



Report of the fourth workshop on International Waterbird Census in North-Africa.

2-6 October 2015, Tunis



Under the aegis of:



Organised by :



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LIST OF ABBREVIATIONS

AAO: Association “les Amis des Oiseaux” (Tunisia)

AEWA: African-Eurasian Waterbird Agreement

RAC/SPA: Regional Activity Center for Specially Protected Areas

CEPF: Critical Ecosystem Partnership Fund

GREPOM: Groupe de REcherche et de Protection des Oiseaux au Maroc (Morocco)

IWC: International Waterbird Census

MEDDE: Ministère de l’écologie, du développement durable et de l’énergie (France)

MOP: Meeting of the Parties (AEWA)

NGO: Non-governmental organization

ONCFS: Office National de la Chasse et de la Faune Sauvage (France)

TSU: Technical Support Unit (to the AEWA African Initiative)

WOW: Wings Over Wetlands (International project on the conservation of waterbirds and wetlands)

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Workshop Report

1. Context reminder

❖ The IWC

The International Waterbirds Census (IWC) is a monitoring programme for the conservation of migratory waterbirds and wetlands. This scheme is an essential tool for the implementation of the AEWA and the Ramsar Convention on wetlands. The IWC is a simple and effective tool to estimate trends in waterbird population numbers and evaluate the relative importance of wetlands for biodiversity as a whole. It is one of the world's largest programs for monitoring biodiversity, led by Wetlands International.

The IWC objectifs are :

- Evaluate waterbirds population size
- Describe the evolution of effectiveness and distribution of populations
- Recognize wetlands of international importance for waterbirds
- Give some information for the management and the protection of waterbirds populations through international agreements, national laws, ...

Census are made each year in January in over than 100 countries, with the participation of near 15,000 counters, principally volunteer. They are also an important tool for the application of the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) and of the Ramsar Convention for wetlands. The IWC are one of the most popular programs in the world on the biodiversity. They are a very basic way to estimate size and trends of waterbirds populations and to evaluate the relative importance of wetlands for waterbirds and the biodiversity.

❖ The Support program to IWC in the Mediterranean Basin

Under the AEWA Plan of Action for Africa, a Technical Support Unit (TSU) was created at the initiative of France to strengthen the implementation of the African Initiative for the period 2013-2015. At the request of the MEDDE, Tour du Valat co-hosts this TSU with ONCFS. Its main objective is to develop and sustain technical support of France to the African Initiative until the MOP6 (2015) by helping African Parties to implement the AEWA Plan of Action for Africa.



In the Mediterranean Basin, an IWC Support Programme was initiated in 2012 by Tour du Valat, ONCFS and Wetlands International, with the support of the MEDDE and the MAVA Foundation, as a result of the answer from the North-African countries. This programme aims to improve the spatial coverage and the overall quality of waterbird monitoring and wetland conservation by creating synergies between existing programs, by strengthening national networks of observers and by completing wetlands inventories.



This program aims at covering all the Mediterranean countries, but in the first instance, it focused on the countries of southern Mediterranean. **North Africa** has indeed a great role to play in this

Mediterranean programme, but also in the AEWA **African Initiative** and its **Plan of Action for Africa**¹ (2012-2017) adopted at the AEWA MOP 5 (La Rochelle, France, May 2012).

2. Achievements for the 1st phase of the IWC MED

This workshop has offered the opportunity to make a point over all the accomplished actions in each North African country, about monitoring and also the conservation of waterbirds; it has been also the opportunity to make a point on the realized actions and those to shape in the future.

❖ Achievement of IWC

National coordinators of IWC have presented the implication of the project in each country: coverage of sites, network of counters, national coordination, problems.... These presentations have showed the difference between countries in realizing IWC:

- In Algeria: the sites are very wide and there are many implicated volunteers, but there's a real problem to cover all the wetlands. There is also a necessity to improve the species recognition (particularly of waders);
- In Libya: most of sites are unattainable for IWC because of security reasons, causing the decrease of counted sites since 2013;
- In Morocco: the countings are well improved but there's a real problem to cover all the wetlands (because there are many little wetlands everywhere);
- In Tunisia: the counting is well realized but there's a problem in choice wetlands to count, with the consequence of missing out one species which could be on a temporary wetland not regularly counted.

❖ Tangible results of the first phase of IWC MED

- Many tools have been realized to increase the capacity building: an Arabic field guide of identification, a multi-languages CD of training for trainers, an increase of capacity building thanks to an associated project financed by the Critical Ecosystem Partnership Fund (CEPF). Several trainings have been effectuated by ornithologists of Tour du Valat to improve species recognition: one training has been in January 2014, one in 2015 and the next will be in 2016 in Tunisia.
- A scientific article has been written with census data of 2013: this has been the only synchronized census for all the countries of the North Africa. It has allowed to realize a first study on population trends at the regional North Africa scale and also to realize the importance of synchronized census in all the countries. This article will be submitted before the end of the year to *Biological Conservation* review.
- The database has been completed (at the exception of the 2015 because it is still in progress): the work on dataset has obliged to revise also all the mistakes on site names. This hard work has been realized by all the countries, led by the Tour du Valat which has realized the formatting. During this workshop we have also directly worked on lacks of dataset.

¹ <http://www.unep-aewa.org/activities/africaninitiative/publication/index.htm>

3. Decisions on the future of the program

This annual workshop has allowed to underline actions that the program has to strengthen or develop.

❖ Decisions taken during the workshop

- Discussion about the importance to continue the edition of Medwaterbirds Bulletin, not published for one year (because of the work overload of all the involved persons): it has been solved to revive this tool, thanks to the help of a new volunteer, Abdelkrim Si Bachir of the “Association Nationale Algérienne d'Ornithologie” (ANAO). The new bulletin will have a simpler form with just a scientific article, some notes and reports about articles or publications. A biannual publishing of the bulletin will be proposed and it will be probably a good tool to allow dynamic information on the network.
- There's a general wish to optimize field efforts on the census, targeting sites and developing a census fixed and a general protocol for all the countries. This point will be extended on the paragraph about developed concepts for the program evolution.
- It is proposed and accepted to fit and submit the article about 2013 data counts, to the scientific review *Biological Conservation*. **The article will be submitted before the end of 2015.**
- The future article, led by Morocco, will be on long-term trends of waterbirds populations with a focus on one or two species. The problem of data lack has been shown, partially analyzed and discussed.
- Every partner shows the wish to speed the realization of the articles: it has been accepted to start the redaction of the third article (for which Tunisia will be the leader) after have finished analyses for the second one, led by Morocco.

❖ Proposal of cooperation

During this workshop, we have discussed the possibility of cooperation with another international program, which is also at the Mediterranean scale: the Mediterranean Observatory of Wetlands. This program, which is also led by Tour du Valat, could allow strengthening capacities giving coherence in actions and giving possibilities to look for more important grants. This possible cooperation would need to share data. A common decision has taken to realize a data charter to fixe objectives in sharing data. **Hichem Azazaf of the AAO (Tunisia) is engaged to make a draft of the charter data and to send it to the other partners before the 1st of November, 2015.**

❖ Work for the next MOP6 of the AEWA

The National Office of Hunting and Wild Fauna (ONCFS), the Tour du Valat and the AEWA focal points of each country will be at the next MOP6. This international meeting will be the opportunity to present with the AAO, the gained results and the future concepts to develop the program. A discussion between partners has allowed to focus ideas on three possible evolutions of the program, which will be presented like three concepts, in order to interest some granters or financial partners. The three concepts (Annex 1) will be distributed during the MOP6; they are about:

- i. Optimization of efficacy in census of waterbirds in wetlands areas
- ii. Contribution of IWC to the illegal killings of migratory birds

- iii. Realization of an Atlas of waterbirds wintering in the North African region.

❖ Training tools

Trainings on the management and valorization of the dataset « waterbirds » by the Geographic Information System (GIS)

This workshop has been also the opportunity to work together on the database with two daily works on:

- The inclusion of data on the platform of medwaterbirds in order to use it as a common tool of management of data: their import (manually and automatically) and the export and also the synthesis in an export form and in a graphic one.
- The utilization of database to make maps: export of data from the medwaterbirds database and the integration in GIS program, the QGIS and the realization of synthetic maps of data analyses.

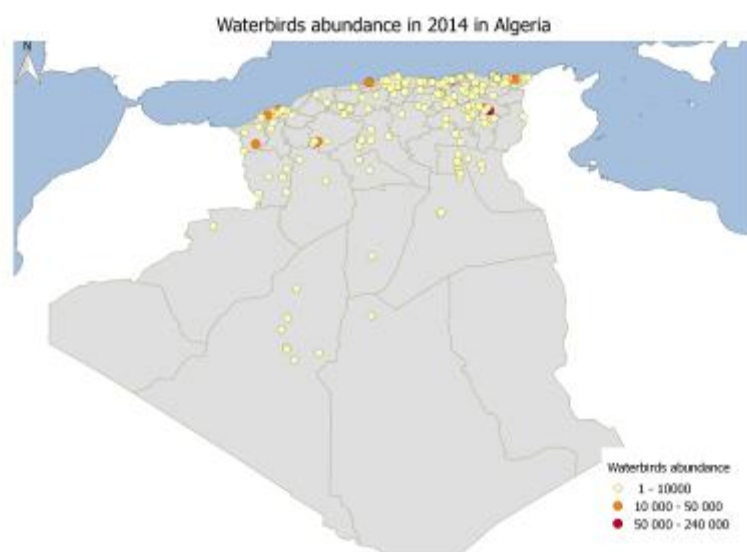


Figure 1: Example of map realized during the workshop.

❖ Items priorities for the future of the IWC MED program

➤ *Priority of actions*

An important objective of this workshop has been the identification of actions to develop in the future for the IWC MED project and their priority.

Table 1: Synthesis of priorities actions of the project in the next future.

Principal themes	Under-themes	Discussion	Priority
Monitoring optimization	Monitoring protocol	Need of a simple and solid protocol suitable to each country in the general lines.	3
	List of priority sites (minimum) to count in each country.	Need to develop some criteria in order to identify a list of sites for each country. Some elements already exist in the database on the analyses of recent data of IWC MED.	1 (Pierre has to realize this list before December 2015)
Capacity building	Look for funding for a PhD who would work on the IWC MED database and on articles to do for the project		2
Communication	Scientific articles	The second article will be realized principally by Morocco. The third one will star after the end of statistical analyses for the second in order to speed up the global realization of scientific articles.	1
	Medwaterbirds Bulletin	Yes, but with a more simple form: only one scientific article and some notes or reports about other articles or publications. Abdelkrim Si Bachir has proposed to help in restarting the dynamic of this bulletin for this year.	1
Data charter		Hichem will send a first draft before the 1st November 2015: everybody will be reactive in answering. Khaled will be the first to answer giving his comments.	1
Fundraising	Regional Atlas		1
	IWC MED contribution against illegal killing	Awareness actions on the field	
	Capacity building	Remote sensing (by using satellite images) of temporary wetlands for a better focus on sites choice.	
Regional meeting		The next meeting will be in November 2016 in Algeria or in Morocco (Dakki will inform us if the coming of Libyans could be possible without visa). Each country will look for prices before the end of 2015, in order to choose the country less expensive.	1
Database		It's near to be finished: 2015 is missing for Tunisia and Algeria.	1
Facebook pageweb for Medwaterbirds		Historical news on the project and about events or activities of the group Medwaterbirds.	Realised: to continue to update. All the partners are able to write and to publish on this webpage.

4. Field excursion

A field excursion has been organized by the AAO to allow to all the partners to know and discover the historical and environmental sites near Tunis: the excursion was at the archeological old town of Utik, at the Wetlands Center at the ancient fortress of Ghar el Melh and the ancient El Mehl harbor. The Wetlands Center was closed (for financial reasons) but we have had a good explication on history

of the site by partners of the Center. The excursion has finished with the visit of the lagoon, looking for waterbirds.

Annexe1

Three concepts that will be shown at the MOP6 of AEWA.

CONCEPT 1 :

Optimizing efficiency and costs of International Waterbird Census

Enhancing capacity building from data collection to analysis

Context

The International Waterbird Census (IWC²) is one of the most important avian biodiversity monitoring programs on earth bringing thousands of experts and scientists in the field every year. Data collected yearly in each country aims at monitoring the state of both waterbird populations and wetlands at international and national levels. However major discrepancies in constraints on IWC occur between North-Western Europe, where volunteering is widespread practice, and other regions, including Eastern and Southern Mediterranean where conditions are particularly complex due to many reasons:

- extent and low accessibility of wetlands, uncertainty of flooding conditions and inability to predict them
- paucity of observers
- lack of awareness of administration
- lack of statistical design in sampling of targeted IWC wetland
- limited capacities and equipment in bird identification and census
- absence of volunteering capacities, cost of transportation means (car rental, petrol)
- limited capacities in national database development, management and transfer to international coordination

To improve cost-effectiveness, this IWC scheme must optimize and quality-control its effort at each step of the data processing from its collection in the field to its communication to international coordination, decision makers and stakeholders.

Objective

This project aims at improving capacities of Eastern and Southern Mediterranean countries in each step of the IWC data process from the field to the final reporting.

Targets

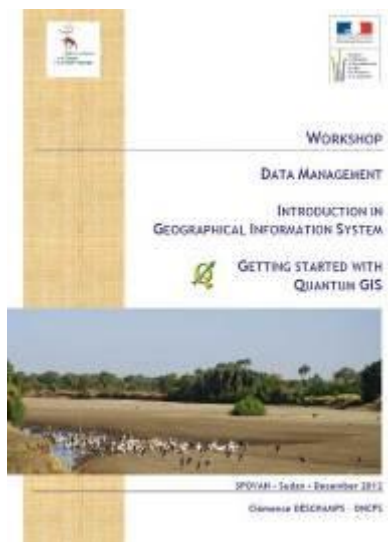
- limiting field efforts to flooded wetlands only (avoiding long transportation to dry wetlands)
- integrating available training kits in universities and colleges curricula

² <http://www.wetlands.org/OurWork/Biodiversity/Monitoringwaterbirdpopulations/tabid/773/Default.aspx>

- designing awareness programs for administration
- reviewing and improving IWC sampling design (limiting costs of visiting unimportant wetlands)
- improving field skills and capacities of observers
- training and improving capacities and communication skills of national database managers and IWC network leaders

Activities

Designing and providing a whole range of training and capacity building tools including in



- basic remote sensing: 2 x 5 days x 5 countries
- statistical aspects of sampling design and population dynamics data analysis: 2 x 5 days x 5 countries
- understanding of issues in biodiversity monitoring, waterbird and wetland ecology and conservation, IWC, AEWA (WOW Flyway Training Kit and ONCFS training kits): 2 x 5 days x 5 countries
- bird identification and census (ONCFS training kits): 2 x 5 days x 5 countries
- database development and management: 2 x 5 days x 5 countries
- GIS mapping: 2 x 5 days x 5 countries

Total budget : 900k€



CONCEPT 2

Contribution of International Waterbird Census against illegal killing of migratory birds

Bringing awareness, skills & action in the field

Context

Recent surveys conducted around the Mediterranean by BirdLife³ shows that massive illegal killing of migratory birds is common practice in the Mediterranean basin. This finding seriously questions the



sustainability of this large-scale exploitation and different programs have already started or are currently being developed. CMS resolution⁴ 11.16 calls on Parties, non-Parties and other stakeholders, including non-governmental organizations, to engage in immediate cooperation to address the illegal killing, taking and trade of migratory birds through support of, and collaboration with, existing international initiatives and mechanisms to address these issues.

In many countries, however, a common weakness of hunting law enforcement in the field is the lack of awareness, practical skills and training for local rangers and/or authorities.

The International Waterbird Census (IWC⁵) is one of the most important avian biodiversity monitoring programs bringing thousands of experts and scientists in the field every year. During IWC field activities, observers frequently come across illegal killing actions of waterbirds or terrestrial birds either by deliberate poaching or inadequately informed hunters. Occasional IWC field operations implying both ornithologists and rangers have proved to be very successful, although logically significantly increasing IWC costs. Therefore IWC could be adapted/optimized to operate as an efficient



³ <http://www.birdlife.org/illegal-killing>

⁴ http://www.unep-aewa.org/sites/default/files/document/tc_inf_12.9_cms_res_11_16_prevention%20illegal_killing_taking_trade_of_mbs_0.pdf

⁵ <http://www.wetlands.org/OurWork/Biodiversity/Monitoringwaterbirdpopulations/tabid/773/Default.aspx>

information platform to raise awareness among encountered hunters and to connect with local rangers and authorities and inform/train them where necessary.

Objective

This project aims at enhancing and strengthening law enforcement and rangers training in the field by taking advantage of the IWC field component.



It would adequately complement national or international programs dealing with this issue of illegal killing of birds by contributing to cost-effectively improve monitoring and capacities in the field.

Added value of such cost optimization would include:

- a) Increased monitoring of wildlife crimes & better information of local authorities
- b) Improvement of awareness of hunters and other stakeholders through communication with IWC experts
- c) increased efficiency in fighting illegal killing
- d) improvement of IWC spatial coverage

Activities

- a) designing and production or adaptation of existing communication tools toward hunters: 80k€ x 1 year
- b) training and awareness programs toward staff of law enforcement agencies: 100k€/year x 3 years
- c) logistical support to operate joint actions of IWC experts and rangers in extended wetlands network: 75k€/year x 3 years

Total budget : 605 k€ for 3 years for the 5 North-African countries

CONCEPT 3

A North-African Atlas of wintering waterbirds

Analyzing and communicating regional IWC data in climate change context

Context

Wetlands are major providers of a wide array of ecosystem services, and are thus essential to human well-being. They play a key role in preserving water resources, and in crop and livestock production, fishing and tourism. This project aims at assessing the influence of climate change on Mediterranean wetlands through the monitoring of their avian biodiversity. Waterbirds are indeed at the end of the food chain, reflecting thus the state of the whole ecosystem and many studies have shown that they are impacted by climate change. They are good indicators to assess the impact of climate change on wetlands and associated ecological services. This project also aims at providing indicators to measure progress towards the achievement of several targets of international conventions signed by Mediterranean countries (African Eurasian Waterbird Agreement, Convention on the Biological Diversity, Ramsar Convention on wetlands, Convention on Migratory Species, Development Goals).

If reasonable datasets on waterbird abundance have been published for European countries, gaps remained for the South and the East of the Mediterranean basin (with the exception of the Atlas of wintering waterbirds of Libya¹). The main cause for this situation is a lack of effort in the coordination of bird census and capacity building. Following 3 years devoted to strengthening and extending the existing network of IWC partners in North Africa to feed a comprehensive database on waterbirds population changes at the Mediterranean level, the proposed project will aim at analyzing this database to develop indicators in the context of climate change and publishing results of such analyses in an Atlas of North African wintering waterbirds, encompassing Morocco, Algeria, Tunisia, Libya and Egypt.

Objective

This project aims at producing and publishing an Atlas of North African wintering waterbirds.

Targets

The expected outcomes of the project are:

- Impact assessment of climate change on Mediterranean wetlands through distribution and trends of their avian diversity
- Indicators to measure progress towards the achievement of targets 4, 5, 6, 7, 10, 12 and 14 of the Convention on Biological Diversity, the general objective of the Ramsar Convention of wetlands, the Resolution 10.19 (paragraph 7) of the Convention on Migratory Species and the goal 7 of the

Millennium Development Goals and the targets 2.2, 3.1, 3.2 and 3.3 of the Action Plans of the Agreement on the Conservation of African-Eurasian Migratory Waterbirds.

Activities:

- Analyzing species-specific datasets (about xx species) to assess and map distribution and time trends using climate and environmental covariates: 6 months
- Coordinating and producing species monographs and introductory overview: 10 months
- Organizing 4 meetings of editorial board
- Editing the Atlas layout: 3 months
- Publishing and disseminating the Atlas: 3 months

Total budget: 22 months x 8k€ + 4 meetings x 15k€ = 236k€

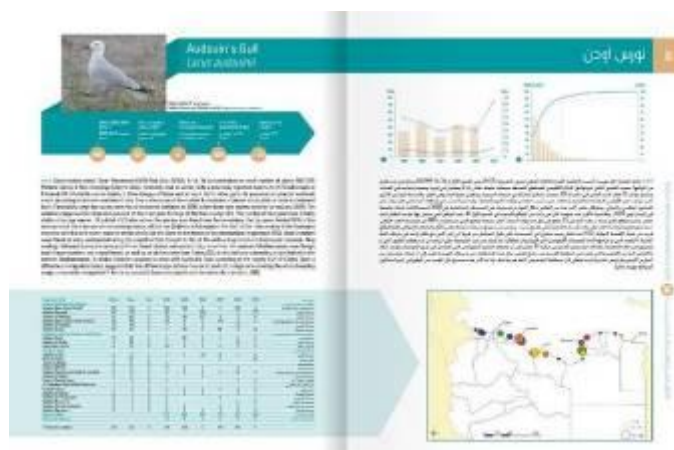


Figure 2: Example from the Libyan Atlas



ⁱⁱ EGA - RAC/SPA waterbird census team (2012) - Atlas of wintering waterbirds of Libya, 2005-2010. Imprimerie COTIM, Tunisia.