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BIRD CHECKLIST OF THE SISAČKA POSAVINA AREA, 1881–1998

JASMINA MUŽINIĆ[1], ŽELJKO VASILIK[2] & ANDREJA RADOVIĆ[1]

[1]The Institute of Ornithology at the Croatian Academy of Sciences and Arts, Gundulićeva 24, HR-10000 Zagreb, Croatia (jasmina@hazu.hr; a.radovic@hazu.hr)

[2]S. Bereka 11, Budaševo, HR-44202 Topolovac, Croatia (zeljko.vasilik@ina.hr)

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A unified bird checklist has been created for the area of Sisačka Posavina. The list summarises the occurrence of a total of 246 species between 1881 and 1998. The list mostly refers to species recorded in Lonjsko Polje Nature Park and the wider geographical area of Lonjsko Polje. Data from recorded published and unpublished papers during the period were used for compiling the bird checklist. The list is a basis that needs supplementing with new records of bird species made in the area and constitutes in addition a contribution to the establishment of the avifauna diversity of Lonjsko Polje Nature Park.

Key words: bird checklist, the Sisačka Posavina, the Lonjsko Polje, Croatia

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Izrađen je objedinjen popis ptica za područje Sisačke posavine kojim je ustanovljeno dolaženje ukupno 246 vrsta u razdoblju 1881. do 1998. Popis se najvećim dijelom odnosi na ptice u području Parka prirode Lonjsko Polje te zemljopisnom području Lonjskog polja. Za izradu popisa rabljeni su dosad zabilježeni podaci iz objavljenih i neobjavljenih radova u spomenutom razdoblju. Popis predstavlja osnovu za dalje dopunjavanje novo zabilježenim vrstama ptica Sisačke posavine kao i prilog valorizaciji avifaunističke različitosti Parka prirode Lonjsko Polje.

Ključne riječi: popis ptica, Sisačka Posavina, Lonjsko Polje, Hrvatska

INTRODUCTION

Bird checklists for certain areas represent an inventory of bird species. They are useful in evaluating the presence of different types of biotopes and monitoring changes in the qualitative composition of the avifauna and habitats. In this way,

lists of species are basic instruments in the protection of nature. Sisačka Posavina is one of the best-known floodplain areas in Croatia. However, there is no unified bird checklist for the area. There is a clear need for an overall avifaunal list for that area, as is shown by the existence of the Lonjsko Polje Nature Park, as well as the presence of rare and endangered bird species (SCHNEIDER, 1989) in the area.

All records of bird species used for this study refer to the period between 1881 and 1998. They refer either to observations of single specimens or separate lists of observations. Separate lists are used for published and unpublished papers as well as manuscripts previously unknown to the general public.

RUCNER (1970) applied such a method of compilation for the Lonjsko Polje bird checklist. This list contains a total of 127 species, 109 of them being recorded by himself, while 12 species are from RÖSSLER's list (1903), five from ERN's list (1960) one species being recorded by RÖSSLER (1907).

The objective of this paper is to draw up a unified list of bird species so far recorded in the Sisačka Posavina area including the geographical area of Lonjsko Polje and Lonjsko Polje Nature Park within its present boundaries. The checklist should provide a starting point for the extension of the total number of species during future avifaunal studies in the area. It should also contribute to the identification and monitoring of ecological changes in the wetlands in central Croatia.

STUDY AREA

Sisačka Posavina lies in the central part of Croatia that borders with the Banija region and the Republic of Bosnia-Herzegovina in the south, and the slopes of the Moslavačka Hills and Mt Psunj in the north. The study area covers the Lonjsko Polje Nature Park and the wider geographical area of Lonjsko Polje.

Due to the abundance of surface streams, the particular relief and specific qualities of the river bed of the Sava and its numerous tributaries, Sisačka Posavina is the main intersection of streams in Croatia (ANON., 1974). There are numerous rivers (Kupa, Odra, Lonja, Glina, Česma, Ilova, Pakra, Strug, Una), which form the wide flood plains (the polje): Lonjsko, Mokro, Poganovo, Odransko, Sunjsko and Ribarsko. Tall forests of oak, hornbeam and other deciduous trees characterise the central greatest part of Sisačka Posavina, Lonjsko Polje. Forest communities of alder, ash trees and willows appear in moist habitats. Old backwaters in any stage of succession form marshy landscapes. Large lowland depressions are overgrown by fast-growing reed beds. The wealth of the fauna complements the specificity and diversity of plant life. Lonjsko Polje is one of the largest fish hatcheries in Croatia, and is also rich in game species. Almost each group of animals has its representatives of rare and endangered species in the area (otter, birds of prey, waders and others). The biological diversity of the Lonjsko Polje area heavily depends on regular flooding (SCHNEIDER-JACOBY & ERN, 1993).

Due to its biodiversity, its richness of flora, fauna and cultural particularities described by DEŽELIĆ & FIŠTROVIĆ (1987), SCHNEIDER-JACOBY (1989) and RUCNER (1970), 506 square kilometres of Lonjsko Polje and Mokro Polje have been preserved since

1990 in the Nature Park category. Three ornithological reserves were established due to the presence of rare and endangered bird species: Krapje Đol (MIKULIĆ, 1964), Dražiblato and Rakita. Because of the exceptional concentration of nesting white storks (*Ciconia ciconia*) showing the value of the area (SCHNEIDER, 1988) and the traditional building of the Posavina houses, two villages have been recognised as of international significance: Čigoč – European Stork Village since 1994 and Krapje – village of the architectural heritage. Furthermore, the Lonjsko Polje Nature Park is protected under the Ramsar Convention and listed as an Important Bird Area (IBA).

METHODS

In all, two kinds of sources were used for compiling the checklist: 1) seven papers, unpublished reports, contain ornithological records for the area and 2) six separate observations available in the form of published papers or unpublished data.

Records were extracted from: RÖSSLER (1903) for the period between 1881 and 1900; RÖSSLER (1902–1918) for the period between 1901 to 1917; ERN (1960) for the period from July 25 to August 23, 1957; RUCNER (1970) for the period from September 9, 1947 to September 11, 1968; FIEDLER & SCHMIDT (1985) for the period from May 24 to June 14, 1985; ERN (1987) for the period from April 15 to April 18, 1987; and SCHNEIDER-JACOBY (1993) concerning the period between 1986 and 1988. Some of these papers, depending on their scope, include records from other areas in Croatia (RÖSSLER, 1903, 1902–1918; ERN, 1960, 1987).

Some observations of single species have been published by RÖSSLER (1907) for the year 1906; Ž. VASILIK (unpublished data) for 1990 and 1998; V. TUTIŠ (unpublished data) for 1996; M. SCHNEIDER-JACOBY (unpublished data) for 1998; and MUŽINIĆ & VASILIK (2002) for 1998.

RUCNER (1970) supplemented her paper with records already published by RÖSSLER (1903, 1907) and ERN (1960). In the current checklist all authors are cited separately, mentioning the species concerned.

Many unpublished records for the area are included in the unpublished reports of ERN (1987) and FIEDLER & SCHMIDT (1985) to the Institute for the Protection of Nature of the Republic of Croatia and the Deutscher Bund für Vogelschutz/Ornithologische Arbeitsgemeinschaft Bodensee.

Authors of the list: RÖSSLER (1902–1918), ERN (1960, 1987), RUCNER (1970) and FIEDLER & SCHMIDT (1985) discuss avian qualitative composition in various seasons while SCHNEIDER-JACOBY (1993) analyses bird status.

RESULTS

Tab. 1 shows the unified bird checklist of Sisačka Posavina. The majority of birds were recorded in the immediate area of Lonjsko Polje Nature Park. In this respect, the list may be considered a bird checklist for Lonjsko Polje Nature Park.

Tab. 1. List of 246 bird species of Sisačka Posavina and authors of records in the period from 1881 to 1998.

	Species	Authors
1	*Gavia arctica*	S
2	*Gavia stellata*	S
3	*Podiceps cristatus*	F E2 S
4	*Podiceps griseigena*	S
5	*Podiceps nigricollis*	S
6	*Tachybaptus ruficollis*	E1 F E2 Ru S
7	*Phalacrocorax carbo*	R1 F E2 S
8	*Phalacrocorax pygmeus*	S
9	*Botaurus stellaris*	S
10	*Ixobrychus minutus*	E1 Ru S
11	*Egretta alba*	R2 S
12	*Egretta garzetta*	E1 F E2 Ru S
13	*Ardea cinerea*	R2 E1 F E2 Ru S
14	*Ardea purpurea*	E1 F E2 Ru S
15	*Ardeola ralloides*	R2 E1 F Ru S
16	*Bubulcus ibis*	S
17	*Nycticorax nycticorax*	E1 F E2 Ru S
18	*Platalea leucorodia*	F E2 Ru S
19	*Plegadis falcinellus*	Ru S
20	*Ciconia ciconia*	R2 E1 F E2 Ru S
21	*Ciconia nigra*	R2 E1 F E2 Ru S
22	*Cygnus cygnus*	R2
23	*Cygnus columbianus*	M
24	*Cygnus olor*	V
25	*Branta bernicla*	R3 S
26	*Anser anser*	R2 E2 S
27	*Anser albifrons*	S
28	*Anser fabalis*	R1 R2 S
29	*Anser brachyrhynchos*	S
30	*Tadorna tadorna*	S
31	*Tadorna ferruginea*	S
32	*Aix galericulata*	S
33	*Anas platyrhynchos*	E1 F E2 Ru S
34	*Anas strepera*	R1 E2 S
35	*Anas acuta*	R1 S
36	*Anas penelope*	R1 E2 S
37	*Anas crecca*	E2 S
38	*Anas querquedula*	F E2 Ru S
39	*Anas clypeata*	E2 S
40	*Netta rufina*	E2 S
41	*Aythya marila*	S
42	*Aythya fuligula*	R1 F E2 S
43	*Aythya ferina*	R1 F E2 S
44	*Aythya nyroca*	E1 F E2 Ru S
45	*Bucephala clangula*	R1 E2 S
46	*Somateria mollissima*	S
47	*Mergus merganser*	R1 S
48	*Mergus serrator*	E2 S
49	*Mergus albellus*	S
50	*Pandion haliaetus*	R1 E2 S
51	*Haliaeetus albicilla*	E1 F E2 S
52	*Milvus milvus*	Ru S
53	*Milvus migrans*	E1 F Ru S
54	*Circaetus gallicus*	E1 S
55	*Circus aeruginosus*	E2 Ru S
56	*Circus cyaneus*	S
57	*Circus pygargus*	S
58	*Accipiter nisus*	E2 Ru S
59	*Accipiter gentilis*	E1 F E2 S
60	*Buteo buteo*	E1 F E2 Ru S
61	*Buteo lagopus*	S
62	*Pernis apivorus*	S
63	*Hieraaetus pennatus*	S
64	*Aquila pomarina*	R1 E1 F E2 Ru S
65	*Aquila clanga*	S
66	*Aquila heliaca*	S
67	*Falco peregrinus*	S
68	*Falco cherrug*	S
69	*Falco subbuteo*	E1 E2 Ru S
70	*Falco columbarius*	S
71	*Falco vespertinus*	S
72	*Falco tinnunculus*	E1 F E2 Ru S
73	*Phasianus colchicus*	E1 F E2 Ru S
74	*Perdix perdix*	S
75	*Coturnix coturnix*	R2 E1 F Ru S
76	*Crex crex*	F Ru S
77	*Rallus aquaticus*	Ru S
78	*Porzana porzana*	S
79	*Porzana parva*	S
80	*Gallinula chloropus*	E1 F E2 Ru S
81	*Fulica atra*	R2 E1 F E2 Ru S
82	*Grus grus*	S
83	*Himantopus himantopus*	S
84	*Recurvirostra avosetta*	E2 S

	Species	Authors
85	*Charadrius dubius*	F E2 S
86	*Charadrius hiaticula*	S
87	*Pluvialis squatarola*	F S
88	*Pluvialis apricaria*	S
89	*Vanellus vanellus*	R2 F E2 Ru S
90	*Calidris ferruginea*	S
91	*Calidris alpina*	E2 S
92	*Calidris minuta*	S
93	*Calidris temminckii*	S
94	*Calidris alba*	S
95	*Philomachus pugnax*	E2 Ru S
96	*Gallinago gallinago*	F Ru S
97	*Gallinago media*	S
98	*Lymnocryptes minimus*	R2 S
99	*Scolopax rusticola*	R2 S
100	*Limosa limosa*	E2 S
101	*Limosa lapponica*	S
102	*Numenius arquata*	R1 S
103	*Numenius phaeopus*	E2 S
104	*Tringa ochropus*	E1 E2 S
105	*Tringa glareola*	E1 F E2 S
106	*Tringa nebularia*	E1 E2 S
107	*Tringa stagnatilis*	S
108	*Tringa totanus*	E1 F S
109	*Tringa erythropus*	E1 E2 Ru S
110	*Actitis hypoleucos*	E1 E2 Ru S
111	*Phalaropus lobatus*	S
112	*Stercorarius parasiticus*	S
113	*Larus cachinnans*	R1 F E2 S
114	*Larus canus*	F E2 S
115	*Larus minutus*	E2 S
116	*Larus ridibundus*	F E2 S
117	*Larus melanocephalus*	S
118	*Rissa tridactyla*	S
119	*Sterna hirundo*	F E2 Ru S
120	*Sterna albifrons*	S
121	*Sterna caspia*	S
122	*Gelochelidon nilotica*	S
123	*Chlidonias niger*	E1 F E2 S
124	*Chlidonias leucopterus*	F S
125	*Chlidonias hybridus*	S
126	*Columba livia f. domestica*	S
127	*Columba oenas*	R2 E1 Ru S
128	*Columba palumbus*	R2 E1 F E2 Ru S

	Species	Authors
129	*Streptopelia turtur*	R2 E1 F Ru S
130	*Streptopelia decaocto*	E1 F E2 Ru S
131	*Cuculus canorus*	R2 F E2 Ru S
132	*Tyto alba*	F S
133	*Otus scops*	S
134	*Athene noctua*	Ru S
135	*Asio otus*	F S
136	*Asio flammeus*	V
137	*Strix aluco*	E2 S
138	*Strix uralensis*	T
139	*Caprimulgus europaeus*	S
140	*Apus apus*	E1 F Ru S
141	*Alcedo atthis*	E1 F Ru S
142	*Upupa epops*	R2 E1 F E2 Ru S
143	*Merops apiaster*	S
144	*Coracias garrulus*	R2 Ru S
145	*Jynx torquilla*	Ru S
146	*Dryocopus martius*	E2 Ru S
147	*Picus canus*	F E2 Ru S
148	*Picus viridis*	F Ru S
149	*Picoides major*	E1 F E2 Ru S
150	*Picoides medius*	F Ru S
151	*Picoides minor*	E1 F Ru S
152	*Picoides syriacus*	E1 S
153	*Picoides leucotos*	S
154	*Lullula arborea*	S
155	*Alauda arvensis*	R2 E1 F E2 Ru S
156	*Galerida cristata*	E1 F Ru S
157	*Riparia riparia*	R2 E1 E2 Ru S
158	*Delichon urbica*	R2 E1 F E2 Ru S
159	*Hirundo rustica*	R2 E1 F Ru S
160	*Hirundo daurica*	S
161	*Anthus trivialis*	F E2 Ru S
162	*Anthus pratensis*	E2 S
163	*Anthus campestris*	S
164	*Anthus cervinus*	S
165	*Anthus spinoletta*	S
166	*Motacilla alba*	R2 E1 F E2 Ru S
167	*Motacilla flava*	F Ru S
168	*Motacilla citreola*	S1
169	*Motacilla cinerea*	E1 E2 S
170	*Bombycilla garrulus*	S
171	*Prunella modularis*	S
172	*Luscinia luscinia*	R2
173	*Luscinia megarhynchos*	R2 E1 F E2 Ru S

	Species	Authors
174	*Luscinia svecica*	S
175	*Erithacus rubecula*	F E2 Ru S
176	*Saxicola rubetra*	E1 F E2 Ru S
177	*Saxicola torquata*	E1 F E2 S
178	*Phoenicurus phoenicurus*	E1 E2 Ru S
179	*Phoenicurus ochruros*	F S
180	*Oenanthe oenanthe*	Ru S
181	*Turdus merula*	R2 E1 F E2 Ru S
182	*Turdus torquatus*	E2
183	*Turdus iliacus*	S
184	*Turdus philomelos*	F E2 Ru S
185	*Turdus viscivorus*	F E2 S
186	*Turdus pilaris*	R2 S
187	*Locustella luscinioides*	F E2 Ru S
188	*Locustella fluviatilis*	F Ru S
189	*Locustella naevia*	S
190	*Acrocephalus schoenobaenus*	E2 Ru S
191	*Acrocephalus palustris*	F Ru S
192	*Acrocephalus scirpaceus*	E2 Ru S
193	*Acrocephalus arundinaceus*	E1 F E2 Ru S
194	*Hippolais icterina*	Ru S
195	*Hippolais pallida*	S
196	*Sylvia nisoria*	Ru S
197	*Sylvia borin*	Ru S
198	*Sylvia atricapilla*	F E2 Ru S
199	*Sylvia communis*	E1 F E2 Ru S
200	*Sylvia curruca*	E1 F Ru S
201	*Phylloscopus collybita*	F E2 Ru S
202	*Phylloscopus trochilus*	E2 S
203	*Phylloscopus sibilatrix*	E2 Ru S
204	*Regulus regulus*	S
205	*Ficedula hypoleuca*	S
206	*Ficedula albicollis*	E1 F E2 Ru S
207	*Muscicapa striata*	E1 F Ru S
208	*Panurus biarmicus*	E2 S
209	*Aegithalos caudatus*	E1 F E2 Ru S
210	*Remiz pendulinus*	F E2 S
211	*Parus major*	E1 F E2 Ru S
212	*Parus caeruleus*	E1 F E2 Ru S
213	*Parus palustris*	F E2 Ru S
214	*Parus ater*	S
215	*Sitta europaea*	E1 F E2 Ru S

	Species	Authors
216	*Certhia familiaris*	E2 Ru S
217	*Certhia brachydactyla*	F E2 Ru S
218	*Troglodytes troglodytes*	F E2 Ru S
219	*Lanius excubitor*	S
220	*Lanius minor*	E1 F Ru S
221	*Lanius collurio*	E1 F Ru S
222	*Nucifraga caryocatactes*	S
223	*Garrulus glandarius*	E1 F E2 Ru S
224	*Pica pica*	E1 F E2 Ru S
225	*Corvus frugilegus*	F S
226	*Corvus corone cornix*	E1 F E2 Ru S
227	*Corvus monedula*	F E2 Ru S
228	*Corvus corax*	E1 F E2 Ru S
229	*Oriolus oriolus*	R2 E1 F Ru S
230	*Sturnus vulgaris*	R2 E1 F E2 Ru S
231	*Passer domesticus*	E1 F E2 Ru S
232	*Passer montanus*	E1 F E2 Ru S
233	*Fringilla montifringilla*	S
234	*Fringilla coelebs*	E1 F E2 Ru S
235	*Serinus serinus*	F E2 Ru S
236	*Acanthis cannabina*	E1 F S
237	*Acanthis flammea*	S
238	*Carduelis carduelis*	E1 F E2 Ru S
239	*Carduelis chloris*	E1 F E2 Ru S
240	*Carduelis spinus*	S
241	*Pyrrhula pyrrhula*	F S
242	*Coccothraustes coccothraustes*	F E2 Ru S
243	*Loxia curvirostra*	S
244	*Miliaria calandra*	E1 F E2 Ru S
245	*Emberiza schoeniclus*	F E2 Ru S
246	*Emberiza citrinella*	E1 F E2 Ru S

LEGEND:

E1= Ern 1960
E2= Ern 1987
F = Fiedler & Schmidt 1985
M = Mužinić & Vasilik 2002
R1= Rössler 1903
R2 = Rössler 1902-18
R3 = Rössler 1907
Ru = Rucner 1970
S = Schneider-Jacoby 1993
S1 = Schneider-Jacoby, non published data
T = Tutiš, non published data
V = Vasilik, non published data

From 1881 to 1998, a total of 246 bird species were recorded in the research area. SCHNEIDER-JACOBY (S & S1) recorded the majority of the birds – 239 species (Tab. 1). ERN (E2) recorded 113 species; RUCNER (Ru) 109; FIEDLER & SCHMIDT (F) 108 species; ERN (E1) 77 species; RÖSSLER (R2) 30 species and RÖSSLER (R1) 13 species, VASILIK (V) recorded two bird species while RÖSSLER (R3), TUTIŠ (T) and MUŽINIĆ & VASILIK (M) recorded one each.

No species is mentioned in all seven lists of records available for the area. Thirteen species occur in six lists, while various authors recorded 152 species in two, three, four of five lists (Tab. 1). Of all the authors SCHNEIDER-JACOBY recorded the greatest number of different species (74) including an unpublished observation of the Citrine Wagtail (*Motacilla citreola*) (S1) (Fig. 1). Other species not mentioned by other observers were noted by RÖSSLER (Thrush Nightingale *Luscinia luscinia* and Whooper Swan *Cygnus cygnus*), VASILIK (Mute Swan *Cygnus olor* and Short-eared Owl *Asio flammeus*), ERN (Ring Ouzel *Turdus torquatus*), TUTIŠ (Ural Owl *Strix uralensis*) and MUŽINIĆ & VASILIK (Tundra Swan *Cygnus columbianus*).

Because of the large number of 74 species recorded only by SCHNEIDER-JACOBY we are not presenting details of his records. Here only the data for those species exclusively noted by other observers are submitted (for references see Tab. 1): the Thrush Nightingale *Luscinia luscinia* was recorded in Lonjsko Polje (Topolovac) under the synonym *Aëdon philomela* (Bechst.) on April 10, 1908. The Whooper Swan (*C. cygnus*) was recorded for the first time in Lonjsko Polje on January 15, 1908. The Ring Ouzel (*Turdus torquatus*) was observed in the Opeka area in Lonjsko Polje on April 16, 1987. The Mute Swan (*C. olor*) was recorded for the first time on February 18, 1990. One adult specimen stayed in the pasture in the northern part of Lonjsko Polje, near Mahovo village. According to reports by local people, there had been

Fig. 1. The Citrine Wagtail *Motacilla citreola* in Poganovo polje (photo: M. Schneider-Jacoby / EURONATUR).

three birds, but two left several days earlier. The Mute Swan appeared in Lonjsko Polje during the winter months each between 1993 and 1996. The Ural Owl *Strix uralensis* was found dead in Lipovljani in March 1996, and the Short-eared Owl *Asio flammeus* was recorded on November 22, 1998 in a field near Tišina Pond (Budaševo/Topolovac). The Tundra Swan (*C. columbianus*) was recorded in Lonjsko Polje from February 14 to 17, 1998. Two adults and two young, probably a family, rested in pasturelands north of Mužilovčica village. The Citrine Wagtail (*Motacilla citreola*) was recorded in Poganovo field on May 30, 1998.

DISCUSSION

There was a need to produce a unified bird checklist of the Sisačka Posavina to get an overview of the species so far recorded in the area. The list will make it easier in the future to monitor the status of birds. Considering the biological diversity of the area, far more species can be expected by systematic field studies.

The most significant contribution to a unified bird checklist of Sisačka Posavina was made by SCHNEIDER-JACOBY (1993 & unpublished data) with 74 species recorded by him alone (Tab. 1). His records also constitute the most recent data. RÖSSLER's papers (1902–1918; 1903) deal with the phenology of the bird fauna of the whole of Croatia. However, RÖSSLER contributes observations of two rare species in the area: *Luscinia luscinia* and *Cygnus cygnus*.

Of the seven mentioned lists, thematic research aimed at establishing a complete composition of species (although in different seasons) is represented by the lists of four authors: RUCNER (1970), ERN (1987), FIEDLER & SCHMIDT (1985) and SCHNEIDER-JACOBY (1993) and thus they are comparable. In this respect, the SCHNEIDER-JACOBY list (1993) confirms in its entirety the presence of species from the RUCNER list (1970) and FIEDLER & SCHMIDT's (1985), while it confirms ERN's list (1987) in 108 of the total of 109 species. ERN (1987) recorded the Ring Ouzel in the area of Opeka.

Common species (13) documented in six lists along with several forest species mainly refer to water birds, and they point to the stability of their populations the abundance of which has not significantly changed in the last 100 years.

The names of two nightingale species in RÖSSLER's reports published between 1902 and 1915 were revealed in a confusing manner creating uncertainty about the accuracy of the first record of a Thrush Nightingale in the area. The first observation of the Nightingale (*Luscinia megarhynchos*) is documented under the name of *Luscinia luscinia* (L.) (RÖSSLER, 1902), which is the scientific name of the Thrush Nightingale at present. Its Croatian and German names were not indicated in the manner used by the author later. In following reports, RÖSSLER changed the scientific name to *Aëdon philomela* (Bechst) and accompanied it with the Croatian name »veliki slavuj« and German name »Sprosser«. Observations of the Nightingale at the same time contribute to the differentiation of two morphologically similar species. The observations of the species in Topolovac of April 10, 1908, under the name of *Aëdon philomela* (RÖSSLER, 1909) may be considered to be of the Thrush Nightin-

gale and it is therefore included in the unified bird checklist of the Posavina of Sisak.

Whooper Swans (*Cygnus cygnus*) regularly winter in southern Europe, although they are now very rare. The majority of the population are nesting birds from northern and central parts of Asia, outside the western Palearctic. In Europe the species nests in Russia, Sweden and Norway. Birds from northern Europe winter in northern Germany, Denmark, England and Sweden (CRAMP & SIMMONS, 1979). Its first appearance in Lonjsko Polje was recorded in January 1908 (RÖSSLER, 1909). Even though the Whooper Swan rarely appears in Croatia, in Lonjsko Polje it was recorded before the Mute Swan. The Mute Swan (*Cygnus olor*) was recorded in Lonjsko Polje for the first time in 1990. Since then the species has been recorded each year between 1993 and 1996. Since 1990, the species has been a new breeding bird in Croatia (LESINGER, 1994), switching its status from rare species to frequent winter visitor.

An important contribution to the knowledge of rare and endangered species of the area is the finding of the Tundra Swan (*Cygnus columbianus*) recorded by MUŽINIĆ & VASILIK (2002) wintering in 1998 near Mužilovčica village. This is at the same time the first record of the species in Croatia. Furthermore, the finding of the Ring Ouzel (*Turdus torquatus*) in 1967 by ERN (1987) is a rare record of the species in the lowlands of central Croatia. The Citrine Wagtail (*Motacilla citreola*) breeds in the arctic and northern boreal parts of Europe but reaches the subtropics in Asia (HAGEMEIJER & BLAIR, 1997). It was recorded as breeding in Turkey as well. In Croatia it was recorded for the first time on Vrana Lake between May 1 to May 3, and on August 9, 1997 (ANON., 1998). The finding of the Ural Owl confirmed the conclusion of LUKAČ (1993/94) who detected the presence of this nocturnal bird of prey in Lonjsko Polje by tracking its song.

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SAŽETAK

Popis ptica Sisačke posavine u razdoblju od 1881. do 1998.

Mužinić, J., Vasilik, Ž. & A. Radović

Sastavljen je popis ptica za područje Sisačke posavine kojim je u razdoblju 1881. do 1998. zabilježeno ukupno 246 vrsta. Popis je izrađen objedinjavanjem dosad objavljenih i neobjavljenih podataka iz sedam zasebnih popisa četiri autora i opažanja pojedinačnih vrsta. Popis se najvećim dijelom odnosi na ptice u području koje zemljopisno obuhvaća Lonjsko Polje pa u tom smislu i njegovog užeg dijela Parka prirode Lonjsko Polje. Najveći broj različitih vrsta (74) u odnosu na zasebne popise drugih autora zabilježio je Schneider-Jacoby. Ostalih osam različitih vrsta su: tri vrste labuda *(Cygnus olor, C. cygnus i C. columbianus*), planinski kos (*Turdus torquatus*), limunasta pastirica (*Motacilla citreola*), veliki slavuj (*Luscinia luscinia*), sovina jastrebača (*Strix uralensis*) i sova močvarica (*Asio flammeus*). Popis predstavlja osnovu za dopunjavanje novo zabilježenim vrstama ptica Sisačke posavine te može poslužiti pri valorizaciji poplavnih biotopa središnje Hrvatske.