

Aquatic Warbler Conservation Team

**Assessing distribution and density of
wintering Aquatic Warblers in the
Djoudj area (Senegal),
search in the Gambia**

and

**Training workshop for wetland specialists of
neighbouring West African countries in Djoudj**

15th January to 4th February 2009

Final Report

written by Martin Flade and Volker Salewski

on behalf of the

BirdLife International Aquatic Warbler Conservation Team

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Content

- 1. Summary**
- 2. Participants of the expedition**
- 3. Schedule**
- 4. Background and targets**
- 5. Results and discussion**
- 6. Acknowledgements**
- 7. Financial Report**

ANNEX: List of bird records in Senegal/the Gambia Jan/Feb 2009

1. Summary

This small AWCT expedition was undertaken from 15th January to 4th February 2009 in order (a) to gain more precise information about the distribution and densities of AW in the entire Djoudj area, (b) to run a training workshop for wetland experts from Mauritania, S-Senegal, Gambia and Mali, with the aim of familiarizing them with the typical AW wintering habitat in order to enable them to identify similar sites in their countries/regions, and (c) to check a potentially suitable AW habitat patch (identified through the satellite image analysis and visual impression of Bruno Bargain) at the Gambia River near Farafeni, for suitability of habitat and presence of wintering AW.

Mist-netting was performed at 35 locations spread over the whole Djoudj area using 50 m mist nets and the rope method. Dates, daytime and number of chases with 50 m rope are indicated in Table 3. At 19 sites a total of 55 AW could be captured and ringed or controlled. At two additional sites AW have been observed, but not caught. Five recaptures of own birds from the same year and two recaptures of AW ringed in Djoudj in the previous winter (2008) complete the result. At 14 sites no AW could be recorded despite habitat conditions seemed to be more or less suitable; but it has to be considered that the mist-netting effort per site was comparably low.

The training workshop was successfully performed and attended by two experts from Mali, two experts from the Gambia and three experts from the Casamance (S-Senegal).

The potential Aquatic Warbler sites near Farafeni in the Gambia have been surveyed, but suitability was low and no AW have been found.

2. Participants of the expedition

Bruno Bargain	- Scientific Director of Bretagne Vivante, France
Volker Salewski	- Max Planck Institute for Ornithology 'Vogelwarte Radolfzell', Germany
Peter Becker	- Germany
Vera Knöfler	- Greifswald University, Germany
Ibrahima Diop	- Director of Djoudj Biological Station, Conservateur of the Djoudj NP, Senegal
Racine	- Djoudj Biological Station, Senegal.
Lamin Sanyang, Sarjo Manneh	- The Gambia

3. Schedule

Table 1: Schedule of the expedition.

15.01.	Flight to Dakar (Volker).
16.01.	Travel from Dakar to Djoudj NP (Bruno, Racine, Volker).
17.01.	07:00 – 11:30 mist netting near Tiguet ¹ . 17:30 – 19:00 mist netting near Tiguet.
18.01.	07:00 – 11:30 mist netting near Tiguet. 17:00 – 19:30 mist netting near Tiguet.
19.01.	07:30 – 11:00 mist netting near Tiguet. afternoon: visit of St. Louis ² .
20.01.	07:00 – 09:00 search for AW around Canal Crocodile ³ . 09:00 – 12:00 mist netting near Canal Crocodile. 17:00 – 19:00 mist netting near Canal Crocodile.
21.01.	07:30 – 12:00 mist netting near Canal Crocodile. 17:00 – 18:30 mist netting near Canal Crocodile.
22.01.	07:30 – 12:30 mist netting near Canal Crocodile. afternoon: no mist-netting because of strong wind
23.01.	07:00 – 10:00 search for AW at Grand Lac (near Mirador President), area with a lot of <i>Sporobolus robustus</i> and <i>Scirpus maritimus</i> ; strong wind, no AW found.

¹ For details see Tables 1-3.

² Repeated travels to St. Louis were necessary to retrieve money from the bank account (credit card).

³ Coordinates of trapping sites to be completed by Bruno Bargain

	16:00 – 18:00 boat travel and search for AW near Tiguet („before Channel“), habitat consists of a mixture of <i>Sporobolus robustus</i> , <i>Oryza longistaminata</i> , <i>Scirpus maritimus</i> , <i>S. littoralis</i> , <i>Eleocharis mutata</i> ; no AW found, area either dry or very deep water
24.01.	07:30 – 10:30 mist netting near Tiguet. 10:30 – 11:30 search for AW in direction SE: areas are very dry. afternoon: visit of St. Louis.
25.01.	07:00 – 10:00 long walk from Tiguet in the direction of Grand Lac, huge areas of <i>Oryza longistaminata</i> with many Grasshopper Warblers, but no AW found 10:00 – 11:30 mist netting near Tiguet. 16:00 – 17:30 repeated search at Grand Lac W of Cosimas study plot; no AW found.
26.01.	08:00 – 11:30 mist netting near Diadem II. 17:00 – 19:00 searching walk near Diadem II.
27.01.	07:30 – 09:30 mist netting near Diadem. afternoon: visit of St. Louis.
28.01.	07:00 – 16:00 AW search near Tiguet, no AW found.
29.01.	07:30 – 12:30 mist netting near Canal Crocodile. afternoon: field trip to the White Pelican colony together with the training workshop guests from Casamance, the Gambia and Mali.
30.01.	07:30 – 12:00 mist netting near Debi together with workshop participants afternoon: workshop with guests from Casamance, the Gambia and Mali.
31.01.	travel to Farafeni, the Gambia (Bruno, Cosima, Lamin, Peter, Racine, Serjo, Volker).
01.02.	08:00 – 11:00 survey of areas at the opposite side of the Gambia River, West and East of the road to the ferry. To the West mostly dry rice fields; to the East for several kilometres dominant almost dry rice fields, but also large areas with dry <i>Sporobolus</i> , <i>Scirpus littoralis</i> ; no AW found. In the afternoon travel to Pakali Ba, 2 overnight stays at Safanyama Lodge.
	In the evening short searching walk in the surroundings of the Lodge in rice fields at the other side of the channel; there were <i>Typha</i> / <i>Scirpus littoralis</i> stands within the rice fields being actually flooded; no AW found.
02.02.	07:50 – 9:00 search in the dry rice fields near Njamina. later: exploitation walk at two ponds near Pakali Ba; there was only low, short-grazed vegetation.
03.02.	Good bye to Bruno, Lamin and Serjo, and travel to Dakar (Peter, Volker), or Djoudj, respectively (Cosima, Racine).
05.02.	flight back to Germany (Volker).

4. Background, targets, and methods

According to the Aquatic Warbler Species Action Plan, which is annexed to the Memorandum of Understanding under the Convention on Migratory Species of Wild Animals (Bonn Convention, CMS), the knowledge of the wintering sites of the Aquatic Warbler was given highest priority at the conference of signatory parties in June 2006 at Criewen, Germany. Dramatic habitat changes in the sub-Saharan wetlands obviously could be an important limiting factor, but the extent to which this is affecting the population dynamics of Aquatic Warbler remained unclear.

In January 2007, wintering habitats in vast open water-logged grass marshes inside and north of the Djoudj National Park (Senegal) have been discovered by an AWCT expedition. The density was very roughly estimated at 0.5-1.5 birds per hectare over a total area of suitable habitat of 10,000 hectares (extrapolation 5,000-15,000 birds in total). There might be more wintering sites in wetlands and floodplains of Mauritania and Mali (several winter records), but further intensive search for suitable wintering sites in S-Mauritania and Senegal by the AWCT in 2008 remained unsuccessful so far.

In the Djoudj area, potential threats arise from the ongoing changes of the whole hydrological regime and – possibly - habitat features in general. It is thus of prime importance to carry out further detailed studies on these potential or ongoing habitat changes and to elaborate a thorough threat status analysis. A doctor thesis project (C. Tegetmeyer) has started in January 2008, aiming at the following targets:

- a) ascertainment of the spatial and temporal habitat use in the Djoudj area,
- b) identification of the relevant biotic and abiotic site conditions ,
- c) investigation of the threat status and ongoing modifications of the occupied sites,
- d) proposals for AW-friendly site management.

Elements of the study are standardised mist-netting and radio-tagging of Aquatic Warblers (to study home ranges, habitat use and seasonal movements during wintering period), a detailed vegetation analysis, hydrological measurements, chemical measurements of habitat conditions (trophic level, salinity) and an investigation of the available food supply. The study is linked to a similar project on the local breeding and wintering population of the rare Baillon's Crake *Porzana pusilla*, which was also discovered in January 2007 at the same site and in the same habitat type.

Complementary to the PhD studies, which are focusing on few representative study plots in the four major grassland habitat types, it is urgently necessary to gain more precise information about the distribution and densities of AW in the entire Djoudj area – in order to allow a proper estimate of the number of wintering AW at this major wintering site. It would be of high importance for developing further conservation strategies to know whether there stay e.g. less than 20 % or more than 50 % of the global population. This expedition, therefore, covered a limited, but targeted amount of fieldwork in Africa during the winter 2008/09.

A small group of five people, experienced on Aquatic Warblers, African ornithology and bird ringing travelled to Senegal to achieve the following three results:

1. Gain more precise information about the distribution and densities of AW in the entire Djoudj area – in order to allow a proper estimate of the number of wintering AW at this major wintering site.
2. Run a training workshop for wetland experts from Mauritania, S-Senegal, Gambia and Mali, with the aim of familiarizing them with the typical AW wintering habitat in order to enable them to identify similar sites in their countries/regions.

3. Check a potentially suitable AW habitat patch (identified through the satellite image analysis and visual impression of Bruno Bargain) at the Gambia River near Farafeni, for suitability of habitat and presence of wintering AW.

4.1 Field work at Djoudj

The aims of the field work at Djoudj have been:

1. Collecting presence-absence data and density values of wintering AW from as many as possible locations over the whole Djoudj area.
2. Assessment of AW wintering habitat quality at as many locations as possible,
3. More qualified extrapolation of the total number of wintering AW in Djoudj.

The team visited locations of suitable AW wintering habitat outside the permanent study plots of Cosima, putting 50 m of mist nets there. Birds were captured using the “mobile nets method”, in principle similar to the method described in the AWCT Senegal 2007 report: A rope of 50 m length was repeatedly pulled across the vegetation towards a 50 m mist net fence from a distance of 50 m, so that an area of ¼ ha was covered. This procedure is done from both sides of the mist net, covering 0.5 ha in total. The method was only performed at suitable calm weather conditions without stronger wind (especially at early morning and evening), and was repeated at one place up to three times per netting approach.

In addition, up to 20 claptraps have been installed parallel to the mist net fence to investigate the presence of Baillon’s Crakes.

The netting locations have been chosen on basis of the vegetation map of Djoudj (SCHWÖPPE 1994) and accessibility of sites. Where possible, also sites in the inner habitat area north, northwest and west of Grand Lac (more distant to the margins of the inundation area) have been investigated.

4.2 Training workshop for wetland experts

The workshop contained two days in the field. The different types of suitable and unsuitable AW habitats have been demonstrated in order to allow to detect such habitats in other countries and regions. Several AW have been observed and captured to introduce the African colleagues to the species.

The following wetland experts of neighbouring countries have been invited for the workshop by Ibrahima Diop after consultation with Wetlands International and BirdLife International:

2 experts from Mauritania

2 experts from Mali

2 experts from Gambia

2 experts from Casamance (S-Senegal).

The participation of experts from Mauritania turned out to be impossible in that period. The other experts participated as planned.

4.3 Site check at Farafeni

Near Farafeni at the Gambia River, in 2007 Bruno Bargain spotted a quite large patch of probably suitable AW habitat from some distance (from boat). At the same place, the satellite image analysis from Graeme Buchanan (RSPB) indicated a patch of suitable habitat. The

idea was, therefore, to check this place on the ground with a short and targeted expedition just previous to the departure from Dakar.

5. Results and discussion

5.1 Survey of AW in Djoudj by mist-netting

The survey was performed as planned. Mist-netting was performed at 35 locations spread over the whole Djoudj area using 50 m mist nets and the rope method. Dates, daytime and number of chases with 50 m rope are indicated in Table 3. At 19 sites a total of 55 AW could be captured and ringed or controlled. At two additional sites AW have been observed, but not caught. Five recaptures of own birds from the same year and two recaptures of AW ringed in Djoudj in the previous winter (2008) complete the result. At 14 sites no AW could be recorded despite habitat conditions seemed to be more or less suitable; but it has to be considered that the mist-netting effort per site was comparably low.

Moreover, large areas at Grand Lac, near Tiguet before the channel, and between Tiguet and Grand Lac have been surveyed by extensive exploration walks and boat trips (for details see Table 1).

Habitat descriptions have been obtained from all study plots and are summarised in Table 2. Successful mist-netting attempts as well as failures include *Oryza longistaminata* stands (near Tiguet) as well as vegetation dominated by *Sporobulus robustus*, *Scirpus* species or *Eleocharis mutata*. However, all occupied habitats were waterlogged by shallow water and were characterised by vast, uniform vegetation structure.

As a problem for the assessment of habitat quality and AW density turned out to be the way of selection of mist-netting sites. The sites were not chosen randomly or by a grid, but by visual assessment of suitability and accessibility. It is, therefore, not clear, whether the selected mist-netting sites have been representative for the whole waterlogged habitat area.

On the other hand, given the relatively short length of mist nets (50 m) and the short durance of mist-netting (only few hours per site) it is unlikely that all present AW at the mist-netting sites have been captured.

Having these constraints in mind, the total capture of 55 birds at 35 sites, with a study plot size of approximately 0.5-1.0 ha each, indicates an overall density in the studied suitable habitats of 1.6-3 birds/ha, which is distinctly higher than estimated from previous expeditions (2007, 2008). On the other hand, mist-netting took place preferably at plots where AW have been observed before (by walking through the vegetation), so that the density was likely to be overestimated. Additionally it remains unclear, which proportion of the grassy marshes has been really occupied by AW. The extensive exploration walks without finding AW indicate, that in large parts of Djoudj the AW density must be much lower, and in parts the species could even be totally absent.

It will be subject of future research (e. g. by Cosima Tegetmeyer/Susanne Arbeiter by using radio-tagging) to clarify these questions and to come to more reliable estimates of the total wintering population of AW.

The “bycatch” (Table 3) fits in the known picture for typical AW wintering habitats: Sedge Warbler and Yellow Wagtail are dominant, species as Grasshopper Warbler, Zitting Cisticola and Baillon’s Crake have been repeatedly captured (captures of crakes with claptraps are not included in the Tables – they are part of the phd study of Nina Seifert).

Table 2: Captured Aquatic Warblers and habitat parameters at the mist-netting sites. Shown is the cover [%] of water and open water, the maximum water depth [cm] as well as the cover by various plant species [%].

Site	AW caught	Water cover	Max. Water depth	Open water	Hight dominant vegetation	Scirpus sp.	Scirpus maritimus	Scirpus littoralis	Sporobolus robustus	Eleocharis mutata	Oryza longistaminata	Typha	Tamarix senegalensis
	blue: only seen	%	cm	%	cm	%	%	%	%	%	%	%	%
T 1	0	100	30	10	60	45	0	45	0	0	45	0	0
T 2	0	100	20	30	60	30	0	0	0	0	30	5	0
T 3	0	100	10	5	60	5	0	5	0	0	80	2	0
T 4	6	100	15	20	50	5	0	5	40	0	30	3	0
T 5	2	100	20	10	50	0	0	0	50	0	40	1	0
T 6	0	80	20	10	90	11	10	1	5	0	75	1	0
T 7	0	100	10	5	90	2	1	1	0	0	85	10	0
T 8	0	90	10	5	90	6	1	5	5	0	80	5	0
T 9	6	80	10	20	80	10	5	5	30	1	40	1	0
T 10	0	90	40	30	90	40	30	10	30	0	0	0,5	0
T 11	0	50	5	5	90	10	10	0	30	0	40	5	0
C 2	1	100	30	30	100	1	1	0	5	30	30	5	0
C 3	3	100	20	25	50	3	0	3	1	70	0	1	1
C 4	4	100	20	40	30	5	0	5	10	40	0	5	0
C 5	0	100	30	40	30	5	0	5	10	45	0	0,5	0
C 6	1	90	20	30	100	25	15	10	15	20	5	5	1
C 7	4	100	40	30	90	25	5	20	5	40	0	0,5	0
C 8	0	100	40	40	40	20	0	20	10	20	0	10	0

Site	<i>AW caught</i>	Water cover	Max. Water depth	Open water	<i>Hight dominant vegetation</i>	<i>Scirpus sp.</i>	<i>Scirpus maritimus</i>	<i>Scirpus littoralis</i>	<i>Sporobolus robustus</i>	<i>Eleocharis mutata</i>	<i>Oryza longistaminata</i>	<i>Typha</i>	<i>Tamarix senegalensis</i>
C 9	3	100	40	30	80	35	30	5	15	20	0	0,5	0
C 10	0	100	40	40	100	30	20	10	10	20	0	0	0
C 11	2	100	50	25	40	10	5	5	5	60	0	1	0
C 12	1	100	30	30	40	10	0	10	5	50	0	5	1
C 13	1	100	20	25	50	3	0	3	1	70	0	1	1
C 14	3	100	40	30	40	15	10	5	5	50	0	0,5	0
Dia 1	3	100	40	40	70	20	15	5	20	20	0	0	0
Dia 2	1	100	20	40	90	30	20	10	20	20	0	0,5	0
Dia 3	0	100	20	60	80	25	20	5	5	10	0	1	0
Dia 4	2	80	30	10	80	15	10	5	60	10	5	0,5	0
Dia 5	0	50	20	1	50	5	5	0	25	70	0	0,5	1
Dia 6	1	100	40	40	80	20	20	0	20	20	0	0	0
Dia 7	1	100	10	50	40	10	0	10	10	30	0	1	0
Debi 1	2	100	10	5	40	40	0	40	20	40	0	0	0
Debi 2	6	100	30	5	120	0	0	50	10	40	0	0	0
Debi 3	2	100	30	10	100	0	0	40	20	40	0	0	0
Total	55	94,1	25,0	25,3	69,1	15,6	6,9	10,1	14,6	24,6	17,2	2,1	0,1

Table 3: Birds mist-netted. Shown is the date and time of capture, the number of “chases” with a 50m rope and the number of birds mist-netted per site.

Site	Date	Time	Chases								
T 1	17.01.09		2			1	3				
T 2	17.01.09	9:00	4				1	2			
T 3	17.01.09	11:00	2								
T 3	17.01.09	17:30	3					4			
T 3	18.01.09	7:30	2					2			
T 4	18.01.09	8:30	4				2	5	6	1	
T 5	18.01.09	10:30	5					6	2		
T 5	18.01.09	17:30	2					3	0		
T 6	18.01.09	18:30	4				2	1	4	1	
T 6	19.01.09	7:30	1						0		
T 7	19.01.09	8:30	4	1		2		16			
T 8	19.01.09	9:50	4			2					
T 9	24.01.09	7:40	5			1	6	1	4	5	
T 9	25.01.09	10:40	5						1	2	
T 10	24.01.09	10:00	3			1	3				
T 11	25.01.09	10:00	3				1	3	4		
C 2	20.01.09	9:30	4				2		11	1	10
C 3	20.01.09	11:20	2					2	2		
C 3	20.01.09	17:00	3						1		3 4
C 4	20.01.09	18:00	4					2	2		
C 4	21.01.09	7:40	3			1		2	2		1 1
C 5	21.01.09	8:50	3				1		3	1	

Site	Date	Time	Chases													
C 6	21.01.09	11:00	4						11	1			1	1		
C 7	21.01.09	17:30	4						3	2						
C 7	22.01.09	7:40	4	1					6	2						
C 8	22.01.09	8:40	3						3				1	2		
C 9	22.01.09	10:00	4						4	3						
C 10	22.01.09	11:30	2						8							
C 11	29.01.09	7:40	4					3	2	2	1			2		
C 12	29.01.09	9:50	3					1	6	1				6		
C 13 ⁴	29.01.09	10:40	3	1				2	8	1						
C 14	29.01.09	11:40	3					1	0	3						
Dia 1	26.01.09	8:30	5						3	3				4		
Dia 2	26.01.09	9:40	2	1					4	1						
Dia 3	26.01.09	10:40	3						4		1					
Dia 4	26.01.09	17:00	4		1				2	2						
Dia 5	26.01.09	18:00	2						1							
Dia 6	26.01.09	18:30	3			1			7	1						
Dia 6	27.01.09	7:50	2				2		10							
Dia 7	27.01.09	9:00	2													
Deb 1 ⁵	30.01.09	7:50	3					1	1	2						
Deb 2	30.01.09	9:00	2						7	6						
Deb 3	30.01.09	10:00	2						2	2						
Total:			136	2	2	3	2	35	6	164	54	3	3	1	6	29

⁴ identisch mit C3, fast an der gleichen Stelle⁵ habitat descriptions for the other Debi sites were done by Cosima Tegetmeyer

Table 4: Birds species observed at the mist-netting sites. For dates and time see table 2. An “x” indicates the use of the habitat of the site by the respective bird species. Birds flying over the site are not considered.

	<i>Euplectes afer</i>	<i>Ploceus melanocephalus</i>	<i>Cisticola galactotes</i>	<i>Cisticola juncidis</i>	<i>Phylloscopus collybita</i>	<i>Acrocephalus sp.</i>	<i>Acrocephalus paludicola</i> ¹	<i>Acrocephalus schoenobaenus</i>	<i>Locustella naevia</i>	<i>Motacilla flava</i>	<i>Anthus cervinus</i>	<i>Riparia riparia</i>	<i>Galerida cristata</i>	<i>Merops persicus</i>	<i>Ceryle rudis</i>	<i>Tringa erythropus</i>	<i>Tringa nebularia</i>	<i>Tringa glareola</i>	<i>Gallinago gallinago</i>	<i>Vanellus spinosus</i>	<i>Charadrius hiaticula</i>	<i>Glareola pratincola</i>	<i>Himantopus himantopus</i>	<i>Porzana porzana</i>	<i>Porzana pusilla</i>	<i>Porphyrio porphyrio</i>	<i>Ardeola ralloides</i>	Site
C 7	x	x																										x
C 8		x																										x
C 9		x																										x
C 10																												x
C 11			x																									x
C 12		x																										x
C 13																												x
C 14					x	x									x	x											x	
Dia 1							x	x							x		x			x			x				x	
Dia 2						x	x								x			x					x				x	
Dia 3	x		x				x								x			x					x				x	
Dia 4															x			x					x				x	
Dia 5							x								x	x		x					x				x	
Dia 6					x	x	x	x							x	x		x				x				x		
Dia 7				x	x	x	x	x							x	x		x				x				x		
Deb 1															x	x							x					

¹ not always indicated when observed before mist-netting

Table 5: Ring list from the 2009 expedition (ringer: Bruno Bargain; country: Senegal); yellow: recapture from 2008

Ring no.	Action	Species	Date	Hour	Sex	Age	Wing	Weight	AD	Moult	It	Bill	Head	LR	P3	Site	LOC	Net	Location
6159717	B	ACROLA	30.01.2009	8h00	M	+1A	64,0	11,0	1	0	21,4	10,1	31,4			1	DE1	50	Debi/PN du Djoudj
6159718	B	ACROLA	30.01.2009	8h00	M	+1A	65,0	10,5	1	0	21,1	9,4	32,1			1	DE1	50	Debi/PN du Djoudj
6159721	B	ACROLA	30.01.2009	9h00	F	+1A	63,5	10,7	1	0	20,7	9,4	29,4			2	DE2	50	Debi/PN du Djoudj
6159722	B	ACROLA	30.01.2009	9h00	F	+1A	64,0		1		21,6	10,4	31,2			2	DE2	50	Debi/PN du Djoudj
6159727	B	ACROLA	30.01.2009	9h00	F	+1A	63,5	10,4	1	0	19,8	9,9	30,5			2	DE2	50	Debi/PN du Djoudj
6159728	B	ACROLA	30.01.2009	9h00	M	+1A	64,5	10,8	1	0	20,2	10,1				2	DE2	50	Debi/PN du Djoudj
6159729	B	ACROLA	30.01.2009	9h00		+1A	64,0	10,6	1	0	20,9	10,6	30,3			2	DE2	50	Debi/PN du Djoudj
6159733	B	ACROLA	30.01.2009	9h00	M	+1A	64,0	10,5	1	0	31,3	9,2	30,3			2	DE2	50	Debi/PN du Djoudj
6159734	B	ACROLA	30.01.2009	10h00	F?	+1A	65,0	10,8	1	0	20,6	9,7	31,6			3	DE3	50	Debi/PN du Djoudj
6159735	B	ACROLA	30.01.2009	10h00	F	+1A	63,5	10,1	1	0	20,7	10,1	30,3			3	DE3	50	Debi/PN du Djoudj
6159654	B	ACROLA	26.01.2009	9h00	F	+1A	63,5	10,7	1	0	20,3	9,2	29,9			1	DIA1	50	Diadème 2/Djoudj
6159658	B	ACROLA	26.01.2009	9h00		+1A	64,0	10,8	1	0	20,0	8,7	31,1			1	DIA1	50	Diadème 2/Djoudj
6159661	B	ACROLA	26.01.2009	9h00	F	+1A	63,0	10,4	1	0	20,7	9,6	29,8			1	DIA1	50	Diadème 2/Djoudj
6159663	B	ACROLA	26.01.2009	10h15	M?	+1A	63,5	10,9	1	0	21,1	9,7	29,6			2	DIA2	50	Diadème 2/Djoudj
6159668	B	ACROLA	26.01.2009	17h30	F	+1A	62,5	11,6	1	0	20,4	9,0	30,4			4	DIA4	50	Diadème 2/Djoudj
6159669	B	ACROLA	26.01.2009	17h30	M	+1A	63,5	11,2	1	0	21,0	9,8	30,4			4	DIA4	50	Diadème 2/Djoudj
6159675	B	ACROLA	26.01.2009	19h00		+1A	64,0	11,7	1	0	20,6	9,1	30,7			6	DIA6	50	Diadème 2/Djoudj
6143020	C	ACROLA	18.01.2009	8h50	3	+1A	64,0	11,4	1	0	21,7	9,7	30,2	55,0	48,0	4	TIG4	50	Tiguet/PN du Djoudj
6159509	B	ACROLA	18.01.2009	8h50	3	+1A	63,0	10,4	1	0	18,9	8,5	31,6	52,0	46,0	4	TIG4	50	Tiguet/PN du Djoudj
6159514	B	ACROLA	18.01.2009	8h50	F	+1A	62,0	10,7	1	0	21,2	9,6	30,8	54,0	47,0	4	TIG4	50	Tiguet/PN du Djoudj
6159515	B	ACROLA	18.01.2009	8h50	F	+1A	63,0	9,8	1	0	20,4	9,2	30,2	54,0	48,0	4	TIG4	50	Tiguet/PN du Djoudj
6159516	B	ACROLA	18.01.2009	8h50	M	+1A	63,0	11,7	1	0	21,0	9,0	30,9	54,0	47,0	4	TIG4	50	Tiguet/PN du Djoudj
6159517	B	ACROLA	18.01.2009	8h50	3	+1A	64,0	11,1	1	0	20,7	9,4	30,7	54,0	49,0	4	TIG4	50	Tiguet/PN du Djoudj
6143045	C	ACROLA	18.01.2009	11h00	F	+1A	62,0		1	0	20,6	9,8	30,5	58,0	47,0	5	TIG5	50	Tiguet/PN du Djoudj
6159520	B	ACROLA	18.01.2009	11h00	M	+1A	65,5	11,1	1	0	21,3	9,4	29,8	59,0	47,5	5	TIG5	50	Tiguet/PN du Djoudj
6159520	C	ACROLA	25.01.2009	11h30		+1A		10,9	1							9	TIG9	50	Tiguet/PN du Djoudj
6159627	B	ACROLA	24.01.2009	8h30	F	+1A	61,5	10,8	1	0	21,0	9,5	30,7	53,0	45,5	9	TIG9	50	Tiguet/PN du Djoudj
6159631	B	ACROLA	24.01.2009	8h30	F	+1A	61,0	11,5	1	0	20,2	9,9	31,0	51,0	45,0	9	TIG9	50	Tiguet/PN du Djoudj
6159632	B	ACROLA	24.01.2009	8h30	M	+1A	63,0	10,7	1	0	20,2	8,6	29,8	52,0	47,0	9	TIG9	50	Tiguet/PN du Djoudj
6159632	C	ACROLA	25.01.2009	11h30		+1A		10,9	1							9	TIG9	50	Tiguet/PN du Djoudj
6159635	B	ACROLA	24.01.2009	8h30	F	+1A	61,0	10,4	1	0	18,9	9,2	30,1	54,0	45,0	9	TIG9	50	Tiguet/PN du Djoudj

6159641	B	ACROLA	24.01.2009	8h30	F	+1A	62,5	10,3	1	0	20,3	9,3	30,1	54,0	47,0	9	TIG9	50	Tiguet/PN du Djoudj
6159564	B	ACROLA	20.01.2009	11h40	F?	+1A	62,5	10,5	1	0	20,2	10,2	30,1	49,0	46,0	3	C3	50	Zone de chasse/Djoudj
6159566	B	ACROLA	20.01.2009	11h40	F	+1A	62,0	11,4	1	0	20,7	10,2	30,2	51,0	47,0	3	C3	50	Zone de chasse/Djoudj
6159568	B	ACROLA	20.01.2009	17h00	M	+1A	65,0	11,0	1	0	20,7	9,6	30,5	53,0	48,0	3	C3	50	Zone de chasse/Djoudj
6159569	B	ACROLA	20.01.2009	18h30	M	+1A	65,5	11,6	1	0	21,0	10,8	30,7	59,0	49,5	4	C4	50	Zone de chasse/Djoudj
6159570	B	ACROLA	20.01.2009	18h30	F	+1A	60,0	10,5	1	0	20,8	10,1	30,4	56,0	44,0	4	C4	50	Zone de chasse/Djoudj
6159574	B	ACROLA	21.01.2009	8h00	F?	+1A	65,0	10,8	1	0	19,5	8,2	29,9	53,0	48,0	4	C4	50	Zone de chasse/Djoudj
6159577	B	ACROLA	21.01.2009	8h00	M	+1A	65,5	10,7	1	0	20,8	10,4	30,6	54,0	48,5	4	C4	50	Zone de chasse/Djoudj
6159583	B	ACROLA	21.01.2009	11h30	F?	+1A	63,0	10,0	1	0	20,4	9,6	30,3	52,0	46,0	6	C6	50	Zone de chasse/Djoudj
6159595	B	ACROLA	21.01.2009	18h00	M	+1A	63,5	11,9	1	0	20,4	10,0	30,2	54,0	48,0	7	C7	50	Zone de chasse/Djoudj
6159596	B	ACROLA	21.01.2009	18h00	F?	+1A	65,0	11,5	1	0	21,0	10,4	30,1	52,0	48,0	7	C7	50	Zone de chasse/Djoudj
6159604	B	ACROLA	22.01.2009	8h15	F	+1A	63,0	10,5	1	0	20,0	9,4	30,3	50,0	47,0	7	C7	50	Zone de chasse/Djoudj
6159607	B	ACROLA	22.01.2009	8h15	F	+1A	64,0	9,9	1	0	20,3	9,9	30,8	54,0	48,0	7	C7	50	Zone de chasse/Djoudj
6159611	B	ACROLA	22.01.2009	10h30	M	+1A	64,0	11,2	1	0	20,2	10,1	30,5	53,0	48,0	9	C9	50	Zone de chasse/Djoudj
6159614	B	ACROLA	22.01.2009	10h30	F	+1A	62,5	10,9	1	0	20,9	10,5	29,9	53,0	46,5	9	C9	50	Zone de chasse/Djoudj
6159615	B	ACROLA	22.01.2009	10h30	M?	+1A	65,0	11,5	1	0	21,2	10,2	30,4	55,0	47,0	9	C9	50	Zone de chasse/Djoudj
6159693	B	ACROLA	29.01.2009	8h30	F?	+1A	62,5	10,4	1	0						11	C11	50	Zone de chasse/Djoudj
6159564	C	ACROLA	29.01.2009	8h30		+1A		10,6	1	0						11	C11	50	Zone de chasse/Djoudj
6159702	B	ACROLA	29.01.2009	9h30	M?	+1A	64,5	11,2	1	0	20,3	12,5	29,5			12	C12	50	Zone de chasse/Djoudj
6159705	B	ACROLA	29.01.2009	11h00		+1A	63,0	10,4	1	0	20,0	11,5	29,3			13	C13	50	Zone de chasse/Djoudj
6159716	B	ACROLA	29.01.2009	12h00	F	+1A	62,5	10,9	1	0	20,5	10,0	30,0			14	C14	50	Zone de chasse/Djoudj
6159570	C	ACROLA	29.01.2009	12h00		+1A		10,5	1	0						14	C14	50	Zone de chasse/Djoudj
6159614	C	ACROLA	29.01.2009	12h00	F	+1A	62,5	11,5	1	0						14	C14	50	Zone de chasse/Djoudj
6159690	B	ACRSCH	28.01.2009	11h00		+1A	67,0		1	6						1	PD1	50	Canal du Petit Djoudjj
6159720	B	ACRSCH	30.01.2009	8h00		+1A	66,0	10,4	1	0						1	DE1	50	Debi/PN du Djoudj
6159723	B	ACRSCH	30.01.2009	9h00		+1A	66,0	9,8	1	0						2	DE2	50	Debi/PN du Djoudj
6159724	B	ACRSCH	30.01.2009	9h00		+1A	66,0	10,6	1	0						2	DE2	50	Debi/PN du Djoudj
6159725	B	ACRSCH	30.01.2009	9h00		+1A	66,0	10,8	1	0						2	DE2	50	Debi/PN du Djoudj
6159726	B	ACRSCH	30.01.2009	9h00		+1A	65,5	12,6	2	0						2	DE2	50	Debi/PN du Djoudj
6159730	B	ACRSCH	30.01.2009	9h00		+1A	66,5	9,5	1	0						2	DE2	50	Debi/PN du Djoudj
6159731	B	ACRSCH	30.01.2009	9h00		+1A	65,5	10,4	1	0						2	DE2	50	Debi/PN du Djoudj
6159732	B	ACRSCH	30.01.2009	9h00		+1A	63,0	9,7	1	0						2	DE2	50	Debi/PN du Djoudj
6159736	B	ACRSCH	30.01.2009	10h00		+1A	63,5	10,0	1	0						3	DE3	50	Debi/PN du Djoudj
6159737	B	ACRSCH	30.01.2009	10h00		+1A	63,0	9,1	1	0						3	DE3	50	Debi/PN du Djoudj

6159655	B	ACRSCH	26.01.2009	9h00		+1A	68,0	11,3	1	0					1	DIA1	50	Diadème 2/Djoudj
6159656	B	ACRSCH	26.01.2009	9h00		+1A	66,0	12,0	2	0					1	DIA1	50	Diadème 2/Djoudj
6159657	B	ACRSCH	26.01.2009	9h00		+1A	64,0	10,4	1	0					1	DIA1	50	Diadème 2/Djoudj
6159659	B	ACRSCH	26.01.2009	10h15		+1A	67,0	10,2	1	0					2	DIA2	50	Diadème 2/Djoudj
6159660	B	ACRSCH	26.01.2009	10h15		+1A	68,5	11,9	1	0					2	DIA2	50	Diadème 2/Djoudj
6159662	B	ACRSCH	26.01.2009	10h15		+1A	64,0	9,4	1	0					2	DIA2	50	Diadème 2/Djoudj
X180394	C	ACRSCH	26.01.2009	10h15		+1A	65,0	10,6	1	0					2	DIA2	50	Diadème 2/Djoudj
6159664	B	ACRSCH	26.01.2009	11h00		+1A	64,5	10,1	1	0					3	DIA3	50	Diadème 2/Djoudj
6159665	B	ACRSCH	26.01.2009	11h00		+1A	67,5	11,0	1	0					3	DIA3	50	Diadème 2/Djoudj
6159666	B	ACRSCH	26.01.2009	11h00		+1A	68,0	11,6	1	0					3	DIA3	50	Diadème 2/Djoudj
6159667	B	ACRSCH	26.01.2009	11h00		+1A	66,0	9,9	1	0					3	DIA3	50	Diadème 2/Djoudj
X180394	C	ACRSCH	26.01.2009	17h00		+1A		10,7	1	0					4	DIA4	50	Diadème 2/Djoudj
6159660	C	ACRSCH	26.01.2009	17h00		+1A		11,0	1	0					4	DIA4	50	Diadème 2/Djoudj
6159670	B	ACRSCH	26.01.2009	18h30		+1A	65,5	11,3	1	0					5	DIA5	50	Diadème 2/Djoudj
6159671	B	ACRSCH	26.01.2009	19h00		+1A	65,5	11,2	1	0					6	DIA6	50	Diadème 2/Djoudj
6159672	B	ACRSCH	26.01.2009	19h00		+1A	66,0	10,2	1	0					6	DIA6	50	Diadème 2/Djoudj
6159674	B	ACRSCH	26.01.2009	19h00		+1A	67,0	12,1	1	0					6	DIA6	50	Diadème 2/Djoudj
6159676	B	ACRSCH	26.01.2009	19h00		+1A	65,0	10,7	1	0					6	DIA6	50	Diadème 2/Djoudj
6159677	B	ACRSCH	26.01.2009	19h00		+1A	64,0	12,0	2	0					6	DIA6	50	Diadème 2/Djoudj
6159678	B	ACRSCH	26.01.2009	19h00		+1A	67,0	10,0	1	0					6	DIA6	50	Diadème 2/Djoudj
6159679	B	ACRSCH	26.01.2009	19h00		+1A	66,0	11,1	1	0					6	DIA6	50	Diadème 2/Djoudj
6159680	B	ACRSCH	27.01.2009	8h15		+1A	65,0	9,8	1	0					6	DIA6	50	Diadème 2/Djoudj
6159672	C	ACRSCH	27.01.2009	8h15		+1A	66,5	9,4	1	0					6	DIA6	50	Diadème 2/Djoudj
6159681	B	ACRSCH	27.01.2009	8h15		+1A	66,0	10,2	1	0					6	DIA6	50	Diadème 2/Djoudj
6159682	B	ACRSCH	27.01.2009	8h15		+1A	65,0	10,1	1	0					6	DIA6	50	Diadème 2/Djoudj
6159683	B	ACRSCH	27.01.2009	8h15		+1A	67,0	12,5	2	0					6	DIA6	50	Diadème 2/Djoudj
6159684	B	ACRSCH	27.01.2009	8h15		+1A	65,0	11,4	1	0					6	DIA6	50	Diadème 2/Djoudj
6159685	B	ACRSCH	27.01.2009	8h15		+1A	64,0	9,5	1	0					6	DIA6	50	Diadème 2/Djoudj
6159671	C	ACRSCH	27.01.2009	8h15		+1A		10,0	1	0					6	DIA6	50	Diadème 2/Djoudj
6159686	B	ACRSCH	27.01.2009	8h15		+1A	69,0	11,8	1	0					6	DIA6	50	Diadème 2/Djoudj
6159687	B	ACRSCH	27.01.2009	8h15		+1A	65,0	10,6	1	0					6	DIA6	50	Diadème 2/Djoudj
6159505	B	ACRSCH	17.01.2009	10h00		+1A	68,5	10,8	1	0					2	TIG2	50	Tiguet/PN du Djoudj
6159506	B	ACRSCH	17.01.2009	10h00		+1A	66,0	10,4	1	0					2	TIG2	50	Tiguet/PN du Djoudj
6143025	C	ACRSCH	18.01.2009	7h30		+1A	63,0	9,7	1	0					3	TIG3	50	Tiguet/PN du Djoudj

6143208	C	ACRSCH	17.01.2009	18h00		+1A	64,0	11,4	2	0					3	TIG3	50	Tiguet/PN du Djoudj
6143211	C	ACRSCH	17.01.2009	18h00		+1A	65,5	11,3	1	0					3	TIG3	50	Tiguet/PN du Djoudj
6143211	C	ACRSCH	18.01.2009	7h30		+1A	65,5	9,9	1	0					3	TIG3	50	Tiguet/PN du Djoudj
6159507	B	ACRSCH	17.01.2009	18h00		+1A	64,5	11,2	2	0					3	TIG3	50	Tiguet/PN du Djoudj
6159508	B	ACRSCH	17.01.2009	18h00		+1A	63,0	10,7	1	0					3	TIG3	50	Tiguet/PN du Djoudj
6143080	C	ACRSCH	18.01.2009	9h00		+1A	63,5	10,5	2	0					4	TIG4	50	Tiguet/PN du Djoudj
6159510	B	ACRSCH	18.01.2009	9h00		+1A	66,5	10,7	2	0					4	TIG4	50	Tiguet/PN du Djoudj
6159513	B	ACRSCH	18.01.2009	9h00		+1A	64,0	10,8	2	0					4	TIG4	50	Tiguet/PN du Djoudj
6159518	B	ACRSCH	18.01.2009	9h00		+1A	65,0	10,7	1	0					4	TIG4	50	Tiguet/PN du Djoudj
6159519	B	ACRSCH	18.01.2009	9h45		+1A	64,0	10,2	1	0					4	TIG4	50	Tiguet/PN du Djoudj
6060025	C	ACRSCH	18.01.2009	17h30		+1A	66,5	11,1	1	0					5	TIG5	50	Tiguet/PN du Djoudj
6159521	B	ACRSCH	18.01.2009	11h00		+1A	64,0	10,0	1	0					5	TIG5	50	Tiguet/PN du Djoudj
6159522	B	ACRSCH	18.01.2009	11h00		+1A	64,0	11,7	2	0					5	TIG5	50	Tiguet/PN du Djoudj
6159523	B	ACRSCH	18.01.2009	11h00		+1A	67,0	10,7	1	0					5	TIG5	50	Tiguet/PN du Djoudj
6159524	B	ACRSCH	18.01.2009	11h00		+1A	63,0	11,3	2	0					5	TIG5	50	Tiguet/PN du Djoudj
6159525	B	ACRSCH	18.01.2009	11h00		+1A	67,5	10,5	1	0					5	TIG5	50	Tiguet/PN du Djoudj
6159526	B	ACRSCH	18.01.2009	11h00		+1A	66,0	12,0	2	0					5	TIG5	50	Tiguet/PN du Djoudj
6159526	C	ACRSCH	18.01.2009	17h30		+1A		12,2	2	0					5	TIG5	50	Tiguet/PN du Djoudj
6159527	B	ACRSCH	18.01.2009	17h30		+1A	65,5	11,0	1	0					5	TIG5	50	Tiguet/PN du Djoudj
5512102	C	ACRSCH	18.01.2009	19h00		+1A	68,0		2	0					6	TIG6	50	Tiguet/PN du Djoudj
6159528	B	ACRSCH	18.01.2009	19h00		+1A	63,5	10,7	2	0					6	TIG6	50	Tiguet/PN du Djoudj
6159529	B	ACRSCH	18.01.2009	19h00		+1A	67,0	13,2	2	0					6	TIG6	50	Tiguet/PN du Djoudj
6159532	B	ACRSCH	18.01.2009	19h00		+1A	64,0	12,4	2	0					6	TIG6	50	Tiguet/PN du Djoudj
5509992	C	ACRSCH	19.01.2009	9h00		+1A	66,0	10,4	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6143060	C	ACRSCH	19.01.2009	9h00		+1A	65,5	10,2	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6143246	C	ACRSCH	19.01.2009	9h00		+1A	68,5	11,5	2	0					7	TIG7	50	Tiguet/PN du Djoudj
6159534	B	ACRSCH	19.01.2009	9h00		+1A	67,0	10,4	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6159535	B	ACRSCH	19.01.2009	9h00		+1A	66,5	10,2	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6159536	B	ACRSCH	19.01.2009	9h00		+1A	63,0	10,6	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6159537	B	ACRSCH	19.01.2009	9h00		+1A	65,5	10,7	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6159538	B	ACRSCH	19.01.2009	9h00		+1A	63,0	9,7	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6159539	B	ACRSCH	19.01.2009	9h00		+1A	67,0	11,2	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6159540	B	ACRSCH	19.01.2009	9h00		+1A	66,0	12,3	2	0					7	TIG7	50	Tiguet/PN du Djoudj
6159541	B	ACRSCH	19.01.2009	9h00		+1A	65,0	9,9	1	0					7	TIG7	50	Tiguet/PN du Djoudj

6159542	B	ACRSCH	19.01.2009	9h00		+1A	66,0	11,7	2	0					7	TIG7	50	Tiguet/PN du Djoudj
6159545	B	ACRSCH	19.01.2009	9h00		+1A	63,5	10,7	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6159546	B	ACRSCH	19.01.2009	9h00		+1A	66,0	11,1	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6159547	B	ACRSCH	19.01.2009	9h00		+1A	68,0	14,5	3	0					7	TIG7	50	Tiguet/PN du Djoudj
6159548	B	ACRSCH	19.01.2009	9h00		+1A	65,0	11,0	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6159626	B	ACRSCH	24.01.2009	8h30		+1A	66,5	10,3	1	0					9	TIG9	50	Tiguet/PN du Djoudj
6159634	B	ACRSCH	24.01.2009	8h30		+1A	64,0	10,2	1	0					9	TIG9	50	Tiguet/PN du Djoudj
6159637	B	ACRSCH	24.01.2009	8h30		+1A	67,0	11,1	1	0					9	TIG9	50	Tiguet/PN du Djoudj
6159640	B	ACRSCH	24.01.2009	8h30		+1A	66,0	11,4	1	0					9	TIG9	50	Tiguet/PN du Djoudj
6159653	B	ACRSCH	25.01.2009	11h30		+1A	64,5	10,7	1	0					9	TIG9	50	Tiguet/PN du Djoudj
6159646	B	ACRSCH	25.01.2009	10h30		+1A	67,0	10,6	1	0					11	TIG11	50	Tiguet/PN du Djoudj
6159647	B	ACRSCH	25.01.2009	10h30		+1A	64,5	11,0	1	0					11	TIG11	50	Tiguet/PN du Djoudj
X124560	C	ACRSCH	25.01.2009	10h30		+1A	68,0	11,2	2	0					11	TIG11	50	Tiguet/PN du Djoudj
6159650	B	ACRSCH	25.01.2009	10h30		+1A	67,0	11,0	1	0					11	TIG11	50	Tiguet/PN du Djoudj
6159551	B	ACRSCH	20.01.2009	8h00		+1A	66,0	10,6	1	0					2	C2	50	Zone de chasse/Djoudj
6159552	B	ACRSCH	20.01.2009			+1A	66,5	10,2	1	0					2	C2	50	Zone de chasse/Djoudj
6159553	B	ACRSCH	20.01.2009			+1A	67,0	10,5	1	0					2	C2	50	Zone de chasse/Djoudj
6159554	B	ACRSCH	20.01.2009			+1A	66,0	9,9	1	0					2	C2	50	Zone de chasse/Djoudj
6159555	B	ACRSCH	20.01.2009			+1A	64,0	10,4	1	0					2	C2	50	Zone de chasse/Djoudj
6159556	B	ACRSCH	20.01.2009			+1A	63,0	9,0	1	0					2	C2	50	Zone de chasse/Djoudj
6159558	B	ACRSCH	20.01.2009			+1A	65,5	8,7	1	0					2	C2	50	Zone de chasse/Djoudj
6159560	B	ACRSCH	20.01.2009			+1A	65,0	9,5	1	0					2	C2	50	Zone de chasse/Djoudj
6159561	B	ACRSCH	20.01.2009			+1A	61,5	9,6	1	0					2	C2	50	Zone de chasse/Djoudj
6159562	B	ACRSCH	20.01.2009			+1A	69,5	11,0	1	0					2	C2	50	Zone de chasse/Djoudj
6159563	B	ACRSCH	20.01.2009			+1A	64,5	9,7	1	0					2	C2	50	Zone de chasse/Djoudj
6159565	B	ACRSCH	20.01.2009			+1A	66,0	10,4	1	0					3	C3	50	Zone de chasse/Djoudj
6159567	B	ACRSCH	20.01.2009			+1A		9,3	1	RP1					3	C3	50	Zone de chasse/Djoudj
6159571	B	ACRSCH	20.01.2009			+1A	66,0	11,0	1	0					4	C4	50	Zone de chasse/Djoudj
6159572	B	ACRSCH	20.01.2009			+1A	65,0	9,8	1	0					4	C4	50	Zone de chasse/Djoudj
6159573	B	ACRSCH	21.01.2009			+1A	68,0	11,4	1	0					4	C4	50	Zone de chasse/Djoudj
6159576	B	ACRSCH	21.01.2009			+1A	68,5	9,9	1	0					4	C4	50	Zone de chasse/Djoudj
6159578	B	ACRSCH	21.01.2009	9h15		+1A	63,0	9,5	1	0					5	C5	50	Zone de chasse/Djoudj
6159579	B	ACRSCH	21.01.2009	9h15		+1A	67,0	10,2	1	0					5	C5	50	Zone de chasse/Djoudj
6159580	B	ACRSCH	21.01.2009	9h15		+1A	67,0	10,4	1	0					5	C5	50	Zone de chasse/Djoudj

6159582	B	ACRSCH	21.01.2009	11h30		+1A	67,5	11,2	1	0					6	C6	50	Zone de chasse/Djoudj
6159584	B	ACRSCH	21.01.2009	11h30		+1A	65,5	11,0	1	0					6	C6	50	Zone de chasse/Djoudj
6159585	B	ACRSCH	21.01.2009	11h30		+1A	64,0	10,6	1	0					6	C6	50	Zone de chasse/Djoudj
6159586	B	ACRSCH	21.01.2009	11h30		+1A	64,0	9,5	1	0					6	C6	50	Zone de chasse/Djoudj
6159587	B	ACRSCH	21.01.2009	11h30		+1A	66,0	10,3	1	0					6	C6	50	Zone de chasse/Djoudj
6159588	B	ACRSCH	21.01.2009	11h30		+1A	69,0	11,2	1	0					6	C6	50	Zone de chasse/Djoudj
AN62559	C	ACRSCH	21.01.2009	11h30		+1A	67,0	10,7	1	0					6	C6	50	Zone de chasse/Djoudj
6159590	B	ACRSCH	21.01.2009	11h30		+1A	67,5	11,0	1	0					6	C6	50	Zone de chasse/Djoudj
6159591	B	ACRSCH	21.01.2009	11h30		+1A	66,0	10,4	1	0					6	C6	50	Zone de chasse/Djoudj
6159592	B	ACRSCH	21.01.2009	11h30		+1A	67,0	11,4	1	0					6	C6	50	Zone de chasse/Djoudj
6159594	B	ACRSCH	21.01.2009	11h30		+1A	65,5	10,0	1	0					6	C6	50	Zone de chasse/Djoudj
6159597	B	ACRSCH	21.01.2009	18h00		+1A	65,5	11,3	1	0					7	C7	50	Zone de chasse/Djoudj
6159598	B	ACRSCH	21.01.2009	18h00		+1A	66,0	9,8	1	0					7	C7	50	Zone de chasse/Djoudj
6159599	B	ACRSCH	21.01.2009	18h00		+1A	66,0	10,2	1	0					7	C7	50	Zone de chasse/Djoudj
6159600	B	ACRSCH	22.01.2009	8h15		+1A	66,0	11,0	1	0					7	C7	50	Zone de chasse/Djoudj
6159601	B	ACRSCH	22.01.2009	8h15		+1A	67,0	10,3	1	0					7	C7	50	Zone de chasse/Djoudj
6159602	B	ACRSCH	22.01.2009	8h15		+1A	68,5	11,0	1	0					7	C7	50	Zone de chasse/Djoudj
6159603	B	ACRSCH	22.01.2009	8h15		+1A	68,0	10,8	1	0					7	C7	50	Zone de chasse/Djoudj
6159605	B	ACRSCH	22.01.2009	8h15		+1A	66,0	10,9	1	0					7	C7	50	Zone de chasse/Djoudj
6159606	B	ACRSCH	22.01.2009	8h15		+1A	65,0	10,6	1	0					7	C7	50	Zone de chasse/Djoudj
6159608	B	ACRSCH	22.01.2009	9h15		+1A	65,0	9,8	1	0					8	C8	50	Zone de chasse/Djoudj
6159609	B	ACRSCH	22.01.2009	9h15		+1A	67,5	11,2	1	0					8	C8	50	Zone de chasse/Djoudj
6159610	B	ACRSCH	22.01.2009	9h15		+1A	63,5	9,8	1	0					8	C8	50	Zone de chasse/Djoudj
6159612	B	ACRSCH	22.01.2009	10h30		+1A	66,0	10,6	1	0					9	C9	50	Zone de chasse/Djoudj
6159613	B	ACRSCH	22.01.2009	10h30		+1A	64,5	10,0	1	0					9	C9	50	Zone de chasse/Djoudj
6159616	B	ACRSCH	22.01.2009	10h30		+1A	64,0	10,2	1	0					9	C9	50	Zone de chasse/Djoudj
6159617	B	ACRSCH	22.01.2009	10h30		+1A	66,0	11,0	1	0					9	C9	50	Zone de chasse/Djoudj
6159618	B	ACRSCH	22.01.2009	12h00		+1A	66,5	11,0	1	0					10	C10	50	Zone de chasse/Djoudj
6159619	B	ACRSCH	22.01.2009	12h00		+1A	68,5	11,0	1	0					10	C10	50	Zone de chasse/Djoudj
6159620	B	ACRSCH	22.01.2009	12h00		+1A	61,0	10,1	1	0					10	C10	50	Zone de chasse/Djoudj
6159621	B	ACRSCH	22.01.2009	12h00		+1A	65,5	10,4	1	0					10	C10	50	Zone de chasse/Djoudj
6159622	B	ACRSCH	22.01.2009	12h00		+1A	67,0	13,5	2	0					10	C10	50	Zone de chasse/Djoudj
6159623	B	ACRSCH	22.01.2009	12h00		+1A	65,5	10,8	1	0					10	C10	50	Zone de chasse/Djoudj
6159624	B	ACRSCH	22.01.2009	12h00		+1A	65,0	10,6	1	0					10	C10	50	Zone de chasse/Djoudj

6159625	B	ACRSCH	22.01.2009	12h00		+1A	66,0	10,2	1	0					10	C10	50	Zone de chasse/Djoudj
6159692	B	ACRSCH	29.01.2009	8h30		+1A	64,5	10,4	1	0					11	C11	50	Zone de chasse/Djoudj
6159694	B	ACRSCH	29.01.2009	8h30		+1A	66,0	10,6	1	0					11	C11	50	Zone de chasse/Djoudj
6159697	B	ACRSCH	29.01.2009	9h30		+1A	64,0	11,1	1	0					12	C12	50	Zone de chasse/Djoudj
6159698	B	ACRSCH	29.01.2009	9h30		+1A	66,0	10,5	1	0					12	C12	50	Zone de chasse/Djoudj
6159699	B	ACRSCH	29.01.2009	9h30		+1A	66,0	10,6	1	0					12	C12	50	Zone de chasse/Djoudj
6159700	B	ACRSCH	29.01.2009	9h30		+1A	64,5	9,5	1	0					12	C12	50	Zone de chasse/Djoudj
6159701	B	ACRSCH	29.01.2009	9h30		+1A	68,5	10,1	1	0					12	C12	50	Zone de chasse/Djoudj
6159704	B	ACRSCH	29.01.2009	9h30		+1A	64,0	9,3	1	0					12	C12	50	Zone de chasse/Djoudj
6159707	B	ACRSCH	29.01.2009	11h00		+1A	66,5	11,0	1	0					13	C13	50	Zone de chasse/Djoudj
6159708	B	ACRSCH	29.01.2009	11h00		+1A	63,5	10,7	1	0					13	C13	50	Zone de chasse/Djoudj
6159709	B	ACRSCH	29.01.2009	11h00		+1A	67,0	11,0	1	0					13	C13	50	Zone de chasse/Djoudj
6159710	B	ACRSCH	29.01.2009	11h00		+1A	66,5	11,0	1	0					13	C13	50	Zone de chasse/Djoudj
6159711	B	ACRSCH	29.01.2009	12h00		+1A	65,0	9,5	1	0					13	C13	50	Zone de chasse/Djoudj
6159712	B	ACRSCH	29.01.2009	12h00		+1A	66,0	11,2	1	0					13	C13	50	Zone de chasse/Djoudj
6159713	B	ACRSCH	29.01.2009	12h00		+1A	63,0	9,5	1	0					13	C13	50	Zone de chasse/Djoudj
6159714	B	ACRSCH	29.01.2009	12h00		+1A	63,0	10,8	1	0					13	C13	50	Zone de chasse/Djoudj
6159719	B	LOCNAE	30.01.2009	8h00		+1A	63,5	14,0	2	0					1	DE1	50	Debi/PN du Djoudj
6159530	B	LOCNAE	18.01.2009	19h00		+1A	65,0	18,5	3	0					6	TIG6	50	Tiguet/PN du Djoudj
6159635	B	LOCNAE	24.01.2009	8h30		+1A	62,0	19,6	3	0					9	TIG9	50	Tiguet/PN du Djoudj
6159648	B	LOCNAE	25.01.2009	10h30		+1A	62,5	12,7	1	0					11	TIG11	50	Tiguet/PN du Djoudj
6159651	B	LOCNAE	25.01.2009	10h30		+1A	65,0	18,1	3	0					11	TIG11	50	Tiguet/PN du Djoudj
6159652	B	LOCNAE	25.01.2009	10h30		+1A	66,5	13,1	1	0					11	TIG11	50	Tiguet/PN du Djoudj
6159688	B	MOTFLA	27.01.2009	8h15		2A	76,0	15,4	1						6	DIA6	50	Diadème 2/Djoudj
6159689	B	MOTFLA	27.01.2009	8h15		2A	78,0	15,6	1						6	DIA6	50	Diadème 2/Djoudj
6159501	B	MOTFLA	17.01.2009	8h00		2A	75,0	15,3	1	0					1	TIG1	50	Tiguet/PN du Djoudj
6159502	B	MOTFLA	17.01.2009	8h00		2A	76,5	16,5	1	0					1	TIG1	50	Tiguet/PN du Djoudj
6159503	B	MOTFLA	17.01.2009	8h00		2A	79,5	15,8	1	0					1	TIG1	50	Tiguet/PN du Djoudj
6159504	B	MOTFLA	17.01.2009	10h00		2A	76,0	14,7	1	0					2	TIG2	50	Tiguet/PN du Djoudj
6159511	B	MOTFLA	18.01.2009	9h00		2A	69,0	14,3	1	0					4	TIG4	50	Tiguet/PN du Djoudj
6159512	B	MOTFLA	18.01.2009	9h00		2A	74,5	13,8	1	0					4	TIG4	50	Tiguet/PN du Djoudj
6159531	B	MOTFLA	18.01.2009	19h00		2A	74,0	16,0	1	0					6	TIG6	50	Tiguet/PN du Djoudj
6159533	B	MOTFLA	18.01.2009	19h00		2A	82,0	17,1	1	0					6	TIG6	50	Tiguet/PN du Djoudj
6159543	B	MOTFLA	19.01.2009	9h00		+2A	76,0	13,0	1	0					7	TIG7	50	Tiguet/PN du Djoudj

6159544	B	MOTFLA	19.01.2009	9h00		2A	72,5	14,6	1	0					7	TIG7	50	Tiguet/PN du Djoudj
6159549	B	MOTFLA	19.01.2009	10h00		+2A	79,0	15,4	1						8	TIG8	50	Tiguet/PN du Djoudj
6159550	B	MOTFLA	19.01.2009	10h01		2A	76,0	13,8	1						8	TIG8	50	Tiguet/PN du Djoudj
6159628	B	MOTFLA	24.01.2009	8h30		+2A	80,0	15,5	1						9	TIG9	50	Tiguet/PN du Djoudj
6159629	B	MOTFLA	24.01.2009	8h30		+2A	85,0	17,6	1						9	TIG9	50	Tiguet/PN du Djoudj
6159630	B	MOTFLA	24.01.2009	8h30		2A	75,5	14,6	1						9	TIG9	50	Tiguet/PN du Djoudj
6159633	B	MOTFLA	24.01.2009	8h30		2A	76,5	15,3	1						9	TIG9	50	Tiguet/PN du Djoudj
6159638	B	MOTFLA	24.01.2009	8h30		+2A	75,0	15,2	1						9	TIG9	50	Tiguet/PN du Djoudj
6159639	B	MOTFLA	24.01.2009	8h30		2A	76,5	13,8	1						9	TIG9	50	Tiguet/PN du Djoudj
6159642	B	MOTFLA	24.01.2009	10h00		2A	74,5	16,1	1						10	TIG10	50	Tiguet/PN du Djoudj
6159643	B	MOTFLA	24.01.2009	10h00		2A	77,5	16,0	1						10	TIG10	50	Tiguet/PN du Djoudj
6159644	B	MOTFLA	24.01.2009	10h00		2A	76,5	16,2	1						10	TIG10	50	Tiguet/PN du Djoudj
6159649	B	MOTFLA	25.01.2009	10h30		2A	76,5	16,8	1						11	TIG11	50	Tiguet/PN du Djoudj
6159557	B	MOTFLA	20.01.2009			2A	82,0	14,0	1						2	C2	50	Zone de chasse/Djoudj
6159559	B	MOTFLA	20.01.2009			2A	73,5	15,6	1						2	C2	50	Zone de chasse/Djoudj
6159575	B	MOTFLA	21.01.2009			+2A	82,0	16,6	1						4	C4	50	Zone de chasse/Djoudj
6159581	B	MOTFLA	21.01.2009	9h15		+2A	79,0	16,2	1						5	C5	50	Zone de chasse/Djoudj
6159589	B	MOTFLA	21.01.2009	11h30		+2A	82,5	15,3	1	0					6	C6	50	Zone de chasse/Djoudj
6159691	B	MOTFLA	29.01.2009	8h30		2A	75,5	14,8	1						11	C11	50	Zone de chasse/Djoudj
6159695	B	MOTFLA	29.01.2009	8h30		2A	75,0	13,4	1						11	C11	50	Zone de chasse/Djoudj
6159696	B	MOTFLA	29.01.2009	8h30		+2A	75,0	13,5	1	6					11	C11	50	Zone de chasse/Djoudj
6159703	B	MOTFLA	29.01.2009	9h30		+2A	78,5	14,6	1						12	C12	50	Zone de chasse/Djoudj
6159706	B	MOTFLA	29.01.2009	11h00		2A	81,5	18,8	2						13	C13	50	Zone de chasse/Djoudj
6159715	B	MOTFLA	29.01.2009	12h00		+2A	78,0	14,9	1						13	C13	50	Zone de chasse/Djoudj
BEG260	C	PHYCOL	26.01.2009	11h00		+1A	64,5	8,0	1	0					3	DIA3	50	Diadème 2/Djoudj
RH1301	B	PHYCOL	21.01.2009	9h15		+1A	64,0	7,6	1	0					5	C5	50	Zone de chasse/Djoudj
RH1302	B	PHYCOL	29.01.2009	8h30		+1A	65,0	9,8	2	0					11	C11	50	Zone de chasse/Djoudj
M30661	B	PORPUS	29.01.2009	12h00		+1A	86,0	48,2	1		32,0	16,0	38,0		13	C13	50	Zone de chasse/Djoudj
6159673	B	RIPRIP	26.01.2009	19h00		+1A	105,0	12,2	1						6	DIA6	50	Diadème 2/Djoudj
6159645	B	RIPRIP	24.01.2009	10h00		+1A	108,0	11,2	1						10	TIG10	50	Tiguet/PN du Djoudj
SB72740	B	TRIGLA	26.01.2009	17h00		+1A	131,0				36,1	27,1	54,2		4	DIA4	50	Diadème 2/Djoudj
SB72738	B	TRIGLA	17.01.2009	8h00		+1A	129,0			0	29,0	42,5			1	TIG1	50	Tiguet/PN du Djoudj
SB72739	B	TRIGLA	24.01.2009	8h30		+1A	132,0				41,0	27,5	57,5		9	TIG9	50	Tiguet/PN du Djoudj

Tab. 6: Total of all captured European migrants.

Species	Total
<i>Acrocephalus paludicola</i>	54
<i>Acrocephalus schoenobaenus</i>	164
<i>Locustella naevia</i>	6
<i>Motacilla flava</i>	35
<i>Phylloscopus collybita</i>	3
<i>Porzana pusilla</i>	2
<i>Riparia riparia</i>	2
<i>Tringa glareola</i>	3
Total	268

5.2 Workshop for African Bird Experts at Djoudj National Park, January 2009

The idea to organise a workshop for African bird experts came up in summer 2008, when all AWCT members agreed that an effective protection of the Aquatic Warbler in its West African wintering grounds can not be achieved without the help of local experts and decision makers. It was intended to make local adepts familiar with the Aquatic Warbler, the whole topic of European protection efforts and above all the wintering habitats with its characteristic water regime and vegetation structure.



With the help of Ibrahima Diop, the Conservator of the Djoudj National Park in Senegal, the AWCT organised a three day workshop realised by tree AWCT members (BRUNO BARGAIN, VOLKER SALEWSKI, COSIMA TEGETMEYER) for seven experts from Senegal, Gambia and Mali

at the Biological Station of the Djoudj National Park in January 2009 (participants and contact details see Table 7). In addition we made contact with engaged Mauritanian colleagues who unfortunately could not participate in the workshop.

The African colleagues got theoretical information about the biology and ecology of the Aquatic Warbler. The current knowledge on migratory routes and conservation activities was introduced. Furthermore, the suitable Aquatic Warbler habitats around the Djoudj National Park were presented to the participants as well as the bird itself. During ringing work and habitat inspection demonstrations were given how to localise and to proof the presence of the birds in humid grassy plains of Africa's savannahs.

The African colleagues were very interested and anxious to contribute, so we expect that our guests will spread the obtained information in their home countries, with the hope that this way, we may discover so far unknown Aquatic Warbler wintering grounds in the near future.

Table 7: Participants of the training workshop.

country	name	first name	profession	email
Gambia	Sanyang	Lamin	Parc and Wildlife Officer	lmnsanyang@yahoo.com
Gambia	Nianneh	Sarjo	Eco gard	manneh_sarjo@yahoo.com
Mali	Fofana	Bouba	Assistant technique de recherche (ATR) Wetlands International	fofanaaboua@yahoo.fr
Mali	Diallo	Mori	Assistant technique de recherche (ATR) Wetlands International	diallomori2001@yahoo.fr
Senegal	Faye	Mame Abdou	Ingénieur des Travaux des Parcs Nationaux (ITPN)	doufaya74@yahoo.fr
Senegal	Gomis	Jaques	Ingénieur des Travaux des Parcs Nationaux (ITPN)	jacgomis@yahoo.fr
Senegal	Mandiang	Bounama	Ingénieur des Travaux des Parcs Nationaux (ITPN)	mandingboura@yahoo.fr

5.3 AWCT field trip to Gambia February 2009

The intention for the four day trip to Gambia was to check out several presumably potential Aquatic Warbler wintering habitats, which were advised by Bruno Bargain and the Gambian participants of the "African expert workshop" Lamin Sanyang and Sarjo Manneh. From 31 January until 03 February 2009 we travelled as a group of four Europeans accompanied by the Gambian colleagues to the centre of Gambia nearby the town Farafeni. We checked four sites where humidity and suitable vegetation was expected.

Unfortunately all sites were either too small, dry, converted into rice fields or overgrown by high stands of *Typha australis* (more details see Table 1). We did not find any Aquatic Warblers or potential wintering site in Gambia so far and the impressions were not very promising for further efforts.

6. Acknowledgements

We are very grateful to Colonel Ibrahima Diop (Djoudj Biological Station) for his help with logistic and bureaucratic matters, for hosting us in the parks under their responsibility and for the many fruitful discussions and advices without the expedition would not have been possible.

We express our sincere thanks to our supporters, namely the RSPB, the Stresemann Fund of the German Ornithological Society and, last but not least, The Wetland Trust (Stephen Rumsey), who completed the funding by a private donation.

7. Financial Report

7.1 Expenses:

Amount (€)	Purpose	Comments
521.11	Flight ticket Volker Salewski	bank transfer to Volker
768.00	Flight ticket Peter Becker	bank transfer to Nina 24/11/2008
768.00	Flight ticket Vera Knöfler	paid by Nina (project funds)
560.00	Flight ticket Bruno Bargain	bank transfer to Bruno
497.16	Expenses of Peter Becker for medical care (Malarone) and technical equipment/material	bank transfer to Volker; detailed list and receipts are available
486.54	Expenses by Volker Salewski for medical care, travel costs and technical equipment	Bank transfer to Volker; detailed list and receipts are available
1490.54	Travel and accommodation for Djoudj part	bank transfer to Volker
671.52	Travel and accommodation for the Gambia	bank transfer to Volker
225.00	Accommodation Vera Knöfler in Djoudj	paid by Nina (project funds)
1720.00	Travel costs and accommodation for experts from Mali, the Gambia, Casamance	transferred to Ibrahima Diop via bank transfer to Nina on 28/11/2008
7,707.87	Total	

7.2 Funding:

Amount (€)	source	Purpose	comments
4180.00	RSPB	annual AWCT small grant agreement	3,762.00 received June 2009
2092.50	The Wetlands Trust, Stephen Rumsey	flight tickets for 3 Europeans	received 10/12/2008
993.00	Stresemann Project Fund Nina Seifert	travel and accommodation for Vera Knöfler	transferred to Nina on 17/12/2008
442.37	German participants	private contributions	
Total:			
7,707.87			

Annex: List of Bird Records in Senegal and Gambia, January/February 2009

ORDER & FAMILY	English name	Scientific name	German name	Djoudj NP	The Gambia	Dakar	Others
GAVIIFORMES							
PODICIPIDAE	Little Grebe	<i>Tachybaptus ruficollis</i>	Zwergtaucher	x			
PROCELLARIIFORMES							
	Cory's Shearwater	<i>Calonectris diomedea</i>	Gelbschnabelsturmtaucher			x	
PELECANIFORMES				-	-	-	-
PELECANIDAE	Great White Pelican	<i>Pelecanus onocrotalus</i>	Rosapelikan	x	x	x	
	Pink-backed Pelican	<i>Pelecanus rufescens</i>	Rötelpelikan	x	x	x	
SULIDAE	Northern Gannet	<i>Sula bassana</i>	Basstölpel			x	
PHALACROCORACIDA	Great Cormorant	<i>Phalacrocorax lucidus</i>	Weißbrustkormoran	x	x	x	
	Long-tailed Cormorant	<i>Phalacrocorax africanus</i>	Riedscharbe	x	x	x	
ANHINGIDAE	African Darter	<i>Anhinga rufa</i>	Afrikanischer Schlangenhalsvogel	x	x		
CICONIIFORMES				-	-	-	-
ARDEIDAE	Grey Heron	<i>Ardea cinerea</i>	Graureiher	x	x	x	
	Black-headed Heron	<i>Ardea melanocephala</i>	Schwarzhalsreiher	x	x		
	Purple Heron	<i>Ardea purpurea</i>	Purpurereiher	x	x		
	Great White Egret	<i>Ardea alba</i>	Silberreiher	x	x	x	
	Goliath Heron	<i>Ardea goliath</i>	Goliathreiher	x			
	Black Heron	<i>Egretta ardesiaca</i>	Glockenreiher	x	x		
	Intermediate Egret	<i>Egretta intermedia</i>	Mittelreiher	x	x		
	Little Egret	<i>Egretta garzetta</i>	Seidenreiher	x	x	x	
	Western Reef Egret	<i>Egretta gularis</i>	Küstenreiher	x	x	x	
	Cattle Egret	<i>Bubucus ibis</i>	Kuhreiher	x	x	x	
	Squacco Heron	<i>Ardeola ralloides</i>	Rallenreiher	x	x		
	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	Nachtreiher	x	x		
	Little Bittern	<i>Ixobrychus minutus</i>	Zwergrohrdommel	x	x		
	Striated Heron	<i>Butorides striatus</i>	Mangrovenreiher		x		
	Great Bittern	<i>Botaurus stellaris</i>	Große Rohrdommel	x			

SOPIDAE	Hamerkop	<i>Scopus umbretta</i>	Hammerkopf		x		
CICONIIDAE	Marabou Stork	<i>Leptoptilos crumeniferus</i>	Marabu		x		
	Yellow-billed Stork	<i>Mycteria ibis</i>	Nimmersatt	x	x		
	Woolley-necked Stork	<i>Ciconia episcopus</i>	Wollhalstorch		x		
	Black Stork	<i>Ciconia nigra</i>	Schwarzstorch	x			
	White Stork	<i>Ciconia ciconia</i>	Weißstorch	x			
THRESKIORNITHIDAE	Sacred Ibis	<i>Threskiornis aethiopicus</i>	Heiliger Ibis	x			
	Hadada Ibis	<i>Bostrychia hagedash</i>	Hagedasch		x		
	Glossy Ibis	<i>Plegadis falcinellus</i>	Brauner Sichler	x			
	European Spoonbill	<i>Platalea leucorodia</i>	Löffler	x			
	African Spoonbill	<i>Platalea alba</i>	Afrikanischer Löffler	x			
<u>PHOENICOPTERIFORMES</u>							
PHOENICOPTERIDAE	Greater Flamingo	<i>Phoenicopterus roseus</i>	Rosaflamingo	x			
	Lesser Flamingo	<i>Phoeniconaias minor</i>	Zwergflamingo	x			
ANATIDAE	White-faced Whistling Duck	<i>Dendrocygna viduata</i>	Witwenpfeifgans	x			
	Fulvous Whistling Duck	<i>Dendrocygna bicolor</i>	Gelbbrustpfeifgans	x			
	Egyptian Goose	<i>Alopochen aegyptiaca</i>	Nilgans	x			
	Spur-winged Goose	<i>Plectropterus gambensis</i>	Sporngans	x	x		
	Knob-billed Duck	<i>Sarkidiornis melanotos</i>	Glanzente	x			
	African Pygmy Goose	<i>Nettapus auritus</i>	Afrikanische Zwergente	x			
	Common Teal	<i>Anas crecca</i>	Krickente	x			
	Northern Pintail	<i>Anas acuta</i>	Spießente	x			
	Garganey	<i>Anas querquedula</i>	Knäkente	x			
	Northern Shoveler	<i>Anas clypeata</i>	Löffelente	x			
<u>FALCONIFORMES</u>							
PANDIONIDAE	Osprey	<i>Pandion haliaetus</i>	Fischadler	x	x	x	
ACCIPITRIDAE	Black-shouldered Kite	<i>Elanus caeruleus</i>	Gleitaar	x	x		
	African Swallow-tailed Kite	<i>Chelictinia riocourii</i>	Schwalbenschwanzaar	x			
	Black Kite	<i>Milvus parasitus</i>	Gelbschnabelmilan		x	x	
	African Fish Eagle	<i>Haliaeetus vocifer</i>	Schreiseeadler	x	x		
	Palm-nut Vulture	<i>Gypohierax angolensis</i>	Palmgeier		x		
	Hooded Vulture	<i>Necrosyrtes monachus</i>	Kappengeier		x	x	

	African White-backed Vultur	<i>Gyps africanus</i>	Weißrückengeier	x			
	Rüppell's Griffon Vulture	<i>Gyps rueppellii</i>	Sperbergeier	x			
	Short-toed Snake Eagle	<i>Circaetus gallicus</i>	Schlangenadler	x			
	Beaudouin's Eagle	<i>Circaetus beaudouini</i>	Afrikanischer Schlangenadler		x		
	Brown Snake Eagle	<i>Circaetus cinereus</i>	Einfarb-Schlangenadler		x		
	African Harrier Hawk	<i>Polyboroides typus</i>	Höhlenweihe		x		
	Eurasian Marsh Harrier	<i>Circus aeruginosus</i>	Rohrweihe	x	x		
	Pallid Harrier	<i>Circus macrourus</i>	Steppenweihe	x			
	Montagu's Harrier	<i>Circus pygargus</i>	Wiesenweihe	x	x		
	Dark chanting Goshawk	<i>Melierax metabates</i>	Graubürzelsinghabicht		x		
	Shikra	<i>Accipier badius</i>	Schikra		x		
	Grasshopper Buzzard	<i>Butastur rufipennis</i>	Heuschreckenteesa		x		
	Ayres's Hawk Eagle	<i>Hieraetus ayresii</i>	Fleckenadler		x		
	Long-crested Eagle	<i>Lophoaeetus occipitalis</i>	Schopfadler		x		
FALCONIDAE	Lesser Kestrel	<i>Falco naumanni</i>	Rötelfalke	x			
	Common Kestrel	<i>Falco tinnunculus</i>	Turmfalke			x	
	Grey Kestrel	<i>Falco ardosiaceus</i>	Graufalke	x		x	
	Red-necked Falcon	<i>Falco chicquera</i>	Rothalsfalke	x			
	Peregrine Falcon	<i>Falco peregrinus</i>	Wanderfalke	x		x	
	Lanner Falcon	<i>Falco barmicus</i>	Lannerfalke			x	
GALLIFORMES	-	-	-	-	-	-	-
PHASIANIDAE	Stone Partridge	<i>Ptilopachus petrosus</i>	Felsenhenne		x		
	Double-spurred Francolin	<i>Francolinus bicalcaratus</i>	Doppelspornfrankolin		x	x	
	Common Quail	<i>Coturnix coturnix</i>	Wachtel	x			
GRUIDAE	Black crowned Crane	<i>Balearica pavonina</i>	Schwarzer Kronenkranich	x	x		
RALLIDAE	Black Crake	<i>Amauornis flavirostra</i>	Mohrenralle	x	x		
	Baillon's Crake	<i>Porzana pusilla</i>	Zwergralle	x	x		
	Little Crake	<i>Porzana parva</i>	Kleinralle	x			
	Purple Swamphen	<i>Porphyrio porphyrio</i>	Purpurhuhn	x	x		
	Allen's Gallinule	<i>Porphyrio alleni</i>	Bronzesultanshuhn	x	x		
	Lesser Moorhen	<i>Gallinula angulata</i>	Zwergteichhuhn	x			
	Common Moorhen	<i>Gallinula chloropus</i>	Teichralle	x	x		

OTIDIDAE	Denham's Bustard	<i>Neotis denhami</i>	Kaffertrappe	x			
CHARADRIIFORMES							
JACANIDAE	African Jacana	<i>Actophilornis africanus</i>	Blaustirnblatthühnchen	x	x		
ROSTRATULIDAE	Greater Painted Snipe	<i>Rostratula benghalensis</i>	Goldschnepfe	x			
RECURVIROSTRIDAE	Black-winged Stilt	<i>Himantopus himantopus</i>	Stelzenläufer	x	x		
	Pied Avocet	<i>Recurvirostra avosetta</i>	Säbelschnäbler	x			
BURHINIDAE	Senegal Thick-Knee	<i>Burhinus senegalensis</i>	Senegaltrial	x	x	x	
	Stone-Curlew	<i>Burhinus oedicnemus</i>	Triel			x	
GLAREOLIDAE	Collared Pratincole	<i>Glareola pratincola</i>	Rotflügelbrachschwalbe	x			
CHARADRIIDAE	Spur-winged Lapwing	<i>Vanellus spinosus</i>	Spornkiebitz	x	x	x	
	Black-headed Lapwing	<i>Vanellus tectus</i>	Schwarzschopfkiebitz		x		
	African Wattled Lapwing	<i>Vanellus senegallus</i>	Senegalkiebitz	x	x		
	Common Ringed Plover	<i>Charadrius hiaticula</i>	Sandregenpfeifer	x		x	
	Little Ringed Plover	<i>Charadrius dubius</i>	Flußregenpfeifer	x			
	Kittlitz's Plover	<i>Charadrius pecuarius</i>	Hirtenregenpfeifer	x			
	Kentish Plover	<i>Charadrius alexandrinus</i>	Seeregenpfeifer	x			
	Grey Plover	<i>Pluvialis squatarola</i>	Kiebitzregenpfeifer	x		x	
SCOLOPACIDAE	Common Snipe	<i>Gallinago gallinago</i>	Bekassine	x	x		
	Jack Snipe	<i>Lymnocryptes minimus</i>	Zwergschnepfe	x			
	Black-tailed Godwit	<i>Limosa limosa</i>	Uferschnepfe	x			
	Bar-tailed Godwit	<i>Limosa lapponica</i>	Pfuhlschnepfe			x	
	Whimbrel	<i>Numenius phaeopus</i>	Regenbrachvogel	x	x	x	
	Curlew	<i>Numenius arquata</i>	Brachvogel			x	
	Common Redshank	<i>Tringa totanus</i>	Rotschenkel	x	x		
	Spotted Redshank	<i>Tringa erythropus</i>	Dunkler Wasserläufer	x	x		
	Marsh Sandpiper	<i>Tringa stagnatilis</i>	Teichwasserläufer	x	x		
	Common Greenshank	<i>Tringa nebularia</i>	Grünschenkel	x	x	x	
	Green Sandpiper	<i>Tringa ochropus</i>	Waldwasserläufer	x	x		
	Wood Sandpiper	<i>Tringa glareola</i>	Bruchwasserläufer	x	x	x	
	Common Sandpiper	<i>Actitis hypoleucos</i>	Flußenläufer	x	x	x	
	Ruddy Turnstone	<i>Arenaria interpres</i>	Steinwälzer			x	
	Little Stint	<i>Calidris minuta</i>	Zwergstrandläufer	x			

	Curlew Sandpiper	<i>Calidris ferruginea</i>	Sichelstrandläufer	x			
	Dunlin	<i>Calidris alpina</i>	Alpenstrandläufer	x			
	Sanderling	<i>Calidris alba</i>	Sanderling	x			
	Ruff	<i>Philomachus pugnax</i>	Kampfläufer	x			
STERCORARIIDAE	Arctic Skua	<i>Stercorarius parasiticus</i>	Schmarotzerraubmöwe			x	
LARIDAE	Audouin's Gull	<i>Larus audouinii</i>	Korallenmöwe			x	
	Yellow-legged Gull	<i>Larus michaellis</i>	Mittelmeermöwe				x
	Lesser Black-backed Gull	<i>Larus fuscus</i>	Heringsmöwe	x		x	
	Grey-headed Gull	<i>Larus cirrocephalus</i>	Graukopfmöwe		x	x	
	Mediterranean Gull	<i>Larus melanocephalus</i>	Schwarzkopfmöwe			x	
	Black-headed Gull	<i>Larus ridibundus</i>	Lachmöwe	x			
	Slender-billed Gull	<i>Larus genei</i>	Dünnschnabelmöwe	x	x		
STERNIDAE	Gull-billed Tern	<i>Gelochelidona nilotica</i>	Lachseeschwalbe	x	x		
	Caspian Tern	<i>Sterna caspia</i>	Raubseeschwalbe	x	x	x	
	Lesser Crested Tern	<i>Sterna bengalensis</i>	Rüppellseeschwalbe			x	
	Sandwich Tern	<i>Sterna sandvicensis</i>	Brandseeschwalbe	x		x	
	Royal Tern	<i>Sterna maximus</i>	Königsseeschwalbe		x	x	
	Common Tern	<i>Sterna hirundo</i>	Flusseeschwalbe	x		x	
	Black Tern	<i>Chlidonias niger</i>	Trauerseeschwalbe	x			
	White-winged Tern	<i>Chlidonia leucopterus</i>	Weißflügelseeschwalbe	x			
	Wiskered Tern	<i>Chlidonias hybridus</i>	Weißbartseeschwalbe	x	x		
PTEROCLIDIFORMES	-	-	-	-	-	-	-
PTEROCLIDIIDAE	Chestnut-bellied Sandgrouse	<i>Pterocles exustus</i>	Braunbauchflughuhn	x			
COLUMBIFORMES	-	-	-	-	-	-	-
COLUMBIDAE	Speckled Pigeon	<i>Columba guinea</i>	Guineataube	x	x	x	
	Rock Dove	<i>Columba livia</i>	Felsentaube	x	x	x	
	Red-eyed Dove	<i>Streptopelia semitorquata</i>	Halbmondtäube	x	x		
	African Collared Dove	<i>Streptopelia roseogrisea</i>	Lachtaube	x			
	African Mourning Dove	<i>Streptopelia decipiens</i>	Brillentaube	x	x	x	
	Vinaceous Dove	<i>Streptopelia vinacea</i>	Röteltaube		x		
	Laughing Dove	<i>Streptopelia senegalensis</i>	Palmtaube	x	x	x	

	Black-billed Wood Dove	<i>Tutur abyssinicus</i>	Erzflecktaube		x		
	Namaqua Dove	<i>Oena capensis</i>	Kaptäubchen	x	x	x	
PSITTACIFORMES							
PSITTACIDAE	Rose-ringed Parakeet	<i>Psittacula krameri</i>	Halsbandsittich		x		
	Senegal Parrot	<i>Poicephalus senegalus</i>	Mohrenkopf		x	x	
CUCULIFORMES							
MUSOPHAGIDAE	Western Grey Plantain-Eater	<i>Crinifer piscator</i>	Schwarzschwanzlärmvogel		x		
CUCULIDAE	Senegal Coucal	<i>Centropus senegalensis</i>	Spornkuckuck	x	x		
STRIGIFORMES							
TYTONIDAE	Barn Owl	<i>Tyto alba</i>	Schleiereule	x			
	African Scops Owl	<i>Otus senegalensis</i>	Afrikanische Zwergohreule				
STRIGIDAE	Pearl-spotted Owlet	<i>Glaucidium perlatum</i>	Perlkauz		x		
	African Marsh Owl	<i>Asio capensis</i>	Kapohreule	x			
CAPRIMULGIFORMES							
CAPRIMULGIDAE	Long-tailed Nightjar	<i>Caprimulgus climacurus</i>	Schleppennachtschwalbe	x			
	European Nightjar	<i>Caprimulgus europaeus</i>	Ziegenmelker	x			
	Red-necked Nightjar	<i>Caprimulgus ruficollis</i>	Rothalsziegenmelker	x			
APODIFORMES							
APODIDAE	African Palm Swift	<i>Cypsiurus parvus</i>	Palmsegler		x		
	Little Swift	<i>Apus affinis</i>	Haussegler		x	x	
	Pallid Swift	<i>Apus pallidus</i>	Fahlsegler		x		
	White-rumped Swift	<i>Apus caffer</i>	Kaffernsegler			x	
COLIIFORMES							
COLIIDAE	Blue-naped Mousebird	<i>Urocolius macrourus</i>	Blaunackenmausvogel	x			
CORACIIFORMES							
ALCEDINIDAE	Malachite Kingfisher	<i>Alcedo cristata</i>	Malachiteisvogel	x	x		
	Pied Kingfisher	<i>Ceryle rudis</i>	Graufischer	x	x		
	Blue-breasted Kingfisher	<i>Halcyon malimbica</i>	Zügellist		x		
MEROPIDAE	Little Bee-Eater	<i>Merops pusillus</i>	Zwergspint	x	x		
	Blue-Cheeked Bee-Eater	<i>Merops persicus</i>	Blauwangenspint	x			
CORACIIDAE	Rufous-Crowned Roller	<i>Coracias naevius</i>	Strichelracke		x		
	Abyssinian Roller	<i>Coracias abyssinicus</i>	Senegalracke	x	x	x	

UPUPIDAE	Hoopoe	<i>Upupa epops</i>	Wiedehopf	x	x		
PHOENICULIDAE	Green Wood-Hoopoe	<i>Phoeniculus purpureus</i>	Baumhopf		x		
BUCEROTIDAE	African Grey Hornbill	<i>Tockus nasutus</i>	Grautoko		x		
	Red-Billed Hornbill	<i>Tockus erythrorhynchus</i>	Rotschnabeltoko	x	x	x	
PICIFORMES				-	-	-	-
CAPITONIDAE	Vieillot's Barbet	<i>Lybius vieilloti</i>	Blutbrustbartvogel	x	x		
	Bearded Barbet	<i>Lybius dubius</i>	Furchenschnabelbartvogel				
	Yellow-fronted Tinkerbird	<i>Pogoniulus chrysoconus</i>	Gelbstirn-Bartvogel		x		
PICIDAE	Grey Woodpecker	<i>Dendropicos goertae</i>	Graubrustspecht	x	x		
PASSERIFORMES				-	-	-	-
ALAUDIDAE	Chestnut-backed Sparrow Lark	<i>Eremopterix leucotis</i>	Weißwangenlerche	x			
	Black-Crowned Sparrow Lark	<i>Eremopterix nigriceps</i>	Weißstirnlernerche	x			
	Crested Lark	<i>Galerida cristata</i>	Haubenlerche	x	x	x	
	Short-toed Lark	<i>Calandrella brachydactyla</i>	Kurzzehenlerche	x			
HIRUNDINIDAE	Common Sand Martin	<i>Riparia riparia</i>	Uferschwalbe	x	x		
	Barn Swallow	<i>Hirundo rustica</i>	Rauchschwalbe	x	x	x	
	Red-chested Swallow	<i>Hirundo lucida</i>	Singschwalbe			x	
	Mosque Swallow	<i>Hirundo senegalensis</i>	Senegalschwalbe		x		
	House Martin	<i>Delichon urbicum</i>	Mehlschwalbe	x	x		
MOTACILLIDAE	Tawny Pipit	<i>Anthus campestris</i>	Brachpieper	x			
	Red-Throated Pipit	<i>Anthus cervinus</i>	Rotkehlpieper	x			
	Tree Pipit	<i>Anthus trivialis</i>	Baumpieper	x			
	White Wagtail	<i>Motacilla alba</i>	Bachstelze	x	x	x	
	Yellow Wagtail	<i>Motacilla flava</i>	Schafstelze	x	x	x	
PYCONOTIDAE	Common Bulbul	<i>Pycnonotus barbatus</i>	Graubülbül	x	x	x	
TURDIDAE	Bluethroat	<i>Luscinia svecica</i>	Blaukehlchen	x	x		
	Rufous-tailed Scrub-Robin	<i>Cercotrichas galactotes</i>	Heckensänger	x			
	Black Scrub Robin	<i>Cercotrichas podobe</i>	Rußheckensänger	x		x	
	African Stonechat	<i>Saxicola torquatus</i>	Afrikan. Schwarzkehlchen	x			
	Northern Wheatear	<i>Oenanthe oenanthe</i>	Steinschmätzer	x		x	
	Isabelline Wheatear	<i>Oenanthe isabellina</i>	Isabellsteinschmätzer	x			

CISTICOLIDAE	Tawny-Flanked Prinia	<i>Prinia subflava</i>	Rahmbrustprinie	x	x		
	River Prinia	<i>Prinia fluviatilis</i>	Flussprinie	x	x		
	Winding Cisticola	<i>Cisticola galactotes</i>	Schwarzrückenzistensänger	x	x		
	Zitting Cisticola	<i>Cisticola juncidis</i>	Cistensänger	x	x		
SYLVIIDAE	Grey-Backed Camaroptera	<i>Camaroptera brachyura</i>	Blökgrasmücke	x	x	x	
	Grasshopper Warbler	<i>Locustella naevia</i>	Feldschwirl	x			
	Savi's Warbler	<i>Locustella luscinoides</i>	Schlagschwirl	x			
	Aquatic Warbler	<i>Acrocephalus paludicola</i>	Seggenrohrsänger	x			
	Sedge Warbler	<i>Acrocephalus schoenobaenus</i>	Schilfrohrsänger	x	x		
	European Reed Warbler	<i>Acrocephalus scirpaceus</i>	Teichrohrsänger	x			
	African Reed Warbler	<i>Acrocephalus baeticatus</i>	Gartenrohrsänger	x	x		
	Great Reed Warbler	<i>Acrocephalus arundinaceus</i>	Drosselrohrsänger	x			
	Greater Swamp Warbler	<i>Acrocephalus rufescens</i>	Papyrusrohrsänger	x	x		
	Isabelline Warbler	<i>Hippolais opaca</i>	Isabellspötter	x			
	Common Chiffchaff	<i>Phylloscopus collybita</i>	Zilpzalp	x	x		
	Willow Warbler	<i>Phylloscopus trochilus</i>	Fitis	x			
	Senegal Eremomela	<i>Eremomela pusilla</i>	Graukappeneremomela		x		
	Northern Crombec	<i>Sylvietta brachyura</i>	Braunbauchsylvieta	x		x	
	Western Orphean Warbler	<i>Sylvia hortensis</i>	Orpheusgrasmücke	x			
	Common Whitethroat	<i>Sylvia communis</i>	Dorngrasmücke	x			
	Subalpine Warbler	<i>Sylvia cantillans</i>	Weißbartgrasmücke	x	x		
	Lesser Whitethroat	<i>Sylvia curruca</i>	Klappergrasmücke	x			
PLATYSTEIRIDAE	Senegal Batis	<i>Batis senegalensis</i>	Senegalschnäpper	x			
NECTARINIIDAE	Pygmy Sunbird	<i>Hedydipna platura</i>	Grünbrustnektarvogel	x	x		
	Variable Sunbird	<i>Cinnyris venustus</i>	Ziernektarvogel			x	
	Beautiful Sunbird	<i>Cinnyris pulchellus</i>	Elfennektarvogel	x	x		
LANIIDAE	Woodchat Shrike	<i>Lanius senator</i>	Rotkopfwürger	x	x		
	Southern Grey Shrike	<i>Lanius meridionalis</i>	Südlicher Raubwürger	x			
	Isabelline Shrike	<i>Lanius isabellinus</i>	Isabellwürger	x			
	Yellow-Billed Shrike	<i>Corvinella corvina</i>	Gelbschnabelwürger		x		
MALACONOTIDAE	Yellow-Crowned Gonolek	<i>Laniarius barbarus</i>	Papyruswürger	x	x		
	Brubru	<i>Nilaus afer</i>	Brubru	x			

	Black-Crowned Tchagra	<i>Tchagra senegalus</i>	Senegaltschagra			x	
	Sulphur-breasted Bush-shrike	<i>Telophorus sulfureopectus</i>	Orangebrustwürger		x		
DICRURIDAE	Fork-tailed Drongo	<i>Dicrurus adsimilis</i>	Trauerdrongo		x		
CORVIDAE	Pied Crow	<i>Corvus albus</i>	Schildrabe	x	x	x	
	Piapiac	<i>Ptilostomus afer</i>	Piapia		x		
STURNIDAE	Chestnut-bellied Starling	<i>Lamprotornis pulcher</i>	Rotbauchglanzstar				x
	Long-Tailed Glossy Starling	<i>Lamprotornis caudatus</i>	Langschwanzglanzstar	x	x	x	
	Greater Blue-Eared Starling	<i>Lamprotornis chalybaeus</i>	Grünflügelglanzstar	x	x		
BUPHAGIDAE	Yellow-Billed Oxpecker	<i>Buphagus africanus</i>	Gelbschnabelmadenhacker	x	x		
PASSERIDAE	House Sparrow	<i>Passer domesticus</i>	Haussperling	x		x	
	Sudan Golden Sparrow	<i>Passer luteus</i>	Goldspferling	x			
	Northern Grey-headed Sparrow	<i>Passer griseus</i>	Graukopfsperling		x	x	
PLOCEIDAE	Black-Headed Weaver	<i>Ploceus melanocephalus</i>	Schwarzkopfweber	x			
	Little Weaver	<i>Ploceus luteolus</i>	Zwergweber	x			
	Village Weaver	<i>Ploceus cucullatus</i>	Dorfweber	x		x	
	Red-billed Quelea	<i>Quelea quelea</i>	Blutschnabelweber	x	x	x	
	Yellow-Crowned Bishop	<i>Euplectes afer</i>	Tahaweben	x			
VIDUIDAE	Village Indigobird	<i>Vidua chalybeata</i>	Rotfußatlaswitwe		x		
	Cameroon Indigobird	<i>Vidua camerunensis</i>	Kamerunatlaswitwe				
ESTRILDIDAE	Red-Cheeked Cordon-Bleu	<i>Uraeginthus bengalus</i>	Schmetterlingsastrild		x	x	
	Black-Faced Quailfinch	<i>Ortygospiza atricollis</i>	Wachtelastrild	x	x		
	Red-Billed Firefinch	<i>Lagonosticta senegala</i>	Senegalamarant	x	x	x	
	Cutthroat Finch	<i>Amadina fasciata</i>	Bandamadine		x		
	Zebra Waxbill	<i>Amandava subflava</i>	Goldbrüstchen	x			
	African Silverbill	<i>Lonchura cantans</i>	Afrikanischer Silberschnabel	x		x	
	Bronze Mannikin	<i>Lonchura cucullata</i>	Kleinsterchen			x	
FRINGILLIDAE	White-Rumped Seedeater	<i>Serinus leucopygius</i>	Weißbürgelgirlitz			x	
TOTAL	256						