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# 3<sup>rd</sup> SESSION OF THE MEETING OF THE PARTIES TO THE AGREEMENT ON THE CONSERVATION OF AFRICAN-EURASIAN MIGRATORY WATERBIRDS (AEWA)

23 - 27 October 2005, Dakar, Senegal

## DRAFT INTERNATIONAL SINGLE SPECIES ACTION PLAN FOR THE NORTHERN BALD IBIS Geronticus eremita

#### INTRODUCTION

The Single Species Action Plan for the Northern Bald Ibis *Geronticus eremita* has been initiated by AEWA. The plan covers the global range of the species. The drafting of the plan was carried out by SEO/BirdLife Spain and has been compiled mainly by María J. Jiménez Armesto.

This final draft represents a version that had been circulated amongst Range States within the species' range, and all suggested amendments received through the official comments were incorporated. The Technical Committee reviewed the document at its 6<sup>th</sup> meeting in May 2005 and made several minor proposals, which were later included by the compiler. The Standing Committee at its 3<sup>rd</sup> meeting in July 2005 approved the draft single species action plan for submission to the MOP3.

### ACTION REQUESTED FROM THE MEETING OF THE PARTIES

The Meeting of the Parties is requested to endorse the single species action plan for the Northern Bald Ibis *Geronticus eremita* for further implementation.



# International Single Species Action Plan for the Conservation of the Northern Bald Ibis *Geronticus eremita*





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#### Milestones in the production:

- Experts workshop held in Madrid, January 04
- Draft version of action plan with products of the workshop, April 2004
- Contributions and comments from participants
- Last version to submit to AEWA Technical Committee April 2005

### Geographical Scope:

All world population of the species

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#### Acronyms

BirdLife International / BirdLife Middle East (BLI / BLME)

Food and Agriculture Organization of United Nations (FAO)

Fund for Integrated Rural Development Of Syria (FIRDOS)

Haut Commissariat àux Eaux et Fôrets et la Lutte contre la Desertification (HCEFLD)

International Advisory Group on Northern Bald Ibis (IAGNBI)

International Center for Agricultural Research in the Dry Areas (ICARDA)

**IUCN:** International Conservation Union

Ministry of Agriculture and Agrarian Reform (MAAR)

Ministry of Local Affairs and Environment (MLAE)

Parc National Souss Massa (PNSM)

Sociedad Española de Ornitología (SEO/BirdLife)

SSC: Species Survival Commission (of the IUCN)

Syrian Society for Conservation of Wildlife (SSCW)

The Arab Center for the Study of Arid zones and Dry lands (ACSAD)

The Royal society for the Protection of Birds (RSPB)

Doga Dernegi (DD) Natural Society (BirdLife Turkey)

#### **Executive Summary**

The Northern Bald Ibis *Geronticus eremita* has undergone a long history of decline over at least four centuries, having been distributed over much of North and North-East Africa and the Middle East. Two distinct populations have been identified which are genetically distinct. The main western population occurs in Morocco, where the population is now around 100 pairs. A relict population of two pairs persists in Syria, which provides a precarious opportunity to keep the eastern population going in a truly wild state. Turkish birds are now only semi-wild, but are still a very important genetic resource for a time when reintroduction methodology has been developed further.

It is thought that birds used to winter in Sudan, Eritrea, Saudi Arabia and Yemen. Post-1989 records in Saudi Arabia and Eritrea suggested that an undiscovered breeding colony remained in the Middle East.

The Northern Bald Ibis is still classified as critically threatened because of its small range and population. The improvement of the population in Morocco is very recent and mainly through conservation and management actions. Where this is missing the decline of a population appears dramatically like in Syria over the last 20 years.

The main threats for the species over the centuries have been a combination of direct prosecution but also the loss of steppe and unintensive agricultural areas. The main threats the species now faces are different in the countries where it still occurs.

In Morocco preventing the loss of feeding areas and disturbance to breeding sites are the most important priorities. Illegal buildings and disturbance close to the breeding cliffs and changes in farming on the feeding grounds are threats, which may have the most severe impact on the population.

In Syria there are even greater challenges although it may already be too late. Hunting is the main threat to the tiny population and there is the need to control land-use pressures and other local and regional awareness issues. There is an urgent need to learn where the birds overwinter to reduce potential threats there. Although Turkey has only a semi-wild population it has to be managed well to build up the genetic stock.

The Northern Bald Ibis is susceptible to pesticides and contaminated water sources, and particular attention to this is needed in all areas where the birds forage in all three countries.

The key priority for conservation is to ensure the protection of the Moroccan population, which has two sites where it occurs. The Souss-Massa National Park was designated specifically to protect nesting and feeding areas.

As main targets to increase the number of Northern Bald Ibis colonies in Morocco as well in Syria and Turkey were recognized:

- to maintain agriculture and grazing regimes in order to achieve sustainable exploitation of rangelands and halt advance of desertification processes
- to promote alternative sustainable grazing regimes and energy use, coupled with the promotion of socio-economic development of local communities

- to control firewood collection to prevent destruction or degradation of NBI feeding areas
- to stop hunting
- to control the construction of illegal buildings on or near to NBI breeding and feeding sites
- to reduce the risk of intoxication

Considerable progress has been made over recent years with methodology that should help with potential reintroduction attempts in future. Establishing a resident population is now a real possibility following work carried out in Austria. But there are still important challenges for getting a migratory population established, which may well prove to be possible in future. Further work in this area will be useful but much more detailed information on ecological requirements and previously occupied sites will be necessary.

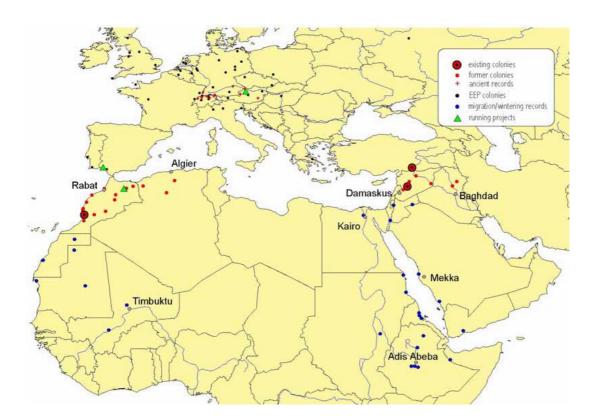
But this should not in any way distract from the top priorities in Morocco and in Syria to maintain areas of breeding and feeding habitat for these remaining known wild breeding population.

### 1- Biological Assessment

70-80 cm long and weighs 1000-1500g. The body is elongated and rowith a fairly long neck. The legs are short brownish red. Head and threare naked and deep red. The nape feathers are elongated. Juvenile bird to two years have feathers on head and neck which are greyish and she Data of historic colonies in the Alps (Switzerland, Germany, Austria) (GESNER 1555, overview in PEGORARO 1996 and 1999) which disappeared during 17 <sup>th</sup> century. Formerly widespread almost certainly throughout North Africa and into the Middle East (Morocco to Algeri	oat ls up ort.
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	a.
Turkey Syria, Iraq?) until recently in Turkey and Syria; wintering in	,
Arabia, Ethiopia and N-Somalia. Since the beginning of the 20 <sup>th</sup> centu	ry
two disjunct wild populations: western population in Morocco and east	stern
population in Turkey.	
Lives in semiarid arid rocky plains, but also cultivated fields and high	
altitude pastures and meadows. Nest and roosts in cliffs, often close to	)
watercourses or along the sea. It is a colonial breeder. Feeds on	
invertebrates, snails, small vertebrates. Sometimes in association to m	an
however very shy due to hunting and affected by disturbance.	
<b>Taxonomy</b> Aves-Ciconiiformes-Ciconidae_Threskiornithidae Threskiornithinae- <i>Geronticus eremita</i> L. 1758	
Population Since the beginning of the 20 <sup>th</sup> century sharp decline of the western an	nd
development eastern population.	ıu
Eastern population: Former records tell of thousand of birds (19 <sup>th</sup>	
century, DANFORD 1880, KUMMERLOEVE 1962); 3000 birds in Birecik	
1930, down to 400 in 1982, 5 pairs in 1986, 7 in 1987 and 1 left in 19	
(Akcakaya 1990). The wild colony was declared extinct in 1992	
(Akcakaya et al. 1992). Main cause of decline was the use of pesticide	
(DDT) and human disturbance, no hunting in Turkey but in Syria. In 2	2002
newly discovered colony with 7 birds which reproduce.	
Western population: many colonies in Morocco and Algeria, however	er
sharp decline in the early 20 <sup>th</sup> century. The last colony in Algeria	
disappeared in the late 80s. In Morocco in 1940 about 38 colonies, in 1975 15 and in 1989 3 colonies survived. Reasons for the decline were	2
human disturbance, hunting and the use of pesticides. Since the late 90	
the population in Souss Massa NP is stable and since 1999 increasing	
Status in 2004 420 birds)	`
<b>Distribution</b> Eastern population: migratory: The birds left the breeding grounds in	late
throughout the June/early July and returned February. Wintering grounds not well kn	
annual cycle but most likely the birds migrated south to NE Africa (Ethopia, Eritre	
Sudan). Syrian birds arrive in February and leave in June. The winteri	
grounds are not known. The migration of the juveniles is unknown bu	t
they probably migrated with their parents.	
Western population: dispersive and erratic, not much known and few winter data from Mauritania and even across the Sahara in Mali. Most	
birds left the breeding areas (Atlas) but stayed in Morocco. Breeding a	
confined to the fairly resident population in Souss Massa. Dispersion	
occur from September to January.	····
Survival and Survival: The Northern Bald Ibis is a long living species. In captivity	

productivity	birds reach an average of 20-25 years (oldest male 37y, oldest female 30y (Boehm 1999). As birds start reproduction is an age of 3-5 years the average age can be calculated with 10/15 years.  Productivity: Since 1994-2004 the reproduction rate per breeding pair varies from 0,6 to 1,6 (EL BEKKAY <i>et al.</i> 2003). Circumstances like time away from the nest when the chicks are young may have the biggest influence in the reproduction success (BOWDEN <i>et al</i> 2003).
Life history	Breeding: Seasonal pairs. Nest building start in February. Eggs laid in March to early April, incubation 24-28 days, fledging period 40-50 days, time to independence not known, age of maturity 3 years (in captivity). Both parents breeds and feed the chicks.
	Feeding: The NBI feeds on invertebrates (snails, scorpions, spiders, beetles, caterpillars, also earwigs and ants; crickets and locusts seem to play a minor role) and small vertebrates (lizards, small mammals, ground nesting birds). (Malin 1990)
	Outside breeding season: Nearly nothing is known about the life history outside the breeding season of wild colonies. Trials with satellite transmitters carried to obtain information on birds movements outside the breeding season
Habitat requirements	In contrast to other ibis species the NBI is a rather terrestrial bird. It lives in arid and semi arid steppe and plains with sparse vegetation and also (extensive used) pasture and farmland.  Important seems that the vegetation is sparse and not over 15-20cm high. Change in cultivation may lead to quick abandonment of feeding areas and nesting grounds (HIRSCH pers.). As the NBI is mostly probing for prey and not so much an optical hunter a soft surface seems to be vital (e.g. in riverbeds, farmland, sand, between small shrubs). Nesting habitat:
	The NBI is nesting in sea cliffs and cliff ledges or hollows inland (usually near a river) and will use artificial ledges. However the size and shape and covering of the ledges seems to be crucial.

Figure 1. Map of the distribution of the species.



### **Breeding information**

Breeding	Formerly breeding	Migration (period)	Non breeding
	(date of extinction)		visitor (period):
Morocco		Resident in Souss Massa, migrating in the Atlas (before extinct there)	
Algeria	1987-1990 (Fellous 2004)	Migrating	
Turkey	1989 date of extinction of wild population(Arihan 1999)	migrating (breeding from mid February to early August)	
Syria	breeding, (breeding season from Februrary –July). Recently rediscovered		
Germany	disappeared16th century (last report 1593)	migrating? (no data on breeding season and migration, but surely migrating)	
Austria	disappeared16th century (last report 1584)	migrating (no data on breeding season and migration, but surely migrating)	
Switzerland	disappeared16th century (last report 1535)	migrating (no data on breeding season and migration, but surely migrating)	

### Former distribution of Northern Bald Ibis in Europe (Alps Region)

Location	heard / written	bones	seen	Time
Switzerland				
Balm close to Günsberg (Kanton Solothurn)		x (more individuals, with bones from other species) not sure if moved		1941 (Stehlin)
Alt-Warburg bei Olten, Kanton Aargau		x (one specimen)		1400
Bad Pfäfers, Tamina Schlucht, Kanton St. Gallen	a hunter looking for Waldrapp nestlings has found a spring (is the story how this spring has been found!?)			1194- 1250?
Mariastein, Jura, south of Basle	A medical doctor F. Plattner is telling in his diary of a NBI "dinner party"			1564
Zurich	A guideline that it is forbidden to kill a NBI			1535
Germany				
Breisach am Rhein			Travel report of a breeding colony of Ladislaus baron of Zierotin	1593
Kelheim	cliffs are described as breeding sites (V. Cordus)		?	1585
Passau	cliffs are described as breeding sites (V. Cordus)		?	1585
Überlingen (Bodensee)			Extreme cold days in March, NBI could be caught by hand	1481
Austria				
Salzburg	Prohibition to catch, hunt, shoot young ibises		Common breeding bird	1544,1558 1578,1584
Graz			Breeding colony	
Area around <b>Danube</b> and <b>Save</b>	Description by locals		?	

### 2 – Available key information

Table 2. Population figure

Country	Breeding no.	Quality	Year(s) of the estimate	Breeding Population trend in the last 10 years (or 3 generations)	Quality	Migrating or Non Breeding visitor	Quality	Year(s) of the estimate	Baseline population	References
Morocco	94 pairs		2004	Stable and increasing						Ribi, M., El Bekkay, M., Oubrou, W., Smith, K. 2004
Syria	3 pairs		2003	Unknown only discovered in 2002						Bowden 2003, Serra 2003

Table 3. Knowledge on habitat, diet and occurrence of the Northern Bald Ibis in Inportant Bird Areas and Protected Areas

Type of		Breeding		1	Non Breeding			
Knowledge		C						
_	Morocco	Turkey	Syria	Morocco	Turkey	Syria		
Habitat and diet								
- Habitat use								
- Diet								
Site Protection								
- Number of IBAs	1	0		1				
where the species								
breeds								
- Proportion of the	100 %	0	0	100 %	0	0		
population in								
IBAs								
- Proportion of the	70 %		0			0		
national								
population in								
protected areas								

#### 3 – Threats

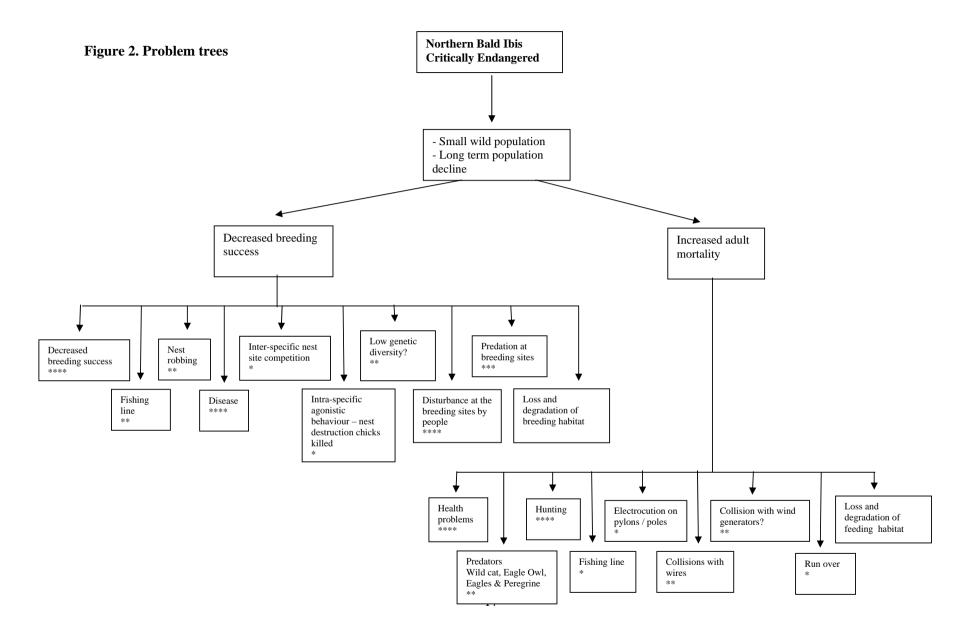
The main threats of the species are described in the following table, combined for the population in Morocco, Syria and Turkey

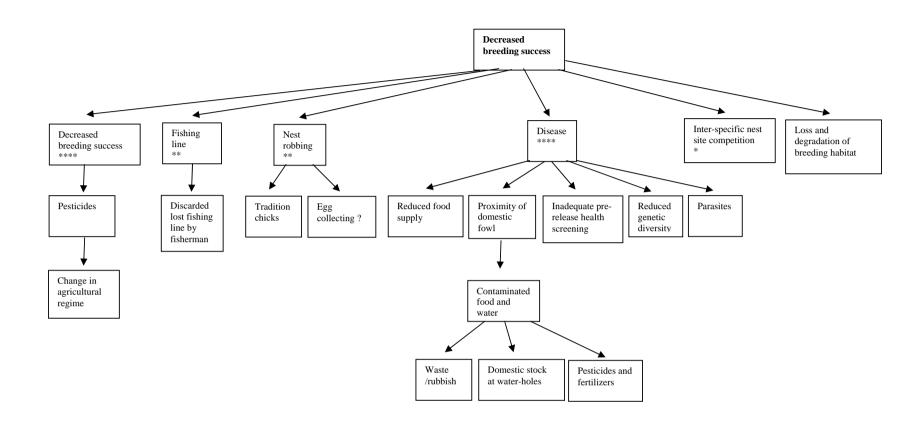
**Table 4.1** The importance of threats resulting in a reduction in breeding success at the national level for Morocco, Syria and Turkey. The threats are ranked relative to each other (-1: a threat believed to have a negligible impact, -2: a threat believed to have a medium impact, -3: a threat believed to have a high impact and -4: a threat believed to have a critical impact and that needs to be addressed immediately). Threats are coded according to the IUCN SSC SiS Threats Authority files. Only countries containing wild and semi-wild populations were included in the threat analyses. Countries in which release programmes are proposed should use the threats shown in the executive summary as a starting point for undertaking feasibility assessments for release programmes.

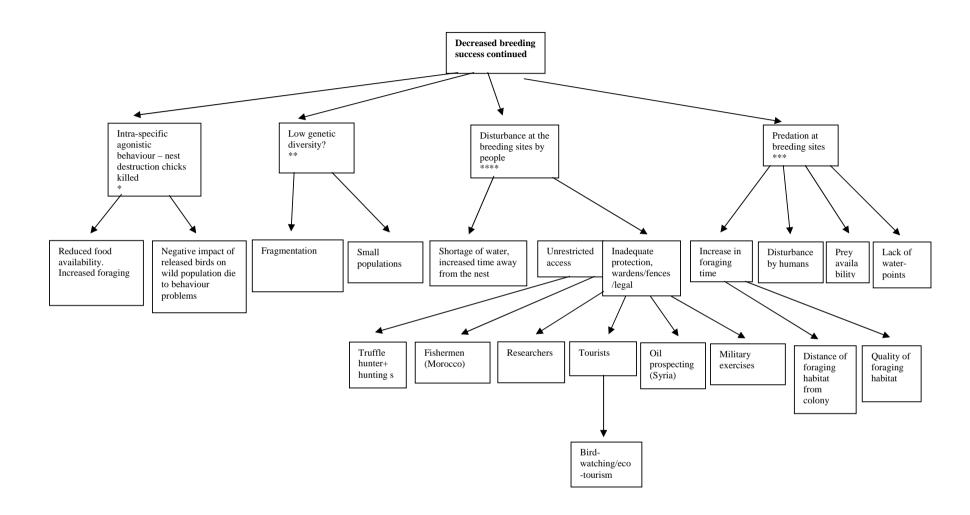
			Countries	
Threat	Threats reducing breeding success	Morocco	Turkey	Syria
code				
1	Loss/degradation of breeding habitat			
1.4.3	Illegal buildings	-4	0	0
1.8	Falling down of cliffs	-2	-2	-1
1.3.1	Mining -extraction of cliffs	0	0	-1
1.4.6	Flooding nesting places by reservoirs	-1	-2	0
10.6	Military exercises	0	0	-2
1.1	Loss/degradation of feeding habitat		-2	
1.1.5	Abandonment	-3	-1	0
1.1.4	Overgrazing	-3	0	-4
1.1.1	Greenhouse crops	-4	-2	0
1.1.1	Irrigated farming barely	-4	0	0
1.3.3.1	Firewood collection	-1	0	-4
7.1	Drought	-2	0	-3
1.4.6	Flooding feeding areas	-1	-2	0
10.1	Tourism development	-4	0	0
1.4.2	Increasing settlements	-2	0	- 4

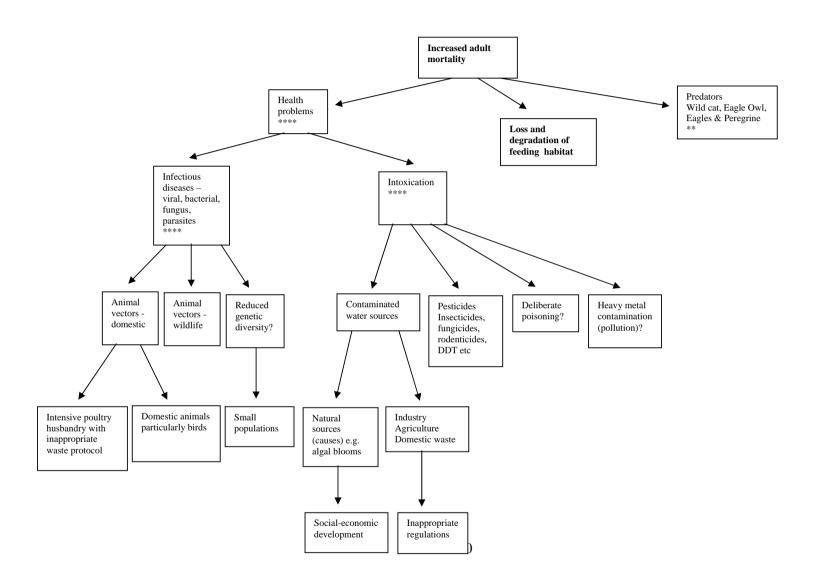
**Table 4.2** The importance of threats resulting in a reduction in adult survival at the national level for Morocco, Syria and Turkey. Threats are coded according to the IUCN SSC SiS Threats Authority files. (-1: a threat believed to have a negligible impact, -2: a threat believed to have a medium impact, -3: a threat believed to have a high impact and -4: a threat believed to have a critical impact and that needs to be addressed immediately). Only countries containing wild and semi-wild populations were included in the threat analyses. Countries in which release programmes are proposed should use the threats listed in the executive summary as a starting point for undertaking feasibility assessments for release programmes.

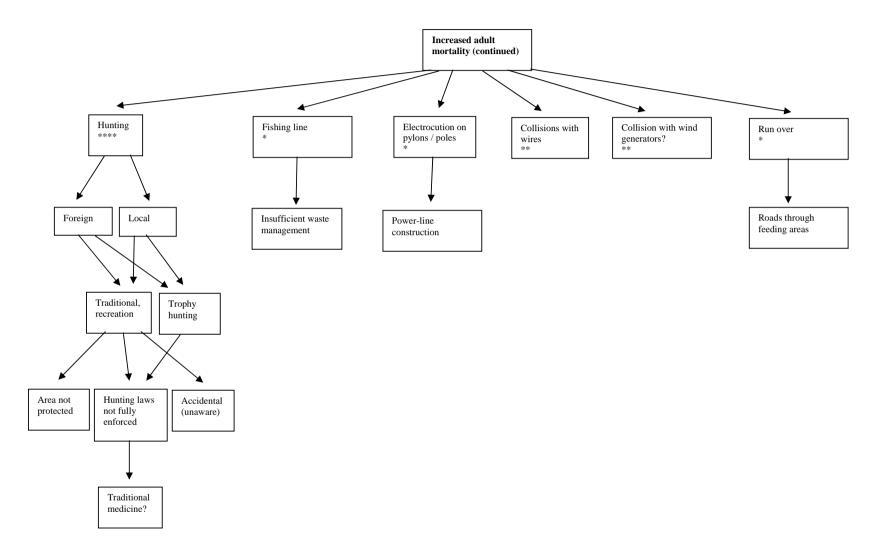
			Countries	
Threat code	Threats reducing adult survival	Morocco	Turkey	Syria
	Human activities			
3.5	Nest robbing	-1	0	- 2
10	Disturbance			- 3
10	Unrestricted access			
10.1	Tourists	-2	-2	-2
10.1	Bird-watching	-2	-1	-2
1.3.1	Oil prospecting	0	0	- 3
10.6	Military	-2	0	0
1.3.2.1	Fishermen	-3	0	0
3.1.1	Truffle hunters	0	0	-4
6.2.6	Discarded fishing line	-2	-1	0
8.2	Predation at breeding sites			- 2
10.7	Disturbance by humans	-2	-1	- 4
8.5	Disease			- 4
8.5	Contaminated food & water	-2	-3	- 3
1.1.4	Proximity of livestock	-1	-1	- 3
10.2	Inadequate pre-release health screening	-3	-3	0
8.5	Intensive poultry unit	-4	-1	- 3
1.1.4	Domestic animals (especially birds)	-1	-1	- 3
6	Inappropriate waste disposal			
6.2.3	Industrial	-1	-1	
6.2.1	Agricultural	-2	-1	
6.2.2	Domestic	-1	-1	- 2
6.2.6	Fishermen	-3	-1	0
6.2.1	Application of pesticides	-2	-3	- 3
4.1.2.3	Deliberate poisoning	-1	0	- 1
3	Shooting by hunters	-2	-1	- 4
4.2.1	Erection of pylons/electric poles	-1	-1	-1
4.2.1	Electric cables	-3	-2	- 1
4.2.3	Wind generators	-1	0	0
1.4	Roads through feeding areas	-1	-1	- 2
	Reduced food supply			- 4
6	Pesticides	-2	-3	- 3
1.2.2	Change in agriculture	-3	-2	-2

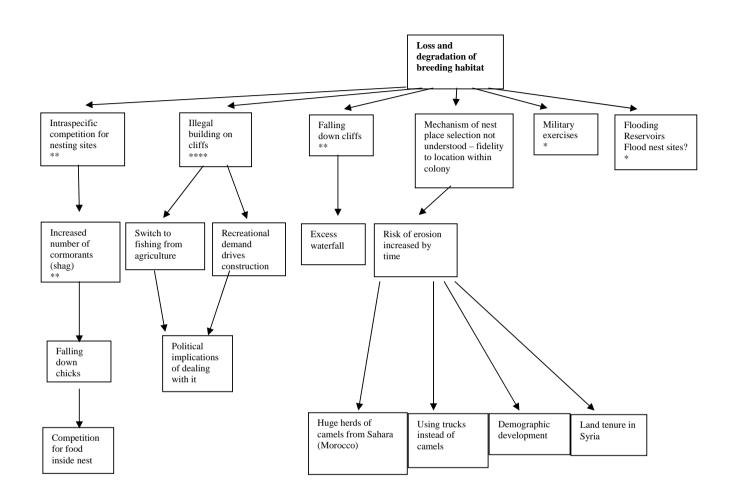


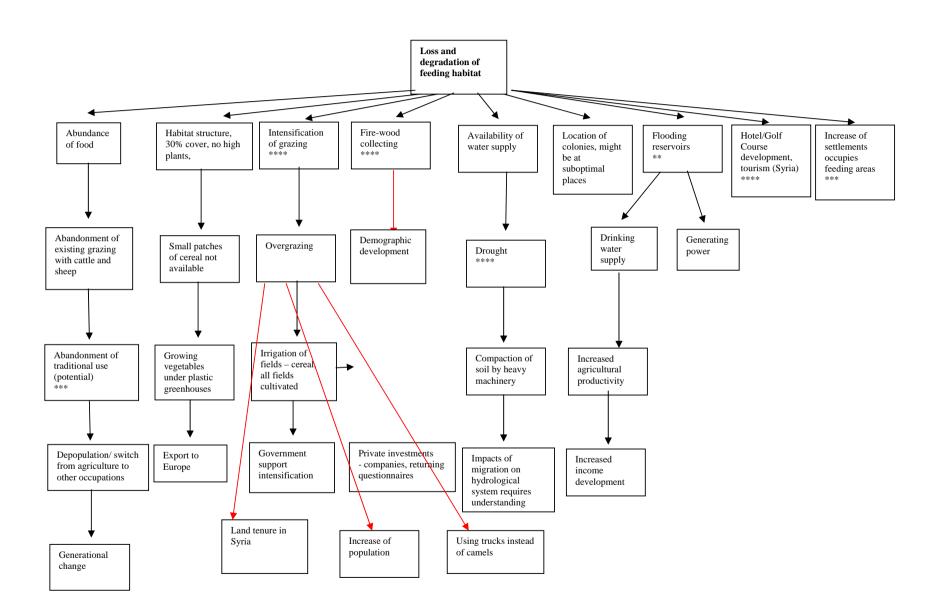












### 4. – Policies and legislation relevant for management

Table 5. International conservation and legal status of the species.

World Status	European status	SPEC category	EU Birds Directive Annex	Bern Convention Annex	Bonn Convention Annex	African-Eurasian Migratory Waterbird Agreement	Convention on the International Trade in Endangered Species
Critically Endangered				Annex II	Annex 1	Included in list	Annex 1

### - National policies, legislation and ongoing activities

Table 6. National conservation and legal status

Country	Status in	Legal protection	Year of protection status	Penalties for illegal killing	Highest responsible
	national Red	from killing		or nest destruction	authority
	Data Book				
Morocco		The main	National Park created in		HCEFLD
		population	1991		
		included in the	Tamri area is Site		
		Souss Massa	d'importance biologique		
		National Park	et ecologique		
Syria		There is a hunting	Decree n. 28 issued in		
		moratorium since	1967 by the Syrian Min		
		early 1990s - lack	of Agric, aimed at		
		of enforcement	protecting several birds		
		makes this	considered beneficial to		
		regulation	agriculture, includes NBI		
		uneffective	(notmentioned, description		
			quite clear)		
Turkey	CR	Hunting Law		2.500.000.000 TI (1850\$)	Min of Env and
					Forestry

Table 7. Site (and habitat) protection and research

Country	Percentage of	Percentage of	Percentage of	Percentage of	Reserch
•	population included	population included	population included	population included	carried out in
	in IBAs	in SPAs	in Ramsar sites	in national	the last 5 years
				protected areas	
Morocco	100%			70%	Intensive monitoring of the breeding and feeding sites at the PNSM and Tamri site (by PNSM team and RSPB/SEO
Syria	0			note: a proposal to establish a protected area including the whole ibis breeding area is under process at MAAR	Habitat use and diet, human disturbance and threats, breeding cycle, search for undiscovered colonies, surveying felt needs of locals (unpubl. data, Serra et al.)

Table 8. Recent conservation action and attitude towards the species

Country	National protection plan for the species	Is there a national Northern Bald Ibis project / working group?	Is there a national survey / monitoring programme	Is there a monitoring programme in protected areas	Routines for informing the responsible authorities regarding nesting areas and nest sites	Conservation efforts over the last ten years	General attitude towards the species
Morocco		The projet Ibis chauve at the PNSM, carried out by the Park team, RSPB and SEO since 1994	Not carried by the national administration, but the project in place covers such a role	The mentioned project Ibis chauve at PNSM	The PNSM informs the Regional authority and the authority in Rabat (central government)	Intense conservation project at the PNSM, including work with local people living near the colonies (by PNSM/SEO)	Government is very willing to conserve the species, the local people attitude is improving as a consequence of sustainable development projects
Syria		Palmyra project staff (MAAR staff and local community of Palmyra) – increasing interest of SSCW	Not at the moment	?		Conservation programme set in place by Palmyra project since the discovery, in April 2002 (by RSPB)	Locally the people seem to start of being aware of the importance of the birds and the potentials for developing eco-tourism

#### **Current Northern Bald Ibis projects.**

#### Austria

1 – Since 1997 experiment for keeping a self sustaining group of NBI (not a reintroduction yet)

2 - Teaching NBI a suitable migration route (N7S Alps) www.waldrapteam.at

#### Spain

Started in 2002 similar to 1 (study of different release techniques in south Western Spain Objective.: see if a free flying colony is self sustaining all year in this area (not a reintroduction)

#### Morocco (wild population)

1994 NBI Conservation project
Research-monitoring /work with local people
Carried out in Souss Massa National Park and Tamri area
National Park/BLI/RSPB/SEO

#### Morocco (captive population)

Mezguitem (site for project)
Proposed reintroduction
Established captive population on site
Birds from Munich Zoo and other zoos (including Rabat)
Another aviary built
Project still moving ahead

#### Turkey (semi wild population)

NBI conservation project:

Birecik

RSPB/DD/Min of Environment and Forestry

Establish contact with Turkish Zoos

Increasing numbers of BI

Restart migration

Make the area more suitable for the birds

Husbandry +site

Educate local people, especially children

Semi-wild population

#### **Syria**

2002/03 Palmyra project (FAO / MAAR / Italian Cooperation)

aimed at developing first operative reserve in the country (Al Talila Reserve), through promotion of rangeland rehabilitation and biodiversity conservation. Discovery of relict ibis colony done by Palmyra project in Mar 2002; the project was flexible enough to conserve and protect this colony during breeding seasons 2002, 2003 and 2004. Ibis colony 50 Km outside nearest PA (Al Talila)

BirdLife / RSPB and AEWA have raised funds to continue some aspects of the project (ie, satellite tagging) in breeding season 2004.

Palmyra project is terminating in June 2004. Complete uncertainty about who will continue the work of Palmyra project, and who will support financially conservation activities needed for next breeding seasons

Flexible enough to conserve this colony

### Somalia

SEO 2004 planned a survey for Northern Bald Ibis, funded by AEWA. Cancelled due to political situation in country EEP + SSP + Japan

#### **International Research contribution**

- Three separately managed captive populations
- Three separate studbooks
- Genetics research project initiated. E+W population first look
- IAGNBI (International Advisory Group on Northern Bald Ibis) acts as a coordinating mechanism at this point in time. It could act as a species working group.

### 5 – Framework for Action

### Goal

Increase the number of Northern Bald Ibis colonies

### Purpose

To conserve the Northern Bald Ibis by securing the wild colonies, increasing the number of birds and improving our understanding of their needs.

	Results											
Result 1 Breeding	Result 2 Provision of	Result 3 The impact of the introduction	Result 4 The level of	Result 5 A	Result 6 Discarded	Result 7 A captive	Result 8 The	Result 9 Techniques	Result 10 Risk of infection			
success, inter and intra specific competition, and predation monitored at all exiting breeding colonies. ***	uncontaminated fresh water sources close to breeding sites maintained and improved. + managing existing reservoirs in accordance with ibis needs (Syria) ***	the introduction of new birds to existing breeding colonies researched in captivity during the breeding season. *	genetic variation within the captive, semi- wild and wild populations assessed. **	comprehensive health screening conducted on all birds prior to reintroduction. ***	fishing line and other potentially dangerous debris to be collected and disposed of safely. *	population maintained with health, inbreeding and age structure managed. ***	conservation of the Northern Bald Ibis through international coordination and cooperation promoted by the International Advisory Group for the Northern Bald Ibis (IAGNBI). ****	for the establishment of new colonies by reintroduction investigated.	infection disease reduced ***			

	Objectively Verifiable Indicators (OVI)										
OVI 1	OVI 2	OVI 3	OVI 4	OVI 5	OVI 6	OVI 7	OVI 8	OVI 9	OVI 10		
	Availability										
n. chicks	of						easier				
fledged	freshwater						access to				
successfully	and						funding				
/ breeding	amphibian						needed for				
pairs	preys is						conservation				
	ensured						of syrian				
	during						ibises;				
	every										
	breeding						medium-				
	season						term project				
							approved				
							and funded				
							aimed at				
							conservation				
							of Syrian				
							ibises				

	Means of Verification (MOV)										
MOV 1	MOV 2	MOV 3	MOV 4	MOV 5	MOV 6	MOV 7	MOV 8	MOV 9	MOV 10		
Monitoring breeding	Surveying and monitoring occurrence of freshwater and status of reservoirs at different stages of each breeding season						Surveying level of funding and support in Syria in breeding years 2005 and later ones				

	Results cont 1.										
Result 11	Result 12	Result 13	Result 14	Result 15	Result 16	Result 17	Result 18	Result 19	Result 20		
Risk of	Reduce	Hunting	Risks reduced	Building on or	Reservoir	Agriculture and	Collection	Socio-	Habitat		
intoxication	impact of	stopped ****	related to	near to NBI	construction	grazing regimes	of firewood	economic	requirements,		
reduced ****	predators *		electric wires	breeding and	affecting	maintained	controlled to	factors	food		
			and collision	feeding sites	feeding and	reformed in order	prevent	driving land	availability		
			*	restricted. ****	breeding sites	to achieve	destruction	use changes	and foraging		
					controlled. *	sustainable	or	investigated	ecology in		
						exploitation of	degradation	and	the current		
						rangelands and	of NBI	addressed in	range and		
						halt advance of	feeding	partnership	release trial		
						desertification	areas. ****	with local	sites		
						process . (SYR to	(MOR +	communities	researched		
						provide suitable	SYR)	and	and		
						feeding areas.		stakeholders	compared.		
						****		Promotion	***		
						(MOR,SYR,		of			
						TUR)		alternative			
								sustainable			
								grazing			
								regimes and			
								energy use,			
								coupled with			
								promotion of			
								socio-			
								economic			
								developmnet			
								of local			
								community.			
								****			

	Objectively Verifiable Indicators (OVI) cont. 1											
OVI 11	OVI 12	OVI 13- n.	OVI 14	OVI 15	OVI 16	OVI 17	OVI 18	OVI 19	OVI 20			
		birds shot										
		down per				Vegetation	Vegetation	Present land	Preparation			
		breeding				coverage	coverage	use	of sound			
		season				increaased or	increaased	regulation is	articles to be			
		- n.				n. species of	or n.	reformed in	submitted to			
		attempts of				shrubs	species of	order to	scientific			
		ibis killing				increased	shrubs	attain	and			
		per					increased	sustainability	conservation			
		breeding					or n. of	by	journals			
		season					locals	traditional				
		- n. of					using	users at ibis				
		hunters					alternative	breeding				
		stopped per					source of	grounds				
		breeding					energy					
		season					increased					

			Mea	ans of Verifica	ation (MOV) con	t. 1			
MOV 11	MOV 12	MOV 13 Data collected in the field by rangers and guards	MOV 14	MOV 15	MOV 16	MOV 17  Surveying and monitoring scheme of rangeland species and relative abundance	MOV 18  Surveying and monitoring scheme of rangeland species and their relative abundance and of energy use by locals	MOV 19 Surveying and monitoring the process of reform	MOV 20  Data publication

### 6 – Activities by country.

**Coast:** \*:0-5,000 \$, \*\*:50001-15,000 \$, \*\*\*: 15,001 – 30,000 \$ and

\*\*\*\*: > 30,000\$

Priority (for results): \* : low importance

\*\* : medium importance

\*\*\* : high importance

\*\*\*\* : critically important

### Morocco

Result	Activity		Agencies	Timescale	Cost					
1. Breeding success, in	nter and intra specific cor	npetition, and predation	monitored at all exiting l	oreeding colonies. ***						
	1.1 To establish and tra	1.1 To establish and train a network of wardens to monitor breeding colonies.								
			PNSM, SEO, RSPB	Ongoing	**					
	1.2 To provide monitor	ing equipment e.g. binoc	ulars, telescopes, vehicle	es etc. for use by warden	S.					
			RSPB, SEO	Oct.2005	*					
	1.3 To establish a unifo	rm scientific protocol fo	r monitoring breeding co	olonies.						
			PNSM, RSPB	Ongoing	-					
2. Provision of unconta	2. Provision of uncontaminated fresh water sources close to breeding sites maintained and improved ***									
	2.1 To create new water	r points where required.								
			RSPB, PNSM	Ongoing	-					
	2.2 To ensure regular maintenance and cleaning of water points.									
			RSPB, PNSM	Ongoing	-					
3. The impact of the in	troduction of new birds t	<u> </u>	1	, ,	eason. *					
	3.1 To identify suitable	institutions and research	partners to manipulate	captive colonies.						
			EAZA, IAGNBI	March .2006	***					
	3.2 To carry out the res	search required to invest	igate the impact							
			EAZA, IAGNBI,	March.2006	***					
			Zoos, Research							
			institutions.							
4. The level of genetic	variation within the capt									
	4.1 To develop a proto	col for assessing genetic								
			IAGNBI	March 2006						
	4.2 To identify suitable	e institutions and collect								
			IAGNBI	Oct.2006						

Result	Activity		Agencies	Timescale	Cost
	4.3 To evaluate any ex	isting data on colony into	erference by introduced	birds e.g. Birecik.	
			IAGNBI, EAZA,	March 2006	
			Research Institutions		
5. A comprehensive he	ealth screening conducted	d on all birds prior to rein	ntroduction. ***		
	5.1 To establish a proto	col of health screening f	or Northern Bald Ibis pri	or to reintroduction.	
			IAGNBI, IOZ, Jerez	March .2006	*
			Zoo, Veterinary		
			Institutions.		
	5.2 To conduct a diseas	e risk analysis as part of	<u> </u>		
			IUCN SSC	May 2006	**
			Reintroduction SG,		
			IAGNBI		
	5.3 To build capacity in	Turkey and Morocco or			
			PNSM, RSPB, IOZ,	March 2006	**
			Veterinary		
			institutions.		
	5.4 To provide equipme	ent and materials to cond			
			PNSM, RSPB,	March 2006	***
			Veterinary		
			institutions.		
6. Discarded fishing li	ne and other potentially of				
	6.1 To ensure wardens	include fishing line and			T :
			PNSM	Ongoing	*
	6.2 To educate fisherm	en by informal meetings			ng debris.
			PNSM, RSPB, Local	March 2006	*
			NGOs		
7. A captive populatio	n maintained with health				
		intain separate captive E	astern and Western popu	lations until further rese	arch clarifies their
	relationship.	T	T	1	
			EAZA, IAGNBI,	Ongoing	*
			Zoos		

Result	Activity		Agencies	Timescale	Cost				
	7.2 Conduct genetic res	7.2 Conduct genetic research to clarify the relationships between the Eastern and Western populations.							
			EAZA, IAGNBI,	Oct.2006	*				
			Zoos, Research						
			Institutions						
	7.3 Increase the number	r of the captive Eastern p	opulation to 200 – 250 b	oirds.					
			EAZA, IAGNBI,	March.2006	**				
			Zoos						
	7.4 Investigate other No	orthern Bald Ibis holders	for the Eastern population						
			EAZA, IAGNBI,	March.2006	**				
			Zoos						
	7.5 Investigate the original	in of all Eastern population							
			EAZA, IAGNBI,	March 2006	**				
			Research Institutions.						
	n of the Northern Bald Ibis tl	rough international coor	dination and cooperation	n promoted by the Inter	national Advisory Group				
for the Northern Ba	ald Ibis (IAGNBI). ****								
	8.1 To obtain the endor	sement of AEWA and ot	her appropriate bodies for	or IAGNBI as the desig	gnated lead coordinating				
	body.								
			IAGNBI, AEWA,	Ongoing					
					*				
			IUCN SSC, BirdLife,		*				
			RSPB						
		BI as both a group of tech	RSPB						
	8.2 To maintain IAGNI future range states of the		RSPB nnical experts and govern	nmental representatives	s from all current and				
	future range states of th	e Northern Bald Ibis.	RSPB nnical experts and govern	nmental representatives Ongoing	s from all current and				
	future range states of th		RSPB nnical experts and govern IAGNBI ional Northern Bald Ibis	nmental representatives Ongoing s action plans where ap	s from all current and  * propriate.				
	future range states of the 8.3 IAGNBI to promote	te Northern Bald Ibis.  the the development of Nat	RSPB nnical experts and govern IAGNBI ional Northern Bald Ibis IAGNBI	Ongoing action plans where ap March 2006	s from all current and  * propriate.  **				
	future range states of the 8.3 IAGNBI to promote	e Northern Bald Ibis.	RSPB nnical experts and govern IAGNBI ional Northern Bald Ibis IAGNBI nation exchange with the	Ongoing action plans where ap March 2006 Southern Bald Ibis Wo	* propriate.  ** orking Group (SBIWG).				
	8.3 IAGNBI to promote  8.4 IAGNBI to maintain	e the development of Nat n cooperation and inform	RSPB Inical experts and government of the second se	Ongoing action plans where ap March 2006	s from all current and  * propriate.  **				
9. Techniques for t	8.3 IAGNBI to promote  8.4 IAGNBI to maintain the establishment of new color	te Northern Bald Ibis.  The the development of Nation of	RSPB  Inical experts and government of the second s	Ongoing Saction plans where apple March 2006 Southern Bald Ibis Wood	s from all current and    *				
9. Techniques for t	8.3 IAGNBI to promote  8.4 IAGNBI to maintain the establishment of new color	e the development of Nat n cooperation and inform	RSPB  Inical experts and government of the second s	Ongoing Saction plans where apple March 2006 Southern Bald Ibis Wood	s from all current and    *				
9. Techniques for t	8.3 IAGNBI to promote  8.4 IAGNBI to maintain the establishment of new color	te Northern Bald Ibis.  The the development of Nation of	RSPB  Inical experts and government of the second s	Ongoing Saction plans where apple March 2006 Southern Bald Ibis Wood	s from all current and    *				

Result	Activity	Agencies	Timescale	Cost
		conservation &		
		research institutions		
	9.2 To develop techniques (	nodel) for assessing suitable release sites.		
		IAGNBI, research	Feb. 2006 - 2007	***
		institutions		
	9.3 To investigate captive c	olony splitting as a potential technique.		
		IAGNBI, Zoos,	Feb. 2006	***
		Research institutions		
	9.4 To ensure that no reintro	ductions take place without full consultation	n with IAGNBI and th	e IUCN SSC
	Reintroduction specialist gr	oup.		
		IAGNBI, IUCN SSC	Ongoing	*
		Reintroduction SG.		
10. Risk of infectio	n disease reduced ***			
	10.1 Veterinary / post-morte	m protocol assured for any sick or dead bir	d	
		IAGNBI, IOZ, Jerez	March.2006	**
		Zoo, Veterinary		
		Institutions.		
	10.2 To build veterinary cap	acity in Morocco, Syria and Turkey for pos	t-mortem work.	
		PNSM, RSPB, IOZ,	Ongoing	**
		Veterinary		
		institutions.		
	10.3 To provide equipment	and materials to conduct veterinary / post-m	ortem work.	
		PNSM, RSPB, IOZ,	Ongoing	**
		Veterinary		
		institutions.		
	10.4 Standardised assessme	nt of risks made in each country (domestic a	and wildlife)	
		RSPB, LAS.VET,	Oct 2006	**
		PNSM		
	10.5 Appropriate waste prot	ocol at intensive poultry units it is assured i	n all known feeding ar	eas
		PNSM	Dec 2006	*
	10.6 Douira poultry unit rel	ocated		

Result	Activity		Agencies	Timescale	Cost
		Pî	NSM	06	**
11. Risk of intoxication	n reduced ****				
	11.1 Local farmers que	stioned about use of pesticid	les.		
		Pî	NSM, RSPB	06	*
	11.2 Meetings with far	ners, teachers etc to raise av	vareness of risks of p	pesticides used.	
		Pî	NSM, RSPB	06	
	11.3 To identify key fo	raging areas.			
		Pî	NSM, RSPB	March 2006	*
	11.5 Maintain water pro	ovisioning points near colon	ies (Mor).		
		O	ngoing		
	11.6 Veterinary / post-ı	nortem protocol assured for	any sick or dead bir	d	
		IA	GNBI, IOZ, Jerez	March 2005	**
		Zo	oo, Veterinary		
		In	stitutions.		
	11.7 To build veterinar	y capacity in Morocco, Syria	a and Turkey for pos	st-mortem work.	
		Pî	NSM, RSPB, IOZ,	Ongoing	**
			eterinary		
			stitutions.		
	11.8 To provide equipm	nent and materials to conduc	ct veterinary / post-m	ortem work.	
			NSM, RSPB, IOZ,	Ongoing	**
		Ve	eterinary		
		in	stitutions.		
13. Hunting stopped **					
	13.3. Signboards placed	l in all feeding areas (Syria	& Turkey), maintain	ed (Morocco).	
14. Risks reduced relat	ed to electric wires and c				
	14.1. Poles are low-risk	of electrocution design (Mo		1	
		M	IN E and F	06	**
	14.2. Increasing visibili	ty of electric wires in feedir		irecik)	

Result	Activity		Agencies	Timescale	Cost
			MIN OF ENERGY		
15. Building on or nea	r to NBI breeding and fee	ding sites restricted. ***	*		
	15.1 Stop the illegal co	nstruction of grottes at o	r near breeding and roosti	ng sites.	
	15.2 Restrict and consu	lt with IAGNBI on all to	urist and hotel developme	ents.	
		us for all breeding and fo Tifnit – MOR, Palmyra	eeding areas (best designa -SYR, + ?TUR)	tion to be determined)	in partnership with local
	15.4 Develop a manage	ement plan for Tamri and	Palmyra in partnership v	with local communities.	
	15.5 Initiate training an	d provide equipment for	staff to implement manag	gement plans.	
16. Reservoir construc	tion affecting feeding and				
	16.1 Ensure consultation	n with IAGNBI at early	planning stage of all futur	re developments potent	ially effecting NBI.
17. Agriculture and gr	azing regimes maintained	/altered to provide suitab	le feeding areas. ****		
18. Collection of firew	vood controlled to prevent	destruction or degradati	on of NBI feeding areas.	****	
19. Socio-economic fa	ctors driving land use cha	inges investigated and ac	ldressed in partnership wi	th local communities ar	nd stakeholders. ****
20. Habitat requiremen	nts, food availability and I	foraging ecology in the c	urrent range and release t	rial sites researched and	compared. ***
21. Disturbance by mi be discussed at draft st	litary firing range reduced tage)	l.(suggested for MOR –	Souss-Massa*) - not fully	discussed, but option of	f moving firing range to

## Syria

Result	Activity		Agencies	Timescale	Cost
1. Breeding success	s, inter and intra specific cor	npetition, and predation	monitored at all exiting b	preeding colonies. ***	
	1.1 To establish and tra	in a network of wardens	to monitor breeding colo	onies.	
			MLAE, MAAR,	Ongoing	*
			SSCW, BLI / BLME		
	1.2 To provide monitor	ing equipment e.g. binoc	culars, telescopes, vehicle	es etc. for use by warder	ns.
			MLAE MAAR,	Oct.2006	*
			SSCW, RSPB, BLI /		
			BLME, donors		
	1.3 To establish a unifo	erm scientific protocol fo	r monitoring breeding co	lonies.	
			RSPB	Ongoing	-
<ol><li>Provision of unce</li></ol>	ontaminated fresh water sou	rces close to breeding sit	tes maintained and impro	ved ***	
	2.3 To investigate the h	ydrology of key availabl	le sources of water.		
			MLAE, MAAR,	Oct.2006	*
			SSCW, ACSAD, BLI		
			/ BLME		
	2.4 To make recommer	dations to local authorit	ies on best practices for r	nanaging key available	water sources.
			ACSAD, BLI /	March 2006	*
			BLME		
<ol><li>The impact of the</li></ol>	e introduction of new birds	to existing breeding colo	nies researched in captiv	ity during the breeding	season. *
	3.1 To identify suitable	institutions and research	n partners to manipulate of	captive colonies.	
			EAZA, IAGNBI	March 2006	***
	3.2 To carry out the re-	search required to invest	igate the impact		
			EAZA, IAGNBI,	March 2006	***
			Zoos, Research		
			institutions.		
4. The level of gene	etic variation within the capt	ive, semi-wild and wild	populations assessed. **		
	4.1 To develop a proto	col for assessing genetic	variation in Northern Ba	ald Ibis.	
			IAGNBI	March 2006	
	4.2 To identify suitable	e institutions and collect	appropriate samples.		

Formatiert: Deutsch (Deutschland)

Formatiert: Deutsch (Deutschland)

Result	Activity		Agencies	Timescale	Cost
			IAGNBI	March 2006	
	4.3 To evaluate any ex	isting data on colony inte	rference by introduced I	oirds e.g. Birecik.	
			IAGNBI, EAZA,	March 2006	
			Research Institutions		
5. A comprehensive	health screening conducted	l on all birds prior to reint	troduction. ***		
	5.1 To establish a proto	col of health screening fo	or Northern Bald Ibis pri	or to reintroduction.	
			IAGNBI, IOZ, Jerez	March .2006	*
			Zoo, Veterinary		
			Institutions.		
	5.2 To conduct a diseas	e risk analysis as part of a		to reintroduction.	
			IUCN SSC	March 2006	**
			Reintroduction SG,		
			IAGNBI		
	5.4 To provide equipme	ent and materials to condu	act health assessment of	the birds.	
			Min of Env,	March 2006	***
			Veterinary		
			institutions.		
7. A captive popula	tion maintained with health	inbreeding and age struc	ture managed. ***		
	7.1 To develop and ma	ntain separate captive Ea	stern and Western popu	lations until further rese	earch clarifies their
	relationship.				
			EAZA, IAGNBI,	Ongoing	*
			Zoos		
	7.2 Conduct genetic res	earch to clarify the relation	*		lations.
			EAZA, IAGNBI,	March 2006	*
			Zoos, Research		
		I L	Institutions		
	7.3 Increase the numbe	r of the captive Eastern po	opulation to 200 – 250 b		
			EAZA, IAGNBI,	March 2006	**
		I I	Zoos		
	7.4 Investigate other No	orthern Bald Ibis holders	* *		<del>_</del>
			EAZA, IAGNBI,	March 2006	**

Result	Activity	Agencies	Timescale	Cost
		SOS		
	7.5 Investigate the orig	in of all Eastern population birds held in capt	ivity.	
		EAZA, IAGNBI,	March 2006	**
		Research Institution		
		hrough international coordination and cooper	ation promoted by the Inte	ernational Advisory Group
for the Northern Bal	d Ibis (IAGNBI). ****			
		sement of AEWA and other appropriate bodi	es for IAGNBI as the desi	gnated lead coordinating
	body.	, , , , , , , , , , , , , , , , , , ,		
		IAGNBI, AEWA,	Ongoing	*
		IUCN SSC, BirdLi	fe,	
		RSPB		
		BI as both a group of technical experts and go	overnmental representative	es from all current and
	future range states of t			
		IAGNBI	Ongoing	*
	8.3 IAGNBI to promot	e the development of National Northern Bald	Ibis action plans where ap	ppropriate.
		, IUCN SSC ? BLI	/ March 2006	**
		BLME ?IAGNBI		
	8.4 IAGNBI to mainta	n cooperation and information exchange with	the Southern Bald Ibis W	orking Group (SBIWG).
		IAGNBI, SBIWG	Ongoing	**
9. Techniques for th	ne establishment of new col	onies by reintroduction investigated. **		•
•		ols for creating both sedentary and migratory	Northern Bald Ibis popula	ntions in suitable habitat.
	•	IAGNBI, IUCN SS		****
		Reintroduction SG		
		conservation &		
		research institution	S	
	9.2 To develop technic	ues (model) for assessing suitable release site	es.	•
	•	IAGNBI, research	Feb. 2006 - 2007	***
		institutions		
	9.3 To investigate capt	ve colony splitting as a potential technique.	1	•
	2	IAGNBI, Zoos,	Feb. 2006	***
		Research institution		

Result	Activity		Agencies	Timescale	Cost
		-	without full consultation	n with IAGNBI and the	E IUCN SSC
	Reintroduction speciali	st group.			
			IAGNBI, IUCN SSC	Ongoing	*
			Reintroduction SG.		
10. Risk of infection d					
	10.1 Veterinary / post-r	nortem protocol assured	for any sick or dead bird	l	
			IAGNBI, IOZ, Jerez	March .2006	**
			Zoo, Veterinary		
			Institutions.		
	10.2 To build veterinar	y capacity in Morocco, S	Syria and Turkey for post	-mortem work.	
			Min of Env, IOZ,	March 2006	**
			Veterinary		
			institutions.		
	10.3 To provide equipm	nent and materials to con	nduct veterinary / post-me	ortem work.	
			Min of Env, IOZ,	March 2006	**
			Veterinary		
			institutions.		
	10.4 Standardised asses	sment of risks made in	each country (domestic a	nd wildlife)	
			MLAE	06	**
11. Risk of intoxicatio	n reduced ****				
	11.1 Local farmers que	stioned about use of pes	ticides.		
			MLAE, SSWC,	Jul 2006	**
			ICARDA		
	11.2 Meetings with far	ners, teachers etc to rais	e awareness of risks of p		
			MLAE, SSWC	Jul 2006	**
	11.3 To identify key for	raging areas.	1		
			MLAE, SSCW, BLI	Ongoing	**
			/ BLME		
	11.4 Quality of water so	ources monitored each y			
			MAAR, MLAE	06	*
			MIM, IVRIG,		

Result	Activity		Agencies	Timescale	Cost
			ACSAD		
	11.6 Veterinary / post-1	mortem protocol assured	for any sick or dead bird		
			MLAE, MAAR, IOZ,	March 2006	**
			Veterinary		
			institutions.		
	11.7 To build veterinar	y capacity in Morocco, S	Syria and Turkey for post	-mortem work.	
			Min of Env, IOZ,	March 2006	**
			Veterinary		
			institutions.		
	11.8 To provide equipm	nent and materials to con	nduct veterinary / post-me	ortem work.	
			MLAE, MAAR,	March 2006	**
			IOZ, Veterinary		
			institutions.		
12. Reduce impact of	predators *				
	12.1 Surveillance of an	y predation events.			
			MLAE, SSWC, BLI	Ongoing	**
			/ BLME		
	12.2 Control measures	taken (for special cases)			
13. Hunting stopped	****				
	13.1. Surveillance of ar	ny potential hunting and	define all feeding areas.		
			MLAE, MAAR,	Ongoing	**
			SSWC		
	13.2. Meetings (sensitis	sation) with hunters and	schools.		
			MLAE, MAAR	2005 and 2006	*
			SSWC		
		official statement by enfo	orcement Syrian authorit	ies stating the strict forbi	ddance of hunting in
	the ibis breeding area				
	MLAE, MAAR, SSWO				
	13.4. Signboards placed	d in all feeding areas (Sy	ria & Turkey), maintaine	ed (Morocco).	
·	-				

Result	Activity		Agencies	Timescale	Cost
		(TV etc) promoting impor	tance of NBI and hunti	ng laws (Syria & More	occo) and produce
	posters/calendars (Tu	key).			
				1.00.0	
			MLAESSWC	2005 and 2006	***
	10 6 11 26 1 1	11 ( 1 1 (0 1)			
	13.6. Identify and clo	e all trophy shops (Syria)	MI AE COMO	2005	
			MLAE, SSWC,	2005	
	12.7 I		MAAR		
	13.7. Improved hunting	g iaw enforcement	MLAE CCWC	2005 and 2006	***
			MLAE, SSWC, MAAR	2005 and 2006	24-24-24
	12.0 Involve and trai	local hunters in wardening			
	15.6. Hivoive and trai	l local numers in wardening	MLAE, SSWC, BLI	2006	**
			/ BLME	2000	
A Dieke roduced re	elated to electric wires and	collision *	/ DLIVIE		
4. Kisks feduced fe		during any new construction	n of wind generators a	nd roads in feeding zo	nes
	14.5. NDI considered	during any new construction	MLAE, SSWC,	ilu toaus ili teedilig zoi	iics.
			MIN.		
			TRANSPORTATIO		
			N		
5. Building on or n	ear to NBI breeding and fo	eding sites restricted. ****	- 1		
or a management		ult with IAGNBI on all tou		nents.	
			MLAE, SSCW	2006	
	15.3 Protected area st		,	nation to be determined	l) in partnership with local
		& Tifnit – MOR, Palmyra -			
	,		MAAR, MLAE,	2006	*
		I	SSCW, BLI / BLME,		
			FIRDOS		
	15.4 Develop a mana	ement plan for Tamri and l	Palmyra in partnership	with local communitie	es.
			MAAR, MLAE,	2006	**
		I	SSCW, BLI / BLME,		

Formatiert: Deutsch (Deutschland)

Formatiert: Deutsch (Deutschland)

Result	Activity		Agencies	Timescale	Cost			
			FIRDOS					
	15.5 Initiate training an	5.5 Initiate training and provide equipment for staff to implement management plans.						
			MAAR, MLAE,	2006	***			
			SSCW, BLI / BLME					
16. Reservoir construct	ion affecting feeding and	breeding sites controlle	d. *					
	16.1 Ensure consultatio	n with IAGNBI at early	planning stage of all futu	ire developments potenti	ally effecting NBI.			
			MAAR, MLAE,	2005 and 2006	-			
			SSCW					
17. Agriculture and gra	zing regimes reformed i	n order to achieve sustain	nable exploitation of rang	gelands and stop desertif	ication****			
maintained/altered to p	rovide suitable feeding a	reas. ****						
	17.1 Following up the 6	exception to the open acc	ess rule (i.e., pioneeristic	c attempt of land reform	in Syria), promoted by			
	Palmyra project, and in	the process of being app	olied in the buffer zone of	f Al Talila reserve (Palm	yra)			
17.2. Applying the refo	rm of land tenure attemp	ted in Palmyra to all pro	tected areas of Syria					
<u> </u>	orm of land tenure attemp							
18. Collection of firewo	ood controlled to prevent	destruction or degradation	on of NBI feeding areas.	****				
19. Socio-economic fac	ctors driving land use cha	nges investigated and ad	ldressed in partnership w	ith local communities an	d stakeholders. ****			
20. Habitat requiremen	ts, food availability and f	oraging ecology in the c	urrent range and release	trial sites researched and	compared. ***			

Turkey

Result	Activity		Agencies	Timescale	Cost
1. Breeding success	s, inter and intra specific cor	npetition, and predation m	onitored at all exiting b	oreeding colonies. ***	
	1.1 To establish and tra	in a network of wardens to	o monitor breeding colo	onies.	
			Min of Env &	March 2005	*
			Forestry, DD		
	1.2 To provide monitor	ing equipment e.g. binocu	lars, telescopes, vehicle	es etc. for use by warden	ıs.
			Min of Env &	March 2005	*
			Forestry, DD, RSPB		
	1.3 To establish a unifo	orm scientific protocol for		lonies.	
			Min of Env &	Ongoing	-
			Forestry, DD		
3. The impact of the	e introduction of new birds t				season. *
	3.1 To identify suitable	institutions and research j	partners to manipulate of	captive colonies.	
			EAZA, IAGNBI	March 2006	***
	3.2 To carry out the re-	search required to investig	ate the impact		
			EAZA, IAGNBI,	March 2006	***
			Zoos, Research		
			institutions.		
4. The level of gene	etic variation within the capt	ive, semi-wild and wild po	opulations assessed. **		
	4.1 To develop a proto	col for assessing genetic v	ariation in Northern Ba	ıld Ibis.	
			IAGNBI	March 2006	
	4.2 To identify suitable	e institutions and collect a	ppropriate samples.		
			IAGNBI	March 2006	
	4.3 To evaluate any ex	isting data on colony inter	ference by introduced l	oirds e.g. Birecik.	
			IAGNBI, EAZA,	March 2006	
			Research Institutions		
5. A comprehensive	e health screening conducted	d on all birds prior to reint	roduction. ***		
•		ocol of health screening for		or to reintroduction.	
	•		IAGNBI, IOZ, Jerez	March 2006	*
		1	Zoo, Veterinary	I	

Result	Activity	Agencies	Timescale	Cost				
		Institutions.						
	5.2 To conduct a disease	5.2 To conduct a disease risk analysis as part of a feasibility study prior to reintroduction.						
		IUCN SSC	March 2006	**				
		Reintroduction SG,						
		IAGNBI						
	5.3 To build capacity in	5.3 To build capacity in Turkey and Morocco on Health screening techniques						
		Min of Env &	March 2006	**				
		Forestry, IOZ,						
		Veterinary						
		institutions.						
	5.4 To provide equipment and materials to conduct health assessment of the birds.							
		Min of Env &	March 2006	***				
		Forestry, Veterinary	,					
		institutions.						
7. A captive popula		inbreeding and age structure managed. ***						
	7.1 To develop and ma relationship.	ntain separate captive Eastern and Western po	pulations until further r	research clarifies their				
	Terationship.	EAZA, IAGNBI,	Ongoing	*				
		Zoos	011.50111.5					
	7.2 Conduct genetic res	earch to clarify the relationships between the	Eastern and Western po	pulations.				
		EAZA, IAGNBI,	March 2006	*				
		Zoos, Research						
		Institutions						
	7.3 Increase the number of the captive Eastern population to 200 – 250 birds.							
		EAZA, IAGNBI,	March 2006	**				
		Zoos						
	7.4 Investigate other Northern Bald Ibis holders for the Eastern population.							
		EAZA, IAGNBI,	March 2006	**				
		Zoos						
i e	7.5 Investigate the origin of all Eastern population birds held in captivity.							
	7.5 Investigate the orig	n of all Eastern population birds held in captiv	vity.					

Result	Activity		Agencies	Timescale	Cost		
			Research Institutions.				
	7.6 Build the capacity at Birecik to support and increase their population to 150 birds (e.g. removing trees, expanding cages and promoting good husbandry).						
			Min of Env & Forestry, DD, RSPB, EAZA.	Ongoing	***		
	Ibis (IAGNBI). ****				rnational Advisory Group		
	8.1 To obtain the endorsement of AEWA and other appropriate bodies for IAGNBI as the designated lead coordinating body.						
			IAGNBI, AEWA, IUCN SSC, BirdLife, RSPB	Ongoing	*		
	8.2 To maintain IAGNBI as both a group of technical experts and governmental representatives from all current and future range states of the Northern Bald Ibis.						
			IAGNBI	Ongoing	*		
	8.3 IAGNBI to promot	te the development of Na	tional Northern Bald Ibis	action plans where ap	propriate.		
			IAGNBI	March 2006	**		
	8.4 IAGNBI to maintain cooperation and information exchange with the Southern Bald Ibis Working Group (SBIWG).						
			IAGNBI, SBIWG	Ongoing	**		
9. Techniques for the	e establishment of new col						
	9.1 To establish protocols for creating both sedentary and migratory Northern Bald Ibis populations in suitable habitat.						
			IAGNBI, IUCN SSC Reintroduction SG,	Ongoing	****		
			conservation & research institutions				
	9.2 To develop techniques (model) for assessing suitable release sites.						
			IAGNBI, research institutions	Feb. 2006 - 2007	***		
	9.3 To investigate capt	tive colony splitting as a		1	1		
		<b>7</b> 1 8 ·······	IAGNBI, Zoos,	Feb. 2006	***		

Result	Activity	Agencies	Timescale	Cost				
		Research institutions						
	9.4 To ensure that no re	9.4 To ensure that no reintroductions take place without full consultation with IAGNBI and the IUCN SSC						
	Reintroduction specialist group.							
		IAGNBI, IUCN SSC	Ongoing	*				
		Reintroduction SG.						
10. Risk of infection	on disease reduced ***							
	10.1 Veterinary / post-n	ortem protocol assured for any sick or dead bir						
		IAGNBI, IOZ, Jerez	March 2006	**				
		Zoo, Veterinary						
		Institutions.						
	10.2 To build veterinary	10.2 To build veterinary capacity in Morocco, Syria and Turkey for post-mortem work.						
		Min of Env &	Ongoing	**				
		Forestry, IOZ,						
		Veterinary						
		institutions.						
	10.3 To provide equipm	nt and materials to conduct veterinary / post-n	nortem work.					
		Min of Env &	Ongoing	**				
		Forestry, IOZ,						
		Veterinary						
		institutions.						
	10.4 Standardised asses	ment of risks made in each country (domestic						
		Min of Environement,	, 05/06	**				
		DD						
11. Risk of intoxica								
	11.1 Local farmers ques	11.1 Local farmers questioned about use of pesticides.						
		Min of Env &	06					
		Forestry, DD, RSPB						
	11.2 Meetings with farm	ers, teachers etc to raise awareness of risks of						
		Min of Env &	06	**				
		Forestry, DD, Min of						
		AgricultureMIN,						

Result	Activity		Agencies	Timescale	Cost		
			EAV, FOR, DD,				
			AGR				
	11.3 To identify key foraging areas.						
			Min of Env, and	Ongoing	*		
			Forestry DD, RSPB				
	11.6 Veterinary / post-mortem protocol assured for any sick or dead bird						
			IAGNBI, IOZ, Jerez	March 2006	**		
			Zoo, Veterinary				
			Institutions.				
	11.7 To build veterinary capacity in Morocco, Syria and Turkey for post-mortem work.						
			Min of Env &	Ongoing	**		
			Forestry, IOZ,				
			Veterinary				
			institutions.				
	11.8 To provide equip	ment and materials to cor					
			Min of Env &	Ongoing	**		
			Forestry, IOZ,				
			Veterinary				
			institutions.				
12. Reduce impact of	1						
	12.1 Surveillance of an	y predation events.					
			Min of Env and	Ongoing	**		
			Forestry, DD, RSPB,				
			DHKD				
13. Hunting stopped *							
	13.2. Meetings (sensitisation) with hunters and schools.						
			DD,	ongoing	*		
			MUNICIPALITY				
	13.3. Signboards place	d in all feeding areas (Sy		ed (Morocco).			
			Min of Env and		**		
			Forestry, DD				

Result	Activity		Agencies	Timescale	Cost			
	13.6. Improved hunting law enforcement							
			Min of Env and					
			Forestry					
14. Risks reduced re	elated to electric wires and co	ollision *						
	14.1. Poles are low-risk	of electrocution design	(Morocco & Turkey)					
			Min of Env and	06	**			
			Forestry MIN E and F					
	14.2. Increasing visibili	14.2. Increasing visibility of electric wires in feeding areas (Tamri & Birecik)						
			MUNICIPALITY,	06	***			
			Min of Energy					
	14.3. NBI considered d	14.3. NBI considered during any new construction of wind generators and roads in feeding zones.						
			Min of Energy, Min	06	**			
			of Env & Forestry,					
			Municipality					
15. Building on or n	ear to NBI breeding and fee							
			eeding areas (best designate	ation to be determined)	in partnership with local			
	communities. (Tamri &	Tifnit – MOR, Palmyra	–SYR, + ?TUR)					
	15.5 Initiate training and provide equipment for staff to implement management plans.							
16. Reservoir constr	ruction affecting feeding and	<u> </u>						
	16.1 Ensure consultatio	16.1 Ensure consultation with IAGNBI at early planning stage of all future developments potentially effecting NBI.						
17. Agriculture and	grazing regimes maintained	altered to provide suitab	ele feeding areas. ****					
	factors driving land use cha							
Promotion of alterna	ative sustainable grazing reg	imes and energy use, co	upled with promotion of	socio-economic develop	ment of local			
community				T				
20. Habitat requiren	nents, food availability and f	oraging ecology in the c	urrent range and release t	trial sites researched and	d compared. ***			

## 7 – Implementation

The International Advisory Group on Northern Bald Ibis (IAGNBI) could act as Species working group and monitor the implementation of the actions mentioned in the tables if funding is available.

Since 1998 regular monitoring committee meetings have been held in Souss Massa National Park to monitor the activities carried out in the Bald Ibis conservation project. A similar thing could be established in Syria and Turkey.

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