International Waterbird Census Report for Lebanon 2000-2003

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Introduction:

Since January 2000, A Rocha Lebanon has taken the responsibility of national coordinator for the International Waterbird Census (IWC). This count is part of a nearly global effort by Wetlands International to monitor waterbird populations. It is held every January when water birds tend to congregate and do not move very much between water bodies, thus allowing for accurate national, regional and even global estimates on waterbird populations. For four years running, A Rocha Lebanon has coordinated and run all of the counting efforts within Lebanon for the IWC.

The aims of the IWC as outlined by Wetlands International are as follows:

- To provide the basis for estimates of waterbird populations
- To improve knowledge of little-known waterbird species and wetland sites
- To monitor changes in waterbird numbers and distribution by regular, standardised counts of representative wetlands
- To identify and monitor sites that qualify as Wetlands of International Importance under the Ramsar Convention on Wetlands
- To provide information on conservation status of waterbird species for use by the African–Eurasian Migratory Waterbird Agreement under the Bonn Convention
- To increase awareness of the importance of waterbirds and their wetland habitats at local, national and international levels

A Rocha's aims in carrying out the IWC are as follows:

- To provide Wetlands International with data on a national level
- To establish the most important sites for waterbirds in Lebanon

Method:

Ideally, all national counts are run on a designated weekend in January set each year by Wetlands International. However, if the number of researchers is limited within a given country, it is acceptable to run the counts throughout January. This is certainly true for Lebanon and it has been necessary for A Rocha to carry out these surveys throughout the entire month.

All of the counts in Lebanon are done on foot. The routes walked for each site are standardized and a description of each site route can be accessed on A Rocha Lebanon's office computer. All waterbirds are recorded and every effort made to avoid double counting.

A total of seven sites have been visited at least once during the four years of counting. Some sites have been eliminated in recent years due to an insignificant number of birds counted, and one site (Tel Akhdar) was not counted in 2003 due to the political situation at the time.

Status of the wetland is recorded each year indicating whether the wetland is permanent or temporary, giving an indication of the overall health of the wetland, and listing potential threats to each site. Data is then submitted electronically to Wetlands International.

Site Descriptions:

Aanjar

The Aanjar wetlands are located in the east Bekaa valley off the Damascus highway and just north of the town of Aanjar. The entire area is roughly 1 ½ kilometers square. The wetlands are spring-fed, remain wet year-round and in some areas there are extensive reedbeds. However, the wetlands and reedbeds are highly segmented by farmer's fields and drainage ditches. There is little to no protection of the area and it is under severe threat due to hunters, further segmentation, drainage, harmful fertilizers and pesticides.

South Coast from Beirut to Tyre

This stretch of coast (and the entire coastline of Lebanon for that matter) is highly developed with industry, farming and housing. Various industrial plants, banana and other fruit plantations, and urban sprawl run to the edge of the shoreline. Apart from this unnatural setting, the coast is under threat from various forms of pollution and further development.

Taanayl

This site in the Bekaa Valley, between Chtoura and Aanjar, is part of a dairy farm owned by a monastery. The main feature of Taanayl is a small man-made lake (roughly 750x250 m) used for irrigation purposes. Surrounding the lake are farmer's fields and woodland. It is illegal to hunt on this land but hunters can still be found. No other threats are known.

Aammiq Wetlands

The Aammiq Wetlands are located in the western Bekaa Valley, 8 km south of the town of Qab Elias. The wetlands are spring fed and the core area is roughly 250 hectares. Much of the wetland is covered in reedbed and in the winter and spring surrounding fields are flooded. Typically the marsh dries up by mid-summer. The area is now a national reserve and is under the initial stages of government protection.

Lake Qaroun

This lake lies in the southern part of the Bekaa. It is actually a reservoir, formed by the damming of the Litani River. The lake is by far the largest body of fresh water in Lebanon, roughly 4 km long by 1 km wide. It is a deep lake, but highly polluted by all of the chemicals, pesticides, and fertilizers entering the Litani River. Threats to the lake are pollution and hunting.

Tel Akhdar

This site lies about 3 km north of the Aammiq wetlands. It is an unnatural wetland made by scraping the earth to create shallow pools for the purpose of attracting ducks for hunting. The site itself is no greater than 1km square, but the habitat created does attract ducks and other waterbirds. If the threat of hunting was removed, the site and surrounding fields have the potential to be a very good habitat for waterbirds.

Cheik Zennad

Cheik Zennad lies about fifteen km north of the city of Tripoli. The site is a series of derelict salt pans about ½ km inland from the Mediterranean. The entire site is roughly 1km square. Ample mudflats are created where the water recedes. Unfortunately, the site is easily accessed by a road that runs through the middle of the salt pans and hunting is the most immediate threat. As of yet there is little protection of the area and potential development is also a threat.

Results:

The following are the results obtained at the seven wetland sites in Lebanon. Counts at Aanjar and the South Coast were eliminated due to the insignificant number of waterbirds. Nearly 10,000 waterbirds and 35 different species have been counted over three years of data. It must be noted that all data from 2001 has unfortunately been lost.

AANJAR

SPECIES	2000
MALLARD *Anas playtrhynchos*	1
WATER RAIL *Rallus aquaticus*	4
MOORHEN *Gallinula chloropus*	25
LAPWING *Vanellus vanellus*	5
SNIPE *Gallinago gallinago*	1

SOUTH COAST FROM BEIRUT TO TYRE

SPECIES	2000
LITTLE GREBE *Tachybaptus ruficollis*	1
MOORHEN *Gallinula chloropus*	3
COOT *Fulica atra*	2
BLACK-HEADED GULL *Larus ridibundus*	21
LITTLE GULL *Larus minutus*	1

TAANAYL

SPECIES	2000	2002	2003
CORMORANT *Phalacrocorax carbo*	1		
GREY HERON *Ardea cinerea*	2		1
WIGEON *Anas Penelope*		1	
SHOVELER *Anas clypeata*			4
LAPWING *Vanellus vanellus*	112		
MOORHEN *Gallinula chloropus*			2

AAMMIQ

SPECIES	2000	2002	2003
LITTLE GREBE *Tachybaptus ruficollis*			1
GREAT WHITE EGRET *Egretta garzetta*	1		
GREY HERON *Ardea cinerea*	1		
MALLARD *Anas playtrhynchos*		6	0
SHOVELER *Anas clypeata*		69	6
TEAL *Anas crecca*		12	91
MARSH HARRIER *Circus aeruginosus*	2		
MOORHEN *Gallinula chloropus*	1		
COOT *Fulica atra*		10	70
GOLDEN PLOVER *Pluvialis apricaria*	5		
LAPWING *Vanellus vanellus*	1250	770	993
SNIPE *Gallinago gallinago*			2
GREENSHANK *Tringa nebularia*	1		
YELLOW-LEGGED GULL Larus cachinnans	1		

LAKE QAROUN

SPECIES	2000	2002	2003
LITTLE GREBE *Tachybaptus ruficollis*	15	3	
GREAT-CRESTED GREBE *Podiceps cristatus*	8	5	19
BLACK-NECKED GREBE *Podiceps nigricollis*	22	14	31
CORMORANT *Phalacrocorax carbo*	72	37	4
GREAT WHITE EGRET *Egretta garzetta*		5	3

GREY HERON *Ardea cinerea*	1	12	4
SHELDUCK *Tadorna tadorna*	18	7	
GADWALL *Anas strepera*	4	2	4
TEAL *Anas crecca*	444	45	1227
MALLARD *Anas playtrhynchos*	116	6	21
PINTAIL *Anas acuta*	1		
SHOVELER *Anas clypeata*	50	1400	125
POCHARD *Aythya ferina*	5		7
TUFTED DUCK *Aythya fuligula*	2	1	
COOT *Fulica atra*	330	459	149
LAPWING *Vanellus vanellus*	13	19	5
REDSHANK *Tringa tetanus*	1		
COMMON SANDPIPER *Acititis bypoleucos*	1		
BLACK-HEADED GULL *Larus ridibundus*	325	50	141
ARMENIAN GULL *Larus armenicus*			1

TEL AKHDAR

SPECIES	2002
GOLDEN PLOVER *Pluvialis apricaria*	2
LAPWING *Vanellus vanellus*	467
SNIPE *Gallinago gallinago*	4

CHEIK ZENNAD

SPECIES	2002	2003
GREY HERON *Ardea cinerea*		2
TEAL *Anas crecca*		3
AVOCET *Recurvirostra avosetta*	2	
GREY PLOVER *Pluvialis squatarola*	2	
GOLDEN PLOVER *Pluvialis apricaria*	125	51
LAPWING *Vanellus vanellus*	45	117
RINGED PLOVER *Charadrius hiaticula*	6	
DUNLIN *Calidris alpina*	3	5
LITTLE STINT *Calidris minuta*	5	2
REDSHANK *Tringa totanus*		4
BLACK-HEADED GULL *Larus ridibundus*	1	

Discussion:

As of yet, not enough data has been collected for Lebanon to deduce any significant trends. However, the counts in Lebanon are a small part of a much larger count of the Western Paelearctic which has been running since 1967. In most years, around 20 million waterbirds are counted, of 175 species, and more than 20,000 wetlands have been counted since the beginning. From this data long-term population trends have been obtained.
Some notable results include the Mallard *Anas platyrhynchos,* which has shown a significant decrease in population from 1987-1996. Evidence also shows that a majority of dabbling ducks, diving ducks, and common coot *Fulica atra* populations are also declining in East Mediterranean areas.

A series of reports have been published by Wetlands International with information on each individual species and their population status, the latest being for the years 1997,1998, and 1999. This report and the 1995-96 report can now be downloaded from the Wetlands International website at: **www.wetlands.org**

One of the most significant applications of the results on a broader scale is establishing wetlands of international importance under the Ramsar Convention. Any site that regularly holds 1% or more of a global species population qualifies the wetland for Ramsar site status.

No wetland in Lebanon qualifies under this 1% threshold level. However, as the data reflect, three sites, Lake Qaroun, Cheik Zennad, and Aammiq regularly hold large numbers of waterbirds, and are extremely important nationally in terms of waterbird populations. Currently, two of the sites, Lake Qaroun and Cheik Zennad, have no protection status and are under severe threat.

As mentio ned above, Cheik Zennad is an abandoned area of saltpans north of the city of Tripoli and about a half kilometer inland from the Mediterranean. Wading birds in winter often move from the shoreline inland to feed on the extensive mudflats created by the saltpans. Cheik Zennad has the potential to be the premiere site in Lebanon for waders and other waterbirds. Unfortunately, the site is split by a small farm road, which provides easy access to the area for hunters. Hundreds of cartridges can be found throughout the area. A sad example comes from the 2003 count, when we observed two young men with a motorbike and gun chasing a pair of grey herons *Ardea cinerea* arriving from the shoreline, only later to find them tormenting an injured (presumably shot) lapwing *Vanellus vanellus*. Surely the number of waterbirds that are found at this site would greatly increase if the hunting pressure could be eliminated. The importance of this site for waterbirds should not be overlooked and every effort should be made to ensure its future protection.

Lake Qaroun is by far the largest freshwater body of water in Lebanon. Numbers of Teal *Anas crecca, and Shoveler Anas clypeata* can easily exceed 1000 individuals per species

during the winter months. Nationally, this site holds by far the largest number of wintering waterbirds and is also important to species such as the Great Crested Grebe *Podiceps cristatus,* and Shelduck *Tadorna tadorna,* rarely found anywhere else in the country.

As with Cheik Zennad, there is a serious threat to the waterbirds of Lake Qaroun due to hunting. Hunters in boats can be seen chasing the various flocks, and those without boats wait eagerly along the shore for birds that venture too close. But another very worrisome threat is that of pollution. Upon a recent visit to the lake, 11 Grey Herons, 3 Great White Egrets *Egretta garzetta,* and 2 White Pelicans *Pelecanus onocrotalus* were found along the shore; all but two were dead, and the other two seriously ill. They did not have gunshot wounds, but rather appeared to have some type of poisoning from the lake. The effect such pollution will have on all of the waterbirds which visit the lake is unknown but undoubtedly serious. The site should continue to be monitored for evidence of more sick or dead birds, and as with Cheik Zennad it is vital that the future protection of this site is ensured for the sake of waterbirds in Lebanon.

The data also show that there is a significant population of lapwings over-wintering in the area of the Aammiq wetlands and the nearby site of Tell Akhdar. This is probably due to the extensive farmland in the area. In the winter, many of the fields are wet or flooded with stubble and low-lying vegetation creating an ideal habitat for this species. Because of the lapwing's declining international status, it would be worth monitoring future populations around the Aammiq wetlands and surrounding areas throughout the winter and early spring. The fact that no lapwings were recorded in the farmland surrounding Taanayl for 2002 and 2003 is somewhat concerning.

Another notable species is the golden plover *Pluvialis apricaria,* recorded in the farmland surrounding Cheik Zennad. The numbers recorded here for this species are by far the highest within Lebanon. It would be worth surveying the area further to get a better idea of how many are around Cheik Zennad throughout the winter and whether they are under any threats.

Conclusion:

A Rocha's involvement with the IWC ensures that Wetlands International will get accurate data about the wetlands and waterbirds found in Lebanon. Each county's participation in this count is vital in order to gain an accurate and complete understanding of waterbird populations on an international scale. On a national level, the data shows that there are three key wetlands for wintering waterbirds in Lebanon. Two of them, Lake Qaroun and Cheik Zennad, are under serious environmental threat and should be made a conservation priority for Lebanon.

References

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