

Report monitoring process of revitalization 2017

The monitoring of the birds and water level were performed with main focus on detailed monitoring of the trigger species in project SPAs during year 2017. Used methodology is same as in year of initial monitoring. We recorded all of the bird species in SPA areas and created two common overviews of all bird species in areas during project with occurred numbers and state of the occurrence, and numbers of breeding pairs/calling males within the project duration. The table with results focused on trigger species numbers is viewed separately.

1.2 Results

1.2.1 SPA Parížske močiare

In SPA Parížske močiare marshes was during monitoring within the project recorded following birds species in described breeding population, density of numbers recorded during migration (bird species in alphabetical order):

Table 1 – The list of the bird species recorded within the SPA Parížske močiare in y. 2014-2017. Altogether 117 of species were observed in the area of SPA.

Species	Recorded numbers during non breeding season and migration y. 2014-2017	Recorded number of breeding pairs or calling males during breeding season y. 2014-2017	Character of occurrence of species in y. 2014-2017
Accipiter gentilis	1		W, M
Accipiter nisus	1-3		W, M
Acrocephalus arundinaceus		56-104	B
Acrocephalus palustris		5-9	B
Acrocephalus scirpaceus		65-134	B
Acrocephalus schoenobaenus		10-35	B
Acrocephalus melanopogon		3-8	B
Aegithalos caudatus	10	2-5	B
Aix galericulata	4	1?	B?
Alauda arvensis		3-5	B
Alcedo atthis	2	1	W, M, B
Anas crecca	2-115		W, M, B
Anas clypeata	3-7		M
Anas penelope	1-2		W, M
Anas platyrhynchos	10-100	20-40	W, M, B
Anas querquedula	1-14	0-1	M, B
Anser albifrons	4		W
Anser anser	50-80	2-10	W, M, B
Anthus pratensis	1		M
Anthus trivialis	1-2		M
Ardea cinerea	1-5	1-5	W, M, B
Ardea purpurea	2	1-2	M, B

Asio otus	3	1	M, B
Aythya ferina	3	1	M, B
Botaurus stellaris		0-1	B
Bucephala clangula	0-1		W, M
Buteo buteo	4	2-3	W, M, B
Carduelis cannabina	7-75	2-3	B
Carduelis carduelis	6-20	3-7	W, M, B
Carduelis flammea	4		W, M
Carduelis chloris	25-90	5-13	W, M, B
Carduelis spinus	0-15		W, M
Ciconia ciconia		1	F
Circus aeruginosus	20-120	18-29	M, B
Coccothraustes coccothraustes	1	1	M
Columba oenas	1		M
Columba palumbus	350	5	B
Corvus corax	2-3	1	M, B
Corvus cornix	4	1-3	B
Cuculus canorus		11-23	B
Cygnus olor	0-17	3-4	W, M, B
Delichon urbicum	2-135		F, M
Dendrocopos major		3-4	W, B
Dendrocopos medius	1		M
Dendrocopos syriacus	1	1	M, B
Dryocopus martius	1		M
Egretta alba		65-80	W, M, B
Emberiza citrinella		1-2	W, M, B
Emberiza schoeniclus	5-35	16-35	W, M, B
Erithacus rubecula	3-10	0-3	M, B
Falco subbuteo	1		M, F
Falco tinnunculus	1		F
Fringilla coelebs	10	5	B
Fringilla montifringilla	1		W
Fulica atra	5-15	7-14	B
Gallinago gallinago	1		M
Gallinula chloropus	2-72	15-42	M, B
Garrulus glandarius	2	1	W, M, B
Grus grus	1		M
Hippolais icterina		2-5	B
Hirundo rustica	20-350		M, F
Ixobrychus minutus		1-4	B
Jynx torquilla		1	B
Lanius collurio		6	B
Lanius excubitor	1		W
Larus cachinans	1-2		M
Locustella luscinioides		35-118	B

<i>Locustella naevia</i>		1	B
<i>Luscinia megarhynchos</i>		10-19	B
<i>Merops apiaster</i>	20-42	10-39	B, F
<i>Motacilla alba</i>	11	1	M, B
<i>Motacilla flava</i>	3	1	B
<i>Muscicapa striata</i>		1	B
<i>Numenius phaeopus</i>	1		M
<i>Nycticorax nycticorax</i>	1-10		M, F
<i>Oriolus oriolus</i>	9-10	4-5	B
<i>Pandion haliaeetus</i>	1		M
<i>Panurus biarmicus</i>	42-80	8-27	W, M, B
<i>Parus caeruleus</i>	18-25	2-4	W, M, B
<i>Parus major</i>	12-20	5	W, M, B
<i>Passer domesticus</i>	10-60		W, F
<i>Passer montanus</i>	40-100	3-7	W, B
<i>Pernis apivorus</i>	1		M
<i>Picus viridis</i>	1	1	M, B
<i>Phalacrocorax carbo</i>	1		M
<i>Phalacrocorax pygmeus</i>	5		M
<i>Phasianus colchicus</i>	0-11	6-10	W, B
<i>Phoenicurus ochruros</i>	2		M
<i>Phylloscopus collybita</i>	3	14	M, B
<i>Phylloscopus sibilatrix</i>	1		M
<i>Phylloscopus trochilus</i>	1		M
<i>Pica pica</i>	4	1	M, B
<i>Porzana parva</i>	28	6-11	M, B
<i>Prunella modularis</i>	1		M
<i>Pyrrhula pyrrhula</i>	2		W
<i>Rallus aquaticus</i>	1-15	33-56	W, M, B
<i>Regulus regulus</i>	3-4		M
<i>Remiz pendulinus</i>	1-26	10	M, B
<i>Riparia riparia</i>	14-25	0-255	M, B, F
<i>Saxicola torquata</i>		2-3	M, B
<i>Serinus serinus</i>		2	B
<i>Sitta europaea</i>	1	1	W, M, B
<i>Streptopelia decaocto</i>	10	2-4	W, M, B
<i>Streptopelia turtur</i>		6-8	M, B
<i>Sturnus vulgaris</i>	30000-100000	17-50	W, M, B
<i>Sylvia atricapilla</i>		47	B
<i>Sylvia communis</i>		2	B
<i>Sylvia curruca</i>		3	B
<i>Sylvia nisoria</i>		1	B
<i>Tachybaptus ruficollis</i>	1-8	2-6	B
<i>Tringa glareola</i>	1		M
<i>Tringa totanus</i>		1	B
<i>Troglodytes troglodytes</i>	2-10		W

Turdus iliacus	0-2		W
Turdus merula		9-16	W, M, B
Turdus philomelos		4-15	B
Turdus pilaris Linnaeus	60-100		Z, M
Vanellus vanellus	3	0-3	M, B

Table 2 – Populations of the trigger bird species in SPA Parížske močiare marshes, calculating of the breeding density and estimation of the population in SPA Parížske močiare marshes in year 2017.

Species	Estimation of the breeding population (pairs/calling males)	Notice
Porzana parva	7-8	Calling ♂♂ during breeding season
Circus aeruginosus	29	
Acrocephalus melanopogon	5	
Ixobrychus minutus	0-1	
Anas querquedula	0-1	
Anser anser	5-10	
Merops apiaster	39	

Summary

We recorded successful breeding of the Purple Heron. Numbers of the European bee-eater increased on 39 pairs after first smaller revitalizations in cooperation with paleontologists, also 192 pairs of Sand Martins have nested here.

1.2.2 SPA Žitavský luh

In SPA Žitavský luh was during monitoring within the project recorded following birds species in described breeding population, numbers recorded during migration (bird species in alphabetical order):

Table 3 – The list of the bird species recorded within the SPA Žitavský luh in y. 2014-17. Altogether 178 of species were observed in the area of SPA.

Species	Recorded numbers during non breeding season and migration y. 2014-2017	Recorded number of breeding pairs or calling males during breeding season y. 2014-2017	Character of occurrence of species in y. 2014-2017
Accipiter gentilis	1		W, M
Accipiter nisus	2		W, M
Acrocephalus arundinaceus		1	B
Acrocephalus palustris	1	1	B
Acrocephalus scirpaceus	1	1	M, B
Acrocephalus schoenobaenus		15-27	B
Actitis hypoleucos	2		M

<i>Aegithalos caudatus</i>	8	1	W, M, B
<i>Alauda arvensis</i>	30	10-20	W, M, B
<i>Alcedo atthis</i>	2	0-1	W, M, B
<i>Anas acuta</i>	8-14		W, M
<i>Anas clypeata</i>	16		M
<i>Anas crecca</i>	20-180	0-1	W, M
<i>Anas penelope</i>	3		W, M
<i>Anas platyrhynchos</i>	120-1500	12-20	W, M, B
<i>Anas querquedula</i>	4-80	1-3	M, B
<i>Anas strepera</i>	2	1-2	W, M, B
<i>Anser albifrons</i>	8-90		W, M
<i>Anser anser</i>	2-55	0-1	W, M
<i>Anser fabalis</i>	0-130		W, M
<i>Anthus pratensis</i>	1-100		W, M
<i>Anthus trivialis</i>	1-3		M
<i>Apus apus</i>	2-50		M
<i>Aquila heliaca</i>	0-1		W, M
<i>Aquila pomarina</i>	0-1		M
<i>Ardea cinerea</i>	2-29		W, M
<i>Ardea purpurea</i>	1		M
<i>Asio flammeus</i>	1-4		W, M
<i>Asio otus</i>	1		W, M
<i>Aythya ferina</i>	1-11		W, M
<i>Aythya nyroca</i>	2		M
<i>Botaurus stellaris</i>	1-2		M
<i>Buteo buteo</i>	1-25	1	W, M, B
<i>Buteo lagopus</i>	1		W, M
<i>Calidris alpina</i>	1-31		M
<i>Calidris minuta</i>	0-1		M
<i>Calidris temminckii</i>	0-2		M
<i>Carduelis cannabina</i>	2-12		W, M
<i>Carduelis carduelis</i>	40-120	2	W, M, B
<i>Carduelis chloris</i>	1-70	3	W, M, B
<i>Carduelis spinus</i>	2-60		W, M
<i>Certhia brachydactyla</i>	2	1	W, M, B
<i>Certhia familiaris</i>	1		W, M
<i>Ciconia ciconia</i>	1-32		M, F
<i>Ciconia nigra</i>	1-2		M, F
<i>Circus aeruginosus</i>	1-89	2	M, B
<i>Circus cyaneus</i>	1-11		W, M
<i>Circus macrourus</i>	1		M
<i>Circus pygargus</i>	1-3		M
<i>Coccothraustes coccothraustes</i>	2	0-1	B, M
<i>Columba palumbus</i>	1-120	4-10	M, B
<i>Corvus corax</i>	1-6		W, M, F
<i>Corvus frugilegus</i>	22		W, M

<i>Corvus monedula</i>	0-5		W, M
<i>Coturnix coturnix</i>	1	1-3	M, B
<i>Crex crex</i>		0-6	M, B
<i>Cuculus canorus</i>	1	1-2	M, B
<i>Cygnus cygnus</i>	0-8		M, W
<i>Cygnus olor</i>	1-18	0-2	W, M, B
<i>Delichon urbicum</i>	2-450		M, F
<i>Dendrocopos major</i>	2-4	4	W, M, B
<i>Dendrocopos medius</i>	1		M
<i>Dendrocopos minor</i>	1		M
<i>Dendrocopos syriacus</i>	0-3	0-1	W, M, B
<i>Dryocopus martius</i>	1	1	W, M, B
<i>Egretta alba</i>	1-42		W, M
<i>Egretta garzetta</i>	1-3		M
<i>Emberiza citrinella</i>	1-5	1	W, M, B
<i>Emberiza schoeniclus</i>	2	7-10	W, M, B
<i>Erithacus rubecula</i>	1-10		W, M
<i>Falco peregrinus</i>	0-1		M, W
<i>Falco subbuteo</i>	1-2		M, F
<i>Falco tinnunculus</i>	1-4	2	W, M, B, F
<i>Ficedula albicollis</i>	1		M
<i>Ficedula hypoleuca</i>	0-1		M
<i>Ficedula parva</i>	0-1		M
<i>Fringilla coelebs</i>	2-100	4-10	M, B
<i>Fringilla montifringilla</i>	1-2		W, M
<i>Fulica atra</i>	1-50	1-5	M
<i>Gallinago gallinago</i>	1-60		M
<i>Gallinago media</i>	0-1		M
<i>Gallinula chloropus</i>	1-8	2-4	B, M
<i>Garrulus glandarius</i>	1-14		W, M
<i>Glareola pratincola</i>	1		M
<i>Grus grus</i>	1-6		M
<i>Haliaeetus albicilla</i>	1		M
<i>Himantopus himantopus</i>	1-7		M
<i>Hippolais icterina</i>	2	1	M, B
<i>Hirundo rustica</i>	10-600		M, F
<i>Charadrius dubius</i>	2-5	0-5	M, B
<i>Charadrius hiaticula</i>	1		M
<i>Chlidonias hybrida</i>	3-4		M
<i>Chlidonias leucopterus</i>	2		M
<i>Chlidonias niger</i>	1-10		M
<i>Ixobrychus minutus</i>	1		M, F
<i>Jynx torquilla</i>	0-1		B, M
<i>Lanius collurio</i>	2	1-5	B, M
<i>Lanius excubitor</i>	1		W, M
<i>Larus arg./cach./mich.</i>	2		M

<i>Larus ridibundus</i>	1-19		M
<i>Limosa limosa</i>	0-1		M
<i>Locustella fluviatilis</i>		1-2	B, M
<i>Locustella luscinioides</i>		2-15	B, M
<i>Locustella naevia</i>		2-6	B, M
<i>Luscinia megarhynchos</i>		11-16	B, M
<i>Lullula arborea</i>	0-1		M
<i>Lymnocyptes minimus</i>	1		W, M
<i>Merops apiaster</i>	2-30		M, F
<i>Miliaria calandra</i>	2-100	5-11	W, M, B
<i>Milvus mmigrans</i>	0-1		M
<i>Milvus milvus</i>	0-1		M
<i>Motacilla alba</i>	1-50	2	M
<i>Motacilla flava</i>	60-80	20-34	M, B
<i>Muscicapa striata</i>	0-1	0-1	B, M
<i>Netta rufina</i>	1-2		M
<i>Numenius arquata</i>	1-5		M
<i>Numenius phaeopus</i>	1		M
<i>Nycticorax nycticorax</i>	0-4		M, F
<i>Oenanthe oenanthe</i>	1-2		M
<i>Oriolus oriolus</i>	1	2-10	M, B
<i>Otus scops</i>	1		M, F
<i>Pandion haliaeetus</i>	1		M, F
<i>Panurus biarmicus</i>	0-4		W, M
<i>Parus caeruleus</i>	2-10	2-5	W, M, B
<i>Parus major</i>	2-20	2-10	W, M, B
<i>Parus palustris</i>	1-2	0-2	W, M
<i>Parus montanus</i>	1		W, M
<i>Passer domesticus</i>	20-40		W, F
<i>Passer montanus</i>	20-50	5-10	W, M
<i>Pernis apivorus</i>	0-1		M
<i>Phalacrocorax carbo</i>	2-24		W, M
<i>Phalacrocorax pygmeus</i>	0-2		M
<i>Phalaropus lobatus</i>	0-1		M
<i>Phasianus colchicus</i>	1-30	5-7	W, B
<i>Philomachus pugnax</i>	1-200		M
<i>Phoenicurus ochruros</i>	1	1	M, B
<i>Phylloscopus collybita</i>	1-2	1-5	M, B
<i>Phylloscopus sibilatrix</i>	0-2		M
<i>Phylloscopus trochilus</i>	1-5		M
<i>Pica pica</i>	1-2	1	W
<i>Picus viridis</i>	1	1	W, M, B
<i>Platalea leucorodia</i>	1		M
<i>Pluvialis apricaria</i>	0-9		M
<i>Prunella modularis</i>	2-20		M
<i>Podiceps cristatus</i>	1-2	0-1	W, M, B

Porzana parva	1-4	1-3	M, B
Porzana porzana	1-5	1-3	M, B
Pyrrhula pyrrhula	2-6		W, M
Rallus aquaticus	2	1-8	M, B
Regulus regulus	2		W
Remiz pendulinus	2	1	M, B
Riparia riparia	1-20		M, F
Saxicola rubetra	2-8		M
Saxicola torquata	2-4	2-3	M, B
Serinus serinus	1	1	M, B
Sitta europaea	1-4	2	W, M, B
Streptopelia decaocto	0-20		W, M
Streptopelia turtur	1-7	2-4	B, M
Strix aluco	2	1-2	W, B
Sturnus vulgaris	4-2000	25-30	W, M, B
Sylvia atricapilla		8-15	M, B
Sylvia communis		2-4	M, B
Sylvia curruca		1-2	M, B
Sylvia nisoria	0-1	0-3	M, B
Tachybaptus ruficollis	0-6	0-1	W, M
Tringa erythropus	1-19		M
Tringa glareola	2-350		M
Tringa nebularia	1-42		M
Tringa ochropus	1-2		M
Tringa totanus	1-13	1-5	M, B
Troglodytes troglodytes	8-10		W, M
Turdus iliacus	1-3		W, M
Turdus merula	1-10	1-3	W, M, B
Turdus philomelos		6-8	M, B
Turdus pilaris	1-110		W, M
Tyto alba	0-1		M, F
Upupa epops	0-1		M
Vanellus vanellus	1-86	1-9	M, B

Table 4 – Populations of the trigger bird species in SPA Žitavský luh in year 2017.

Species	Estimation of the breeding population (pairs/calling males)	Notice
<i>Porzana porzana</i>	1-2	Calling ♂♂
<i>Anas querquedula</i>	3	recording of 3♀♀ with 7+7+4 pullus
<i>Circus aeruginosus</i>	2	

Summary

The Marsh Harriers have nested in SPA in amount of 2 pairs. The Garganeys (*Anas querquedula*) bred at least in amount of 3 pair, there were occurred 3 females with 18 pullus.

At least, two calling males of Spotted Crake were occurred in 2017 in SPA and we estimating breeding of 2 pairs.

To interesting species recorded during breeding season belongs *Glareola pratincola*, *Otus scops*, *Himantopus himantopus*, *Pandion Haliaeetus*, *Chlidonias hybridus*, *Chlidonias nigra*, 5 calling ♂♂ of *Crex crex*. 3-5 pairs of Redshank and 5-9 pairs of Lapwings have nested on managed pastures during flooding. High abundance of *Motacilla flava* was occurred especially at managed pastures.

1.2.3 SPA Dolné Pohronie

In SPA Dolné Pohronie were during monitoring within the project recorded following bird species and numbers of birds recorded during migration (bird species in alphabetical order):

Table 5 – The list of the bird species recorded within the SPA Dolné Pohronie in y. 2014-17. Altogether 51 of species were observed in the area of SPA.

Species	Recorded numbers during non breeding season and migration y. 2014-2017	Recorded number of breeding pairs or calling males during breeding season y. 2017	Character of occurrence of species in y. 2014-2017
<i>Accipiter nisus</i>	0-1		F
<i>Aegithalos caudatus</i>		1	B
<i>Alauda arvensis</i>		5	B
<i>Anthus pratensis</i>	5		M
<i>Anthus campestris</i>		1	B
<i>Ardea cinerea</i>	1		W, M
<i>Apus apus</i>	6		M
<i>Buteo buteo</i>	1	1	W, M, B
<i>Carduelis carduelis</i>	6	3	W, M, B
<i>Carduelis chloris</i>		1	B
<i>Ciconia ciconia</i>	1		F
<i>Circus aeruginosus</i>	1	1	M, F
<i>Columba oenas</i>	28		M, F
<i>Corvus frugilegus</i>	2		M, F
<i>Corvus corax</i>	1		F
<i>Corvus cornix</i>	1	1	M, F
<i>Coturnix coturnix</i>		1-2	B, M
<i>Dendrocopos major</i>	1		M
<i>Dendrocopos syriacus</i>		1	B
<i>Dryocopus martius</i>		1	B
<i>Emberiza citrinella</i>	2	2	W, M, B
<i>Emberiza schoeniclus</i>		2	B
<i>Falco tinnunculus</i>		1	B, F
<i>Falco subbuteo</i>	3	1	M, B, F
<i>Galerida cristata</i>	1	1	W, M, B
<i>Garrulus glandarius</i>	2	1	M

<i>Hirundo rustica</i>	10-40		M, F
<i>Lanius collurio</i>		1-4	B
<i>Lanius excubitor</i>	1		W, M
<i>Luscinia megarhynchos</i>		1	B, M
<i>Lullula arborea</i>		2	B
<i>Merops apiaster</i>		61-135	B
<i>Miliaria calandra</i>		1	B
<i>Motacilla alba</i>	1-6		M
<i>Motacilla flava</i>		1	B
<i>Muscicapa striata</i>		1	B
<i>Oriolus oriolus</i>		3	B
<i>Parus major</i>		1-5	B
<i>Passer montanus</i>		50-60	W, B, M
<i>Phasianus colchicus</i>	1	4	W, B, M
<i>Pica pica</i>		1	B, F
<i>Picus viridis</i>		1	B
<i>Riparia riparia</i>		0-997	B
<i>Saxicola rubecula</i>		1	B
<i>Sitta europaea</i>		1	B
<i>Sylvia atricapilla</i>		1	B
<i>Sylvia curruca</i>		1	B
<i>Streptopelia turtur</i>		1-8	B
<i>Sturnus vulgaris</i>	30-170	10-30	B, M
<i>Troglodytes troglodytes</i>	1		M, W
<i>Upupa epops</i>	4	1-3	M, B

Summary

Monitoring in SPA Dolne Pohronie was performed in two locations in cadastral area of Radvan nad Dunajom where were counted 25 pairs of European Bee-eaters and 990 pairs of Sand Martins and at Jursky Chlm (cadastral area Muzla) with population of 68 pairs European bee-eaters and 7 pairs of Sand Martins. 93 pairs of European bee-eaters and 997 pairs of Sand Martins have nested within the SPA Dolne Pohronie at locations Jursky Chlm and Radvan nad Dunajom.

2. Monitoring of the water level

The water level changes during the y. 2017 were controlled in detail in SPA Žitavský luh on the installed hydrometric meter. The year 2017 was characteristic with regular spring flooding with maximum reached level of 112 cm at water level meter. The flooding simulation was performed with existing sluices and have had very positive impact on birds in connection with implemented management in form of pasturing on meadows.

