



# Ramsar Information Sheet

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## Croatia

### Crna Mlaka Fishponds



Designation date	2 November 1992
Site number	582
Coordinates	45°36'45"N 15°43'58"E
Area	756,00 ha

## Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

## 1 - Summary

### Summary

Crna Mlaka is an area of extensive carp fishponds that represent an important breeding, feeding and staging/stop-over site for a number of wetland species, especially birds. The fishponds have been protected since 1980 as an ornithological reserve with an area of 693.96 ha. Apart from fishponds, the Ramsar site includes 62.27 ha of adjacent alluvial forest that is protected since 1967 as the ornithological reserve "Jastrebarski lugovi". The stands here are 150 years old. In the middle of the fishpond area, there is a small settlement (Crna Mlaka) with 30 inhabitants, many of them being employed in the fishery organization "IHOR Park Crna Mlaka".

Crna Mlaka is surrounded by a large complex of alluvial forests that stretches over more than 30,000 ha. In this forest complex composed mostly of the Common oak (*Quercus robur*) and the Narrow-leaved Ash (*Fraxinus angustifolia*) there are three carp fishponds: Crna Mlaka, Draganići and Pisarovina. The whole area which is called Pokupski Bazen was proclaimed as a Natura 2000 site in 2013 as well as Important Bird Area (IBA). 204 bird species have been recorded at Crna Mlaka ornithological reserve (Zavod za ornitologiju, 2003). Natura 2000 site has been designated for the protection of 43 bird species that use Crna Mlaka either for breeding, foraging, resting or all of the mentioned.

Regarding migratory waterbirds, Crna Mlaka has exceptional importance for the Ferruginous Duck (*Aythya nyroca*). In post-breeding periods and during the fall migration, it becomes the site with the largest congregation of the Ferruginous Duck in middle Europe, hosting up to 6,700 individuals (Institute for Ornithology, 2010). In combination with two adjacent fishponds, it supports more than 20,000 migratory waterbirds (Radović et al., 2005).

The area is also designated as Natura 2000 site for the protection of non-bird species and important habitats. The target conservation non-bird species are Fire-bellied toad (*Bombina orientalis*), Yellow-bellied toad (*Bombina orientalis*), Eurasian otter (*Lutra lutra*), European pond terrapin (*Emys orbicularis*) and Water Shamrock (*Marsilea quadrifolia* L.). The target habitat type of Crna Mlaka is Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea.

The fact that Crna Mlaka is the only site in Pokupski Bazen where hunting is forbidden contributes to its ornithological value and high numbers of staging birds.

## 2 - Data & location

### 2.1 - Formal data

#### 2.1.1 - Name and address of the compiler of this RIS

##### Responsible compiler

Institution/agency	Javna ustanova Zeleni prsten Zagrebačke županije
Postal address	151. samoborske brigade HV 1, 10430 Samobor info@zeleni-prsten.hr

#### 2.1.2 - Period of collection of data and information used to compile the RIS

From year	2002
To year	2019

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Crna Mlaka Fishponds
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#### 2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary	Yes <input checked="" type="radio"/> No <input type="radio"/>
(Update) The boundary has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The boundary has been extended	<input type="checkbox"/>
(Update) The boundary has been restricted	<input type="checkbox"/>
(Update) B. Changes to Site area	the area has increased
(Update) The Site area has been calculated more accurately	<input checked="" type="checkbox"/>
(Update) The Site has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The Site area has increased because of a boundary extension	<input type="checkbox"/>
(Update) The Site area has decreased because of a boundary restriction	<input type="checkbox"/>
(Update) For secretariat only: This update is an extension	<input type="checkbox"/>

#### 2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?	No
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## 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

#### b) Digital map/image

<2 file(s) uploaded>

Former maps	0
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#### Boundaries description

The boundary is identical to the boundary of existing protected area (two special ornithological reserves). The line follows the outer edge of fishpond banks, including additionally one management unit of adjacent alluvial forest.

### 2.2.2 - General location

a) In which large administrative region does the site lie?	Zagreb County
b) What is the nearest town or population centre?	Jastrebarsko

### 2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries?	Yes <input type="radio"/> No <input checked="" type="radio"/>
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b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes  No

#### 2.2.4 - Area of the Site

Official area, in hectares (ha):

Area, in hectares (ha) as calculated from GIS boundaries

#### 2.2.5 - Biogeography

##### Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Continental biogeographic region of EU and Europe

##### Other biogeographic regionalisation scheme

EU biogeographic regionalization, in accordance with the Habitat Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). Reference: European Commission (2011): Map of EU biogeographic regions EU 27+1, Doc.Hab. 11105/04

### 3 - Why is the Site important?

#### 3.1 - Ramsar Criteria and their justification

<no data available>

Criterion 2 : Rare species and threatened ecological communities

Criterion 3 : Biological diversity

Justification

Exact number of species occurring on Crna Mlaka is not known, except for birds. Anyway, information collected so far regarding habitat types, animals and plants indicate that this relatively small fishpond area is one of the most important sites regarding species richness and biodiversity in the western part of lowland Croatia and also important on the level of the southern part of the Continental biogeographical region (European Commission, 2011) (for more details see chapters 20| 22). Comparing to around 250 bird species registered in Pokupski Bazen (cca 35,000 ha), on fishponds Crna Mlaka even 204 bird species have been registered, out of that 98 being birds of wetland habitats and 74 forest species (Institute for Ornithology, 2003). Apart from high number of species, Crna Mlaka is famous for high concentrations of waterbirds during post-breeding period and fall migrations. Rich water and amphibian vegetation represent valuable wetland habitats on artificial water bodies that significantly contribute to the function of natural wetlands on national and European level.

Criterion 4 : Support during critical life cycle stage or in adverse conditions

Criterion 6 : >1% waterbird population

#### 3.2 - Plant species whose presence relates to the international importance of the site

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<b>Plantae</b>								
<i>Carex riparia</i>	The greater pond sedge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	Vulnerable by National Red List of plant species	Vulnerable by National Red List of plant species
<i>Carex vesicaria</i>	Blister Sedge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	Vulnerable by National Red List of plant species	Vulnerable by National Red List of plant species
<i>Marsilea quadrifolia</i>	Four Leaf Clover	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	Annex II of Habitats Directive	Endangered (EN) by National Red List of plant species

#### 3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
<b>Others</b>																		
CHORDATA/ AMPHIBIA	<i>Bombina bombina</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I, Bern Convention	Criterion 2: Annex IV of the Habitats Directive

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA/ AMPHIBIA	<i>Bombina variegata</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I, Bern Convention	Criterion2: Annex IV of the Habitats Directive
CHORDATA/ MAMMALIA	<i>Castor fiber</i>	Eurasian Beaver	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex II of the Habitats Directive	Criterion 2: Annex II of the Habitats Directive
ARTHROPODA / INSECTA	<i>Cerambyx cerdo</i>	Cerambyx Longicorn	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					VU	<input type="checkbox"/>	<input type="checkbox"/>	Annex II of Habitats Directive	Globally Vulnerable by IUCN Red List
ARTHROPODA / INSECTA	<i>Lucanus cervus</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>	Annex II of the Habitats Directive	Criterion 2: Annex II of the Habitats Directive
CHORDATA/ MAMMALIA	<i>Lutra lutra</i>	European Otter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I, Bern Convention	Criterion 2: Annex II of the Habitats Directive
ARTHROPODA / INSECTA	<i>Rosalia alpina</i>	Rosalia Longicorn	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					VU	<input type="checkbox"/>	<input type="checkbox"/>	Annex II of Habitats Directive	Globally Vulnerable by IUCN Red List
CHORDATA/ AMPHIBIA	<i>Triturus carnifex</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I, Bern Convention	Criterion 2: Annex IV of Habitats Directive
<b>Birds</b>																		
CHORDATA/ AVES	<i>Acrocephalus melanopogon</i>	Moustached Warbler	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Nat.Red List status: CR	Criterion 2: Birds Directive Annex I
CHORDATA/ AVES	<i>Alcedo atthis</i>	Common Kingfisher	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I
CHORDATA/ AVES	<i>Anas strepera</i>	Gadwall	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2016				<input type="checkbox"/>	<input type="checkbox"/>	Nat. Red List status: EN, Birds Directive Annex I species	Endangered (EN) by National Red List of bird species. The site supports the breeding population of 0-4 breeding pairs (Jecmenica 2016)
CHORDATA/ AVES	<i>Aquila pomarina</i>	Lesser Spotted Eagle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Nat. Red List status: EN, Birds Directive Annex I species	Endangered (EN) by National Red List of bird species
CHORDATA/ AVES	<i>Ardea alba</i>	Great Egret	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I
CHORDATA/ AVES	<i>Ardea purpurea</i>	Purple Heron	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Nat. Red List status: EN, Birds Directive Annex I species	Endangered (EN) by National Red List of bird species. Possible breeding of 3 pairs.
CHORDATA/ AVES	<i>Ardeola ralloides</i>	Squacco Heron	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	National red List Status: EN	Criterion 2: Birds Directive Annex I
CHORDATA/ AVES	<i>Aythya nyroca</i>	Ferruginous Duck	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4600	2002-2011	7.3	NT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Birds Directive Annex I species	Criterion 2: CMS Appendix I species; Criterion 4: Crna Mlaka is the most important site in middle Europe for postbreeding dispersion and fall migration (up to 6500 birds) Criterion 6: Biogeographic region: Eastern Europe/E Mediterranean & Sahelian Africa Breeding pop.: 70-80 p.	
CHORDATA/ AVES	<i>Botaurus stellaris</i>	Eurasian Bittern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Nat. Red List status: EN, Birds Directive Annex I species	Endangered (EN) by National Red List of bird species
CHORDATA/ AVES	<i>Chlidonias hybrida</i>	Whiskered Tern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I
CHORDATA/ AVES	<i>Ciconia ciconia</i>	White Stork	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I
CHORDATA/ AVES	<i>Ciconia nigra</i>	Black Stork	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8				LC	<input type="checkbox"/>	<input type="checkbox"/>	Nat. Red List status: VU, Birds Directive Annex I species	Vulnerable by National Red List of bird species. Breeding pop.: 2-15 ind. feeding on fishponds breed in adjacent forest
CHORDATA/ AVES	<i>Circus aeruginosus</i>	Western Marsh Harrier	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2016			LC	<input type="checkbox"/>	<input type="checkbox"/>	Nat. Red List status: EN, Birds Directive Annex I species	Endangered (EN) by National Red List of bird species. Breeding popul: 0-2 p. (Radović 2011, Jecmenica 2016)
CHORDATA/ AVES	<i>Circus cyaneus</i>	Northern Harrier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA/AVES	<i>Circus pygargus</i>	Montagu's Harrier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List Status: EN	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Crex crex</i>	Corn Crake	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List Status: VU	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Dendrocopos medius</i>	Middle Spotted Woodpecker	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Dryocopus martius</i>	Black Woodpecker	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Egretta garzetta</i>	Little Egret	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List Status: VU	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Ficedula albicollis</i>	Collared Flycatcher	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Grus grus</i>	Common Crane	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Haliaeetus albicilla</i>	White-tailed Eagle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3			LC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Nat. Red List status: VU, Birds Directive Annex I species	Vulnerable by National Red List of bird species; CMS Appendix I; CITES Appendix I. Breeding popul.: 2-3 p., Individuals feeding on fishponds breed in adjacent forest	
CHORDATA/AVES	<i>Ixobrychus minutus</i>	Little Bittern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	44	2011-2016		LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Lanius collurio</i>	Red-backed Shrike	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Lanius minor</i>	Lesser Grey Shrike	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Luscinia svecica</i>	Bluethroat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	National red List Status: EN	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Milvus migrans</i>	Black Kite	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Nat. Red List status: EN, Birds Directive Annex I species	Endangered (EN) by National Red List of bird species. Breeding popul.: 2 p., Individuals feeding on fishponds, breeds in adjacent forest	
CHORDATA/AVES	<i>Netta rufina</i>	Red-crested Pochard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2016		LC	<input type="checkbox"/>	<input type="checkbox"/>	Nat. Red List status: VU, Birds Directive Annex I species	Nat. Red List status: VU. The site supports the breeding population of 0-2 breeding pairs (Jecmenica 2016)	
CHORDATA/AVES	<i>Numenius arquata</i>	Eurasian Curlew	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>	National Red List status: EN	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Nycticorax nycticorax</i>	Black-crowned Night-Heron; Black-crowned Night Heron	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Pandion haliaetus</i>	Western Osprey; Osprey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Pernis apivorus</i>	European Honey Buzzard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Philomachus pugnax</i>	Ruff	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Picus canus</i>	Grey-headed Woodpecker	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Platalea leucorodia</i>	Eurasian Spoonbill	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List Status: EN	Criterion 2: birds Directive Annex I	
CHORDATA/AVES	<i>Porzana parva</i>	Little Crane	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7			LC	<input type="checkbox"/>	<input type="checkbox"/>	Nat. Red List status: EN, Birds Directive Annex I species	Endangered (EN) by National Red List of bird species; Breeding popul.: 3-10 p.	

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA/AVES	<i>Porzana porzana</i>	Spotted Crake	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Nat. Red List status: EN, Birds Directive Annex I species	Endangered (EN) by National Red List of bird species	
CHORDATA/AVES	<i>Porzana pusilla</i>	Baillon's Crake	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	National Red List Status: CR	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Strix uralensis</i>	Ural Owl	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Birds Directive Annex I	
CHORDATA/AVES	<i>Sylvia nisoria</i>	Barred Warbler	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Criterion 2: Birds Directive Annex I	
CHORDATA/AVES	<i>Tringa glareola</i>	Wood Sandpiper	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Birds Directive Annex I	Birds Directive Annex I	

1) Percentage of the total biogeographic population at the site

Criterion 4: Crna Mlaka supports many waterbird species in significant numbers during critical stages in their life cycles, especially migratory waterbirds during the fall migration (Central European Flyway) (Institute for Ornithology, 2003). It is one of the most important stopover sites for migratory waterbirds in Croatia and the most important site in middle Europe for the Ferruginous Duck (*Aythya nyroca*) during its postbreeding dispersion and the fall migration. With its rich water and marsh vegetation Crna Mlaka represents important breeding site for number of species. It is also valuable feeding place especially for ichthyophagous species and also provides refuge for wintering birds as long as fishponds are not frozen.

*Aythya nyroca*, Ferruginous Duck, additional material under criterion 6: Crna Mlaka regularly supports more than 1% of the E European, E Mediterranean and Black Sea population of the Ferruginous Duck (*Aythya nyroca*) that breeds in Eastern Europe (Wetlands International, 2006) during postbreeding dispersion and the fall migration (August-October).

Monitoring of this species on Crna Mlaka from 2002 – 2011 registered from min. 2,617 max. 6,658 ind. (Croatian Ornithological Society, 2011 b) As 1% threshold for E European, E Mediterranean and Black Sea population is 630 ind., it is evident that Crna Mlaka regularly supports more than 1% of its populaton, and in some years even more than 7% of this Ferruginous Duck population.

### 3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Subatlantic and mediterranean European oak or oak hornbeam forests of the Carpinion betuli	<input type="checkbox"/>		
Ulmus laevis and Ulmus minor	<input checked="" type="checkbox"/>		Habitat types protected by the EU Habitats Directive that are well represented on this site
Fraxinus excelsior or Fraxinus angustifolia along the great rivers (Ulmenion minoris)	<input checked="" type="checkbox"/>		Habitat types protected by the EU Habitats Directive that are well represented on this site
Riparian mixed forest of Quercus robur	<input checked="" type="checkbox"/>		Habitat types protected by the EU Habitats Directive that are well represented on this site
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	<input type="checkbox"/>		priority habitat type for protection
Natural eutrophic lakes with Magnopotamion or Hydrocharition type vegetation	<input checked="" type="checkbox"/>		Habitat types protected by the EU Habitats Directive that are well represented on this site
the Littorelletea uniflorae and/or of the Isoetes-Nanojuncetea	<input checked="" type="checkbox"/>	Oligotrophic to mesotrophic standing waters with vegetation	Habitat types protected by the EU Habitats Directive that are well represented on this site

## 4 - What is the Site like? (Ecological character description)

### 4.1 - Ecological character

Generally speaking, Crna Mlaka contains two main groups of habitat types: fishponds with water and marsh vegetation as well as alluvial wet forests.

Important habitat types listed in Annex I of the EU Habitats Directive (HD) are:

3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea* or according to European EUNIS classification (EEA):

C3.4 Species-poor beds of low-growing water-fringing or amphibious vegetation

This amphibian vegetation develops along the edge of fishponds that are periodically being emptied. When a pond is empty, amphibious vegetation develops in the wet contact zone or on the pond bottom that is still wet or contains remained water in small depressions. This vegetation is represented by two associations:

- As. *Cyperetum flavescens* W. Koch 1926 em. Aichinger 1933, with characteristic species the Yellow Gallinule (*Cyperus flavescens*), the Water Purslane (*Ludwigia palustris*), the Needle Spikerush (*Eleocharis acicularis*) and others
- As. *Eleocharidii-Lindemietum* Pietsch 1973, with the Blunt Spikerush (*Eleocharis ovata*)

3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation

According to EUNIS classification it corresponds with:

C1.3 Permanent eutrophic lakes, ponds and pools

C1.32 Free-floating vegetation of eutrophic waterbodies C1.33 Rooted submerged vegetation of eutrophic waterbodies

Regarding vegetation types, several associations are included with dominance of different duckweeds (Lemnaceae) or with the European Frogbit (*Hydrocharis morsus-ranae*).

Crna Mlaka Ramsar site contains cca 60 ha of representative alluvial forest belonging to the HD class:

91F0 Riparian mixed forest of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia* along the great rivers (*Ulmion minoris*).

or corresponding EUNIS class:

G1.22 Mixed [*Quercus*] | [*Ulmus*] | [*Fraxinus*] woodland of great rivers

- The association developed in the Ramsar site is *Leucoi-Fraxinetum angustifoliae* Glavač 1959, with characteristic species being the Summer Snowflake (*Leucojum aestivum*) and the Narrow-leaved Ash (*Fraxinus angustifolia*).

Apart from these habitat types of conservation interest, Crna Mlaka contains other habitat types according to EUNIS classification (based on Udjbinac, 1959 and Alegro, 2010):

C1.24 Rooted floating vegetation of mesotrophic waterbodies C1.31 Benthic communities of eutrophic waterbodies

C1.34 Rooted floating vegetation of eutrophic waterbodies C3.65 Exposed unvegetated freshwater lake muds

D5 Sedge and reedbeds, normally without free-standing water E2.2 Low and medium altitude hay meadows

E3.4 Moist or wet eutrophic and mesotrophic grassland FA Hedgerows

I2 Cultivated areas of gardens and parks J1 Buildings of cities, towns and villages

J5.41 Non-saline water channels with completely man-made substrate

### 4.2 - What wetland type(s) are in the site?

#### Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		3		Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		2		Representative

#### Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
1: Aquaculture ponds		1	
9: Canals and drainage channels or ditches		4	

### 4.3 - Biological components

#### 4.3.1 - Plant species

##### Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Cyperus fuscus</i>	Brown Gallinule	rare/threatened on national level
<i>Cyperus michelianus</i>	galingale	rare/threatened on national level
<i>Eleocharis ovata</i>	Blunt Spikerush	rare/threatened on national level
<i>Lythrum portula</i>	Spatulaleaf Loosestrife	rare/threatened on national level
<i>Schoenoplectus triquetus</i>	Ricefield Bulrush	rare/threatened on national level

#### 4.3.2 - Animal species

##### Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
ARTHROPODA/INSECTA	<i>Leucorhinia pectoralis</i>	Yellow-spotted Whiteface				registered on Draganići fishponds situated few km NW from Crna Mlaka (Franković and Bogdanović, 2009).

#### 4.4 - Physical components

##### 4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfb: Marine west coast (Mild with no dry season, warm summer)

Climate characteristics of this area are (Zagreb County, 2002): annual precipitations range from 800 – 900 mm and are relatively evenly distributed during the year; the least precipitation is in winter while the rainfall maximum is in spring (June), late summer (September) and autumn (October – November); the air temperature ranges between 13°C and +22 °C while the humidity is largest in winter (average of 87%) and the minimum is in summer (average of 74%); the winter is characterized by frequent fog and NE winds while warm and humid winds blow during the spring.

##### 4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

Kupa River

##### 4.4.3 - Soil

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes  No

##### 4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from surface water	<input checked="" type="checkbox"/>	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

Hydrology of fishponds depends on several small watercourses: Okićnica – flowing from nearby hills of Samoborsko Gorje (Plešivica) and bordering the western part of fishponds; Brebermica – flowing from hills of Vukomeričke Gorice to the eastern part of fishponds, with its tributaries Lipovec and Botića. Additionally, the small river of Volavčica is flowing from SW. All these watercourses are entering the larger Kupčina River that flows into the canal Kupa Kupa and finally into the Kupa River. Generally, water in fishponds should be cca 1.5 m deep that is optimal for fish production. Anyway, during last years the problem of lack of water is constantly growing because watercourses that fishponds depend on have been captured and used for water supply of nearby settlements. On different ponds there are fluctuations of water level depending on fish production technology.

##### 4.4.5 - Sediment regime

Sediment regime unknown

##### 4.4.6 - Water pH

Unknown

##### 4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Unknown

Please provide further information on dissolved or suspended nutrients (optional):

Water in ponds is mainly eutrophic due to fish production activities, especially fish feeding.

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar  ii) significantly different

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

Please describe other ways in which the surrounding area is different:

In the surrounding area the fish production is also important on two closely by fishponds (Draganići and Pisarovina). The most important activity in Pokupski Bazen is forestry. Except for the small part protected as ornithological reserve, forests are being exploited by the state-owned firm "Hrvatske Šume" ("Croatian Forests"). Only about 1/4 of forests are privately-owned. Hunting is allowed in Pokupski Bazen, in forest and on fishponds except for the Crna Mlaka ornithological reserve. Forestry and hunting activities are based on forestry and hunting management plans that are being revised every 10 years. The whole Pokupski Bazen has an important role in the system of flood protection as the natural retention.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium
Fresh water	Drinking water for humans and/or livestock	Medium
Wetland non-food products	Timber	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Hazard reduction	Flood control, flood storage	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Low
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Long-term monitoring site	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	Medium

Other ecosystem service(s) not included above:

See additional material for further information

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes  No  Unknown

4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

## RIS for Site no. 582, Crna Mlaka Fishponds, Croatia

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

<no data available>

### 4.6 - Ecological processes

<no data available>

## 5 - How is the Site managed? (Conservation and management)

### 5.1 - Land tenure and responsibilities (Managers)

#### 5.1.1 - Land tenure/ownership

##### Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

##### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

##### within the Ramsar site:

Crna Mlaka fishponds are being managed by the private firm "HOR PARK Crna Mlaka" that owns the land and real estate on fishpond area and is engaged in fish production. Ponds with water (cca 563 ha) are state owned and the firm has concession for water use. Adjacent forest is also state owned (62.5 ha).

So out of the whole area of the Ramsar site (756.2 ha – 100%), the state owned area is cca 625.5 ha (82.7%) and the rest (cca 130.7 ha – 17.3%) is privately owned.

##### in the surrounding area:

The surrounding area of Crna Mlaka is covered with forests of Pokupski Bazen that are cca 3/4 state owned while the rest is private. The other two fishponds (Draganići and Pisarovina) are being managed by private firms and have concession for water use, being owners of real estate on these sites. Forests of Pokupski Bazen are surrounded by agriculture land and few settlements. There is no data available on structure of ownership in this zone.

#### 5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

1. Public Institution for management of protected areas and other natural values in Zagreb County "Zeleni prsten" (Javna ustanova za upravljanje zaštićenim područjima i drugim zaštićenim dijelovima prirode na području Zagrebačke županije Zeleni prsten; acronym: Javna ustanova Zeleni prsten Zagrebačke županije)
2. Fishery: HORIPARK Crna Mlaka Ltd Crna Mlaka 9, 10450 Jastrebarsko Phone: +385 1 3755799 Fax: +385 1 3755810 email: crnamlaka@zg.htnet.hr
3. Forestry: "Croatian Forests" – Management unit Karlovac Put Davorina Trstenjaka 1, 47 000 Karlovac. Phone: +385 47 843 258 fax: +385 47 613 438 email: sumarija-karlovac@hrsume.hr
"Croatian Forests" - Management unit Jastrebarsko I. B. Mažuranić 2, 10450 Jastrebarsko. Phone +385 1 628 46 90 e-mail: sumarija-jastrebarsko@hrsume.hr

Provide the name and/or title of the person or people with responsibility for the wetland:

Tatjana Masten Milek, manager of the Public Institution Zeleni prsten

Postal address:

Javna ustanova Zeleni prsten Zagrebačke županije  
151. samoborske brigade HV 1,  
10430 Samobor  
Croatia

web: www.zeleni-prsten.hr

E-mail address:

info@zeleni-prsten.hr

### 5.2 - Ecological character threats and responses (Management)

#### 5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Please describe any other threats (optional):

within the Ramsar site:

Ecological character of the site is directly connected with fish production activities so it is of utmost importance to keep production in current extensive way. Ceasing of production would in several years time result in significant changes of water regimen, vegetation and available food for wetland species, so complete ecological character of the site would be adversely affected.

One of the biggest problems on Crna Mlaka is the lack of water entering fishponds from adjacent watercourses and worsening of its quality. Fishfeeding species like different birds (the Cormorant, herons and others) and the Otter cause significant losses and damages to fish production.

Effective management of ornithological reserve is not established. This should improve in the following years since the management plan should be developed through the Ministry of Environment and Energy's project for developing Natura 2000 management plans.

Forestry activities in ornithological reserve adjacent to fishponds are restricted and there is no economic exploitation. The castle "Ribograd" that has a status of the cultural monument is in bad condition and there are no financial resources to restore it.

in the surrounding area:

Currently in Pokupski Bazen the most of old stands have been cut so young stands prevail. This situation affects directly the most threatened species that are usually connected to old forest and large quantity of deadwood.

## 5.2.2 - Legal conservation status

### Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	HR1000001 Pokupski bazen	<a href="http://natura2000.dzpp.hr/report/publish/reportproxy.aspx?paramSI=TECODE=HR1000001">http://natura2000.dzpp.hr/report/publish/reportproxy.aspx?paramSI=TECODE=HR1000001</a>	partly
EU Natura 2000	HR2000449 Ribnjaci Crna Mlaka	<a href="http://natura2000.dzpp.hr/report/publish/reportproxy.aspx?paramSI=TECODE=HR2000449">http://natura2000.dzpp.hr/report/publish/reportproxy.aspx?paramSI=TECODE=HR2000449</a>	whole
EU Natura 2000	HR2001335 Jastrebarski lugovi	<a href="http://natura2000.dzpp.hr/report/publish/reportproxy.aspx?paramSI=TECODE=HR2001335">http://natura2000.dzpp.hr/report/publish/reportproxy.aspx?paramSI=TECODE=HR2001335</a>	partly

### National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
ornithological reserve	Jastrebarski lugovi		partly

### Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Crna Mlaka Fishponds		whole

## 5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
- VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

## 5.2.4 - Key conservation measures

### Legal protection

Measures	Status
Legal protection	Implemented

### Habitat

Measures	Status
Hydrology management/restoration	Proposed

## Human Activities

Measures	Status
Fisheries management/regulation	Implemented
Management of water abstraction/takes	Proposed
Communication, education, and participation and awareness activities	Proposed

## Other:

In two ornithological reserves hunting and economic exploitation of forests is forbidden. Fish production is implemented independently by the "IHOR PARK Crna Mlaka" but in accordance with nature conservation measures. General restrictions and procedures for issuing permits for planned projects and activities are proscribed by the Nature Protection Law ("Official Gazette" No 80/13, 15/18, 14/19).

Fishery and forestry in surrounding area of Pokupski Bazen are being implemented through sector management plans that contain nature conservation measures approved by ministry responsible for nature protection. As this is the Natura 2000 site, all projects that could significantly influence its target features are subject to the procedure of appropriate assessment.

## 5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

Has a management effectiveness assessment been undertaken for the site? Yes  No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes  No

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

In 2014 there was a project plan to build a visitor center but due to the restrictions to invest EU money into private property, the project had to be postponed. Until 2013, for several years, there was a International Wetland's day celebration organized together by Public Institution Zelenci prsten of Zagreb County and Ministry for Environment and Nature.

URL of site-related webpage (if relevant): <https://zeleni-prsten.hr/web/crna-mlaka-2/>

## 5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

## 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Alegro, A. et al. (2010): Botanički važna područja Hrvatske/ Important Plant Areas in Croatia. Školska knjiga, Zagreb

Burfield, I. and van Bommel, F. (2004): Birds in Europe. Population estimates, trends and conservation status. BirdLife International.

Croatian Bureau of Statistics (2011): Census of Population, Households and Dwellings, 2011  
<http://www.dzs.hr/Hrv/censuses/census2011/censusfirstres.htm>

Croatian Ornithological Society (2011a): Research and evaluation of carp fishponds as sites important for birds with the proposal of management measures. Report for the State Institute for Nature Protection. Zagreb

Croatian Ornithological Society (2011b): Monitoring of breeding and postbreeding dispersal of the Ferruginous Duck (*Aythya nyroca*) on fishponds of Pokupski Bazen from 2002 | 2011. Report for the State Institute for Nature Protection. Zagreb

Croatian Ornithological Society (2011c): Monitoring of breeding population of the Ferruginous Duck (*Aythya nyroca*) on fishponds of Pokupski Bazen from 2004 | 2011. Report for the State Institute for Nature Protection. Zagreb

Croatian Ornithological Society (2011d): Monitoring of breeding population of the Whisked Tern (*Chlydonias hybridus*) on fishponds of Pokupski Bazen from 2004 | 2011. Report for the State Institute for Nature Protection. Zagreb

Croatian Ornithological Society (2011e): Monitoring of breeding pairs of the White-tailed Eagle (*Haliaeetus albicilla*) in Pokupski Bazen from 2004 | 2011. Report for the State Institute for Nature Protection. Zagreb

Emys (2009): Research of the distribution of the Otter (*Lutra lutra*) in Continental Croatia. Report for the State Institute for Nature Protection. Donji Miholjac

European Commission (2011): Map of EU biogeographic regions EU 27+1, Doc.Hab. 11|05/04

Faculty of Forestry (2008): Scientific analysis of beetles from Annex II of the Habitats Directive with the proposal of sites important for their conservation. Report for the State Institute for Nature Protection. Zagreb

Franković, M. and Bogdanović T. (2009): Scientific analysis of dragonflies (Odonata) from Annex II of the Habitats Directive. Report for the State Institute for Nature Protection. Zagreb

See additional material for further information

#### 6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<1 file(s) uploaded>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<1 file(s) uploaded>

#### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Crna Mlaka fishponds ( Luka Basrek, 10-05-2017 )



Crna Mlaka fishponds ( Luka Basrek, 10-05-2017 )



Crna Mlaka fishponds ( Luka Basrek, 10-05-2017 )



Crna Mlaka fishponds ( Luka Basrek, 10-05-2017 )



Crna Mlaka fishponds ( Luka Basrek, 10-05-2017 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1992-11-02