breeding places inside the reed beds. The action is decreasing due to the waste management in Dumbravita village beginning on 2005.

- too early hay harvesting in the marsh and in the wet meadows. Annually, the hay harvesting begins before June the 1st, thus could be affected the breeding of Corncrake and other bird species. The action is constant, but it could be controlled.

- peat exploitation on a fish pond has affected about one hectare of suitable habitat for Corncrake and other species but now this activities is prohibited.

- the water level increase on the fish ponds is a variable practice that affected the emergent vegetation on the small ponds. Some small reed beds areas disappeared.

- intensive fish nourishment at the fish ponds has a constant trend and could cause an increase of eutrophication

- the further invasion of fish eating bird species, such as cormorant and grey heron. The fish ponds are most visited by an increasing number of such bird species and possible conflicts with fishing managers could be possible. Non-violent measures are implemented as preventing rules

- water birds disturbance by various factors, such as: angling, poaching , penetration inside reed beds and making paths. The results are habitats fragmentation and water birds stress especially during breeding season. These disturbances are not uniform and it is expected to decrease next years

(b) in the surrounding area there are no detected excessive negative factors for this wetland. One possible further influence could be the extension of within the built – up area from Dumbrăvița village and the project of the sewerage that could intersect this wetland borders.

25. Conservation measures taken:

This wetland is a Special Protection Area (SPA) as “Dumbrăvița Fishing Complex” – 414 ha by Romanian Government Resolution No. 2151 /2004

Before and after this resolution The Environment Protection Agency – Braşov County (EPA) established a set of measures for conservation and reducing the human negative impact as a official document based on the Romanian Natural Protection Area Law (462/2001). All these

measures will be included in the further “Management Plan” and “Regulations” of this protected area. Among them, the most important are:

- total prohibition of hunting, reed burning, emergent vegetation penetration, angling by boats, aquatic sports, peat exploitation and any potential negative project near and within the wetland
- regulations specific to aquaculture to preserve bird fauna and habitats
- regulations for hay harvesting, agriculture and pasture

At the same time, Romanian Ornithological Society (ROS) and Forestry Faculty of Braşov have begun from 2003 an intensive work of public awareness with local community, hunting and fishing association, county and national institutions. This activity has included discussions, workshops, printed folders, panels. The students of Forestry Faculty are organized in a “Green Patrol” for protection of this wetland. Ornithological field expeditions and camps are also annually organized, all these were sustained by EPA Brasov. One of the most important action of this NGO together with EPA Brasov was the successfully modification of the project “European highway Budapest - Bucharest” (via Brasov – Bors) that initially passed through this protection area.

26. Conservation measures proposed but not yet implemented:

A “Management Plan” is in preparation and there are some conservation measures proposed, such as:

- a survey of silting and eutrophication process
- monitoring water birds species as “target” for local conservation
- education in local community schools
- marking the boundaries of this wetland
- flood of some dry areas (creation of channels, small flooded areas etc.)
- implementation of a well organized tourism / bird watching including facilities, improvement of under structure

27. Current scientific research and facilities:

ROS and the specialists of the Forestry Faculty have studied this area since the beginning of 1993 from ornithological point of view. There are also botanical, ichtiological, mammal fauna studies and observations. The for bird fauna study applied methods were, such as: point count method for counting, ringing for inventory of passerines etc. Some studies identified and tried to quantify the action of negative factors. A PhD ornithological thesis was carried out on this site. Other programs that included this area were IBAs Programme (ROS), Water Birds Census (Mid – winter counts and monthly counts) coordinated by ROS etc. There are no facilities for research.

28. Current conservation education:

There is no special programme for education and public awareness until now but the public awareness activities is applying here (see section 25). Other education activities are working with students of Forestry Faculty from Braşov at the field courses (lectures and applications) and with NGOs members from Braşov Country in field camps. The education potential is good but not facilities. These activities were made in School and commune Hall / Cultural House of Dumbravita (with the local community) and also on the field with children from Dumbravita and with students from Wildlife Department of the Forestry Faculty from Brasov.

29. Current recreation and tourism:

There is no organized tourism and there are no facilities for this activity. The tourism here is in fact for angling, only two shores of the reservoir (it is prohibited on the fish ponds). This kind of tourism is seasonal (spring – autumn) and mainly during week – ends. Further Programmes / Projects (a Life Natura Project could be applied beginning on 2005) will try to build an observation tower birdwatchers and researchers. There is purposed the developing of

birdwatching and some facilities (under structure repair, a parking for cars) were made in this way during 2005.

30. Jurisdiction:

a) The territory is located within the boundaries of Dumbrăvița Commune (Locality), Brașov County (District). Address of the Dumbrăvița Commune Hall is Strada Mare, Dumbravita, Brasov County, Romania

b) Functional environmental administration is performed by Environmental Protection Agency – Brașov County (EPA) under the Ministry of Environment. Address of EPA Brașov is Politehnicii street, no. 3, Brasov, Romania.

31. Management authority:

Environmental Protection Agency – Brașov County (EPA). Address is Politehnicii street, no. 3, Brasov, Romania. Tel: + 40 0268 419013 Fax: + 40 0268 417292, biodiv@apmbrasov.ro

Person responsibility for the wetland: Anca Ioanitescu

Forestry Faculty of Brașov, “Transylvania” University from Brașov as further custodian (caretaker) of this SPA. Address is: Sirul Beethoven, no. 1, Brașov, Romania

Person responsible: Dr. Dan Ionescu, Tel / Fax: + 40 0268 471230, e-mail: dionescu@unitbv.ro

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

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Fish species

No	Species	IUCN Red List	Habitats Directive	Bern Convention
1	<i>Leuciscus cephalus</i>	-	-	-
2	<i>Scardinius erythrophthalmus</i>	-	-	-
3	<i>Ctenopharyngodon idella</i>	-	-	-
4	<i>Abramis sapa</i>	-	-	-
5	<i>Alburnus alburnus</i>	-	-	-
6	<i>Chondrostoma nasus</i>	-	-	-
7	<i>Rhodeus sericeus amarus</i>	-	II	II
8	<i>Cyprinus carpio</i>	-	-	-
9	<i>Carassius auratus</i>	-	-	-
10	<i>Carassius carassius</i>	-	-	-
11	<i>Lota lota</i>	-	-	-
12	<i>Perca fluviatilis</i>	-	-	-
13	<i>Acerina cernua</i>	-	-	-
14	<i>Silurus glanis</i>	-	-	II
15	<i>Hipophthalmichthys molitrix</i>	-	-	-

Batrachians

No	Species	IUCN Red List	Habitats Directive	Bern Convention
1	<i>Bombina variegata</i>	-	II	II
2	<i>Hyla arborea</i>	NT	-	II
3	<i>Rana ridibunda</i>	-	-	-
4	<i>Bufo bufo</i>	-	-	-
5	<i>Triturus alpestris</i>	-	-	III

Mammals

No	Species	IUCN Red List	Habitats Directive	Bern Convention
1	<i>Capreolus capreolus</i>	-	-	-
2	<i>Sus scrofa</i>	-	-	-
3	<i>Ondatra zibethica</i>	-	-	-
4	<i>Arvicola terrestris</i>	-	-	-
5	<i>Vulpes vulpes</i>	-	-	-
6	<i>Mustela nivalis</i>	-	-	III
7	<i>Mustela erminea</i>	-	-	III
8	<i>Putorius putorius</i>	-	-	III
9	<i>Martes martes</i>	-	-	-
10	<i>Lutra lutra</i>	NT	II	II
11	<i>Mus musculus</i>	-	-	-
12	<i>Microtus arvalis</i>	-	-	-
13	<i>Apodemus agrarius</i>	-	-	-
14	<i>Talpa europaea</i>	-	-	-
15	<i>Erinaceus europaeus</i>	-	-	-

Birds species from Dumbravita Fishing Complex included in annex I of the Birds Directive

No.	Species	Status on Dumbravita B-breeding NB- non breeding (regularly in passage-RP, not regularly in passage-NRP or accidental-Acc)	Annex I of the Birds Directive	SPEC category	European Threat Status	Bern Convention
1	<i>Gavia stellata</i>	NB, RP	x	3	(H)	II
2	<i>Gavia arctica</i>	NB, RP	x	3	(VU)	II
3	<i>Phalacrocorax pygmeus</i>	NB, NRP	x	1	S	III
4	<i>Pelecanus onocrotalus</i>	NB, Acc	x	3	R	III
5	<i>Botaurus stellaris</i>	B	x	3	H	III
6	<i>Ixobrychus minutus</i>	B	x	3	(H)	III
7	<i>Nycticorax nycticorax</i>	NB possible further breeding	x	3	H	III
8	<i>Ardeola ralloides</i>	NB, NRP	x	3	D	III
9	<i>Egretta garzetta</i>	NB, RP	x	-	S	III
10	<i>Egretta alba</i>	NB, RP	x	-	S	III
11	<i>Ardea purpurea</i>	B	x	3	D	III
12	<i>Ciconia nigra</i>	NB, RP	x	2	R	III
13	<i>Ciconia ciconia</i>	NB, RP	x	2	H	III
14	<i>Plegadis falcinellus</i>	NB, NRP	x	3	D	III
15	<i>Platalea leucorodia</i>	NB, NRP	x	2	R	III
16	<i>Cygnus cygnus</i>	NB, Acc	x	W	S	III
17	<i>Branta ruficollis</i>	NB, Acc	x	1W	VU	III
18	<i>Aythya nyroca</i>	B	x	1	VU	III
19	<i>Mergus albellus</i>	NB, RP	x	3	D	III
20	<i>Haliaeetus albicilla</i>	NB, NRP	x	1	R	III
21	<i>Pandion haliaetus</i>	NB, RP	x	3	R	III
22	<i>Porzana porzana</i>	B	x	-	S	III
23	<i>Porzana parva</i>	B	x	-	S	III
24	<i>Porzana pusilla</i>	B	x	3	R	III
25	<i>Crex crex</i>	B	x	1	H	III
26	<i>Grus grus</i>	NB, NRP	x	2	H	III
27	<i>Himantopus himantopus</i>	NB, NRP	x	-	S	III
28	<i>Recurvirostra avosetta</i>	NB, NRP	x	-	S	III
29	<i>Eudromias morinellus</i>	NB, Acc	x	-	S	III
30	<i>Pluvialis apricaria</i>	NB, NRP	x	-	S	III
31	<i>Tringa glareola</i>	NB, RP	x	3	H	III
32	<i>Phalaropus lobatus</i>	NB, NRP	x	-	S	III
33	<i>Larus melanocephalus</i>	NB, NRP	x	-	S	III
34	<i>Larus minutus</i>	NB, RP	x	3	H	III
35	<i>Sterna nilotica</i>	NB, Acc	x	3	VU	III
36	<i>Sterna caspia</i>	NB, NRP	x	3	R	III
37	<i>Sterna hirundo</i>	NB, RP	x	-	S	III
38	<i>Sterna albifrons</i>	NB, Acc	x	3	D	III
39	<i>Chlidonias hybrida</i>	NB, RP	x	3	H	III
40	<i>Chlidonias niger</i>	NB, RP	x	3	(H)	III
41	<i>Alcedo atthis</i>	NB, RP	x	3	H	III