

## 1<sup>st</sup> Meeting of the AEWA Northern Bald Ibis International Working Group

19<sup>th</sup> – 22<sup>nd</sup> November 2012, Jazan, Saudi Arabia

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### REVISION OF THE NORTHERN BALD IBIS INTERNATIONAL SINGLE SPECIES ACTION PLAN

#### INTRODUCTION

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 northeast Africa and the Middle East. Two distinct populations have been identified which are genetically distinct. The main western population occurs in Morocco and now numbers around 100 pairs. A relict population of two pairs persists in Syria, providing 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 Endangered” because of its small range and population. The improvement of the population in Morocco is very recent and is mainly due to 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 to the species over the centuries have been a combination of direct persecution but also the loss of steppe and non-intensive agricultural areas. The chief threats the species now faces differ among 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 the threats that may have the most severe impact on the population.

In Syria, there are even greater challenges. 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. Knowledge of where the birds overwinter is urgently required 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.

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

- to maintain agriculture and grazing regimes in order to achieve sustainable exploitation of rangelands and halt the 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 feeding areas;
- to stop hunting;
- to control the construction of illegal buildings on or near to 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 to getting a migratory population established, an objective that could 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. However, 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 populations.

**5. FRAMEWORK FOR ACTION – GOAL, PURPOSE AND RESULTS**

*Action Plan Goal and Purpose*

	<b>Objectively Verifiable Indicator</b>	<b>Means of Verification</b>
<b>Action Plan GOAL</b> Increase the number of Northern Bald Ibis colonies		
<b>Action Plan PURPOSE</b> To conserve the Northern Bald Ibis by securing the wild colonies, increasing the number of birds and improving our understanding of their needs		

*Action Plan Results*

<b>Result</b>	<b>Objectively Verifiable Indicator</b>	<b>Means of Verification</b>	<b>Priority</b>	<b>Timescale</b>
<b>Result 1: Breeding success, inter and Intra specific competition and predation monitored at all existing breeding colonies.</b>	Number of chicks fledged successfully / breeding pairs. Monitoring breeding.		High	

<b>Result 2: Provision of uncontaminated fresh water sources close to breeding sites maintained and improved. Managing existing reservoirs in accordance with ibis needs (Syria)</b>	Availability of freshwater and amphibian preys is ensured during every breeding season. Surveying and monitoring occurrence of freshwater and status of reservoirs at different stages of each breeding season.		High	
<b>Result 3: The impact of the introduction of new birds to existing breeding colonies studied in captivity during the breeding season.</b>			Low	
<b>Result 4: The level of genetic variation within the captive, semi-wild and wild populations assessed.</b>			Medium	
<b>Result 5: A comprehensive health screening conducted on all birds prior to reintroduction.</b>			High	
<b>Result 6: Discarded fishing line and other potentially dangerous debris to be collected and disposed of safely.</b>			Low	
<b>Result 7: A captive population maintained with health, inbreeding and age structure managed.</b>			High	
<b>Result 8: The conservation of the Northern Bald Ibis through international coordination and cooperation promoted by the International Advisory Group for the Northern Bald Ibis (IAGNBI).</b>	Easier access to funding needed for conservation of the Syrian ibises; Medium-term project approved and funded aimed at conservation of the Syrian ibises. Surveying level of funding and support in Syria annually.		Critical	

<b>Result 9: Techniques for the establishment of new colonies by reintroduction investigated.</b>			Medium	
<b>Result 10: Risk of infectious disease reduced.</b>			High	
<b>Result 11: Risk of intoxication reduced.</b>			Critical	
<b>Result 12: Reduce impact of predators.</b>			Low	
<b>Result 13: Hunting stopped.</b>	Number of birds shot down per breeding season. Number of attempts of ibis killing per breeding season. Number of hunters stopped per breeding season. Data collected in the field by rangers and guards.		Critical	
<b>Result 14: Risks reduced related to electric wires and collision.</b>			Low	
<b>Result 15: Building on or near to NBI breeding and feeding sites restricted.</b>			Critical	
<b>Result 16: Reservoir construction affecting feeding and breeding sites controlled.</b>			Low	
<b>Result 17: Agriculture and grazing regimes maintained or reformed in order to achieve sustainable exploitation of rangelands and halt advance of desertification process. (SYR to provide suitable feeding areas). (MOR, SYR, TUR)</b>	Vegetation coverage increased or number of species of shrubs increased. Surveying and monitoring scheme of rangeland species and relative abundance.		Critical	

<p><b>Result 18: Collection of firewood controlled to prevent destruction or degradation of NBI feeding areas. (MOR &amp; SYR)</b></p>	<p>Vegetation coverage increased or number of species of shrubs increased or number of locals using alternative source of energy increased. Surveying and monitoring scheme of rangeland species and their relative abundance and of energy use by locals.</p>		<p>Critical</p>	
<p><b>Result 19: Socioeconomic factors driving land use changes investigated and addressed in partnership with local communities and stakeholders. Promotion of alternative sustainable grazing regimes and energy use, coupled with promotion of socioeconomic development of local community.</b></p>	<p>Present land use regulation is reformed in order to attain sustainability by traditional users at ibis breeding grounds. Surveying and monitoring the process of reform.</p>		<p>Critical</p>	
<p><b>Result 20: Habitat requirements, food availability and foraging ecology in the current range and release trial sites researched and compared.</b></p>	<p>Preparation of sound articles to be submitted to scientific and conservation journals. Data publication.</p>		<p>High</p>	

## 6. ACTIVITIES BY RESULT

### *National activities by Range States required to deliver each Action Plan Result*

Result	National activities and applicable Principal Range States	Implementation Responsibility
<b>Result 1: Breeding success, inter and Intra specific competition and predation monitored at all existing breeding colonies.</b>	<ul style="list-style-type: none"> <li>• To establish and train a network of wardens to monitor breeding colonies <b>(ALL)</b>;</li> <li>• To provide monitoring equipment, e.g. binoculars, telescopes, vehicles etc. for use by wardens <b>(ALL)</b>;</li> <li>• To establish a uniform scientific protocol for monitoring breeding colonies <b>(ALL)</b>;</li> </ul>	
<b>Provision of uncontaminated fresh water sources close to breeding sites maintained and improved. Managing existing reservoirs in accordance with ibis needs (Syria)</b>	<ul style="list-style-type: none"> <li>• To create new water points where required <b>(Morocco)</b>;</li> <li>• To ensure regular maintenance and cleaning of water points <b>(Morocco)</b>;</li> <li>• To investigate the hydrology of key available sources of water <b>(Syria)</b>;</li> <li>• To make recommendations to local authorities on best practices for managing key available water sources <b>(Syria)</b></li> </ul>	
<b>Result 3: The impact of the introduction of new birds to existing breeding colonies studied in captivity during the breeding season.</b>	<ul style="list-style-type: none"> <li>• To identify suitable institutions and research partners to manipulate captive colonies <b>(ALL)</b>;</li> <li>• To carry out the research required to investigate the impact <b>(ALL)</b>;</li> </ul>	
<b>Result 4: The level of genetic variation within the captive, semi-wild and wild populations assessed.</b>	<ul style="list-style-type: none"> <li>• To develop a protocol for assessing genetic variation in the Northern Bald Ibis <b>(ALL)</b>;</li> <li>• To identify suitable institutions and collect appropriate samples <b>(ALL)</b>;</li> <li>• To evaluate any existing data on colony interference by introduced birds e.g. Birecik <b>(ALL)</b>;</li> </ul>	

<p><b>Result 5: A comprehensive health screening conducted on all birds prior to reintroduction.</b></p>	<ul style="list-style-type: none"> <li>• To establish a protocol of health screening for the Northern Bald Ibis prior to reintroduction (<b>ALL</b>);</li> <li>• To conduct a disease risk analysis as part of a feasibility study prior to reintroduction (<b>ALL</b>);</li> <li>• To build capacity in Turkey and Morocco on health screening techniques (<b>MOROCCO, TURKEY</b>);</li> <li>• To provide equipment and materials to conduct health assessment of the birds (<b>ALL</b>)</li> </ul>	
<p><b>Result 6: Discarded fishing line and other potentially dangerous debris to be collected and disposed of safely.</b></p>	<ul style="list-style-type: none"> <li>• To ensure wardens include fishing line and debris removal as part of their daily activities (<b>MOROCCO</b>);</li> <li>• To educate fishermen by informal meetings of the hazards posed by lost and discarded fishing debris (<b>MOROCCO</b>)</li> </ul>	
<p><b>Result 7: A captive population maintained with health, inbreeding and age structure managed.</b></p>	<ul style="list-style-type: none"> <li>• To develop and maintain separate captive Eastern and Western populations until further research clarifies their relationship (<b>ALL</b>);</li> <li>• Conduct genetic research to clarify the relationships between the Eastern and Western populations (<b>ALL</b>);</li> <li>• Increase the number of the captive Eastern population to 200 – 250 birds (<b>ALL</b>);</li> <li>• Investigate other Northern Bald Ibis holders for the Eastern population (<b>ALL</b>);</li> <li>• Investigate the origin of all Eastern population birds held in captivity (<b>ALL</b>);</li> <li>• Build the capacity at Birecik to support and increase their population to 150 birds (e.g. removing trees, expanding cages and promoting good husbandry) (<b>TURKEY</b>)</li> </ul>	
<p><b>Result 8: The conservation of the Northern Bald Ibis through international coordination and cooperation promoted by the International Advisory Group for the Northern Bald Ibis (IAGNBI).</b></p>	<ul style="list-style-type: none"> <li>• To obtain the endorsement of AEWA and other appropriate bodies for IAGNBI as the designated lead coordinating body (<b>ALL</b>);</li> <li>• 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 (<b>ALL</b>);</li> <li>• IAGNBI to promote the development of National Northern Bald Ibis action plans where appropriate (<b>ALL</b>);</li> <li>• IAGNBI to maintain cooperation and information exchange with the Southern Bald Ibis Working Group (SBIWG) (<b>ALL</b>);</li> </ul>	

<b>Result 9: Techniques for the establishment of new colonies by reintroduction investigated.</b>	<ul style="list-style-type: none"> <li>• To establish protocols for creating both sedentary and migratory Northern Bald Ibis populations in suitable habitat (<b>ALL</b>);</li> <li>• To develop techniques (model) for assessing suitable release sites (<b>ALL</b>);</li> <li>• To investigate captive colony splitting as a potential technique (<b>ALL</b>);</li> <li>• To ensure that no reintroductions take place without full consultation with IAGNBI and the IUCN SSC Reintroduction Specialist Group (<b>ALL</b>);</li> </ul>	
<b>Result 10: Risk of infectious disease reduced.</b>	<ul style="list-style-type: none"> <li>• Veterinary / post-mortem protocol assured for any sick or dead bird (<b>ALL</b>);</li> <li>• To build veterinary capacity for post-mortem work (<b>ALL</b>);</li> <li>• To provide equipment and materials to conduct veterinary / post-mortem work (<b>ALL</b>);</li> <li>• Standardised assessment of risks made in each country (domestic and wildlife) (<b>ALL</b>);</li> <li>• Appropriate waste protocol at intensive poultry units it is assured in all known feeding areas (<b>MOROCCO</b>);</li> <li>• Douira poultry unit relocated (<b>MOROCCO</b>);</li> </ul>	
<b>Result 11: Risk of intoxication reduced.</b>	<ul style="list-style-type: none"> <li>• Local farmers questioned about use of pesticides (<b>ALL</b>);</li> <li>• Meetings with farmers, teachers, etc .to raise awareness of risks of pesticides used (<b>ALL</b>);</li> <li>• To identify key foraging areas (<b>ALL</b>);</li> <li>• Maintain water-provisioning points near colonies (<b>MOROCCO,SYRIA</b>);</li> <li>• Veterinary / post-mortem protocol assured for any sick or dead bird (<b>ALL</b>);</li> <li>• To build veterinary capacity for post-mortem work (<b>ALL</b>);</li> <li>• To provide equipment and materials to conduct veterinary / post-mortem work (<b>ALL</b>);</li> </ul>	
<b>Result 12: Reduce impact of predators.</b>	<ul style="list-style-type: none"> <li>• Surveillance of any predation events (<b>SYRIA, TURKEY</b>);</li> <li>• Control measures taken (for special cases) (<b>SYRIA</b>);</li> </ul>	
<b>Result 13: Hunting stopped.</b>	<ul style="list-style-type: none"> <li>• Surveillance of any potential hunting and define all feeding areas (<b>SYRIA</b>);</li> <li>• Meetings (sensitisation) with hunters and schools (<b>SYRIA, TURKEY</b>);</li> <li>• Preparation of an official statement by enforcement Syrian authorities stating the strict forbiddance of hunting in the ibis breeding area (<b>SYRIA</b>);</li> <li>• Signboards placed in all feeding areas (Syria &amp; Turkey), maintained (Morocco) (<b>ALL</b>);</li> <li>• Media campaign (TV, etc.) promoting importance of NBI and hunting laws (Syria &amp; Morocco) and produce posters/calendars (Turkey) (<b>ALL</b>);</li> <li>• Identify and close all trophy shops (<b>SYRIA</b>);</li> <li>• Improved hunting law enforcement (<b>SYRIA, TURKEY</b>);</li> <li>• Involve and train local hunters in wardening, ecotourism etc. (<b>SYRIA</b>);</li> </ul>	
<b>Result 14: Risks reduced related to electric wires and collision.</b>	<ul style="list-style-type: none"> <li>• Poles are low-risk of electrocution design (<b>MOROCCO,TURKEY</b>);</li> <li>• Increasing visibility of electric wires in feeding areas (Tamri &amp; Birecik) (<b>MOROCCO,TURKEY</b>);</li> <li>• NBI considered during any new construction of wind generators and roads in feeding zones (<b>SYRIA, TURKEY</b>);</li> </ul>	

<p><b>Result 15: Building on or near to NBI breeding and feeding sites restricted.</b></p>	<ul style="list-style-type: none"> <li>• Stop the illegal construction of grottoes at or near breeding and roosting sites (<b>MOROCCO</b>);</li> <li>• Protected area status for all breeding and feeding areas (best designation to be determined) in partnership with local communities. (Tamri &amp; Tifnit – MOR, Palmyra –SYR, + ?TUR) (<b>ALL</b>);</li> <li>• Develop a management plan for Tamri and Palmyra in partnership with local communities (<b>MOROCCO,SYRIA</b>);</li> <li>• Initiate training and provide equipment for staff to implement management plans (<b>ALL</b>)</li> </ul>	
<p><b>Result 16: Reservoir construction affecting feeding and breeding sites controlled.</b></p>	<ul style="list-style-type: none"> <li>• Ensure consultation with IAGNBI at early planning stage of all future developments potentially effecting NBI (<b>TURKEY</b>)</li> </ul>	
<p><b>Result 17: Agriculture and grazing regimes maintained or reformed in order to achieve sustainable exploitation of rangelands and halt advance of desertification process. (SYR to provide suitable feeding areas). (MOR, SYR, TUR)</b></p>	<ul style="list-style-type: none"> <li>• Following up the exception to the open access rule (i.e., pioneering attempt of land reform in Syria), promoted by Palmyra project, and in the process of being applied in the buffer zone of Al Talila reserve (Palmyra) (<b>SYRIA</b>);</li> <li>• Applying the reform of land tenure attempted in Palmyra to all protected areas of Syria (<b>SYRIA</b>);</li> <li>• Extending the reform of land tenure attempted in Palmyra to all steppe regions of Syria (<b>SYRIA</b>)</li> </ul>	
<p><b>Result 18: Collection of firewood controlled to prevent destruction or degradation of NBI feeding areas. (MOR &amp; SYR)</b></p>		

<p><b>Result 19: Socioeconomic factors driving land use changes investigated and addressed in partnership with local communities and stakeholders. Promotion of alternative sustainable grazing regimes and energy use, coupled with promotion of socioeconomic development of local community.</b></p>		
<p><b>Result 20: Habitat requirements, food availability and foraging ecology in the current range and release trial sites researched and compared.</b></p>		
<p><b>Result 21: Disturbance by military firing range reduced (suggested for MOROCCO – Souss-Massa)</b></p>		

## **7. IMPLEMENTATION**

### **Principles of implementation**

The International Advisory Group on the 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 Northern Bald Ibis conservation project. A similar arrangement could be established in Syria and Turkey.