

**Status and Trends  
of  
Selected Important Bird Areas in Egypt**

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**Definitions:**

- **Monitoring:** is the repeated collection of information over time, in order to detect changes in one or more variables.
- **Trigger species:** are the bird species that determine if a site should be designated as an IBA, i.e. the Threatened, Restricted-range, Biome-restricted and/or Congregatory species, whose regular presence at a site in numbers exceeding relevant thresholds qualify it as an IBA.
- **Biome:** is defined as a major regional ecological community, characterized by distinctive life forms and principal plant species).
- **Migration bottleneck:** is a site at which, during well defined seasons of the year, large numbers of migratory birds regularly pass through or over. These sites are mainly land on either side of the narrowest crossing point, or straits of a large water body, across which birds may funnel in dense, often low flying flocks).
- **Pressure:** Pressure indicators identify and track the major threats to important bird populations at IBAs.
- **State:** State indicators refer to the condition of the site, with respect to its important bird populations.
- **Response:** Response indicators identify and track conservation actions.

**Summary:**

In Egypt 34 sites were designated as IBAs according BirdLife's criteria most of these IBAs are terrestrials areas supporting trigger species of international conservation concern and or sites in which high concentration of birds were recorded forming a strategic points for migration (Bottlenecks). Since designation Egyptian IBAs network no longer monitored, the status and conditions of birds species and habitat no directly investigate using IBAs guidelines.

In this report we will try to understand the status and trends of biodiversity and track respond to threats and assess the effectiveness of conservation efforts using standardized way to assign scores for the threats to IBAs ('Pressure'), the condition of IBAs ('State') and conservation actions taken at IBAs ('Response'). It is also explain how this scoring system works.

Five IBAs were selected to be subjected to monitoring procedures, these sites were intensively used by soaring birds during migration periods of its life cycle, these sites are, Zaranik, Ras Mohamed, El Qa Plain, Hurghada Archipelago, and Wadi El Gemal Island.

The result of the selected sites assessment shows shortage in birds population estimate where the monitoring depends on data on habitat quality and quantity. Although the conservation actions in the investigated site increasing the pressures and habitat state are decreasing.

Adopting to migratory soaring birds conservation and compromising the national strategy of Natural conservation sector for improving and promote performance and skills of protected areas' staff in the first stage of IBAs monitoring process, 20 environmental researches were trained on collecting IBAs required information and filling monitoring form. They also had background knowledge about concepts, approach and procedures of IBAs monitoring. Importance of migratory soaring birds and the benefits of conducting IBAs monitoring on conservation of these birds group and its habitat as key sites for biodiversity conservation was a main issue addressed during the training.

In this report the guidelines of IBAs monitoring is presented to facilitate communication and understanding of the concept and approach of protection of IBAs within different level of decision makers and different relevant stakeholders interesting despite of those who working in protecting wildlife and natural resources management for benefit of wild birds and soaring birds in particular.

## **1- Introduction and background:**

The Important Bird Area (IBA) identification process aims to locate, list and document all sites that, individually or as networks, are critically significant for bird conservation. IBAs are identified using local data and applying globally or regionally agreed-upon criteria. In most cases IBAs identification depends on

- bringing together the available published and unpublished information and consultation with experts on the avifauna of the country. IBA identification is based on data that are as complete and up-to-date as possible.
- Consultation of wide range of stakeholders with varying expertise in refining and agreeing on the national inventory, and verifying site specific information.
- Each IBA criterion is supported by a list of ‘trigger’ species, and, where appropriate, population thresholds.

The IBA selection categories and criteria are standardized globally, where the Birdlife Secretariat (in consultation with the network) develops and maintains the taxonomic list of trigger species and population thresholds to be used for each IBA category in each region. The Secretariat also maintains consistent standards, making sure that agreed-upon criteria are applied in a transparent, consistent and common-sense fashion. Hitherto, the identification of IBAs has focused on terrestrial and freshwater ecosystems, which encompass inland and coastal wetlands, with well established processes for identifying and establishing boundaries for IBAs in these environments.

### **1.1- Criteria for terrestrial IBAs**

To qualify as an IBA, a site must meet four standard criteria. These criteria address the two key issues of concern in biodiversity conservation, namely vulnerability and irreplaceability. The criteria thus address (a) globally threatened (vulnerable) species and (b) three classes of geographically concentrated (irreplaceable) species, namely restricted-range species, biome-restricted species and congregatory species. A site may qualify for designation as an IBA if it meets at least one of the 4 criteria.

#### **Category A1: Globally Threatened species**

The site regularly holds significant numbers of a Globally Threatened species, or other species of global conservation concern.

#### **Category A2: Restricted-range species**

The site is known or thought to hold a significant component of a group of species whose breeding distributions define an Endemic Bird Area (EBA) or Secondary Area (SA).

#### **Category A3: Biome-restricted assemblages**

The site is known or thought to hold a significant component of a group of species whose distributions are largely or wholly confined to one biome.

#### **Category A4: Congregations**

A site may qualify as an IBA if it meets any one or more of criteria i–iv below.

The site is known or thought to hold, on a regular basis,

- (i) 1% or more of a biogeographic population of a congregatory waterbird species,
- (ii) 1% or more of the global population of a congregatory seabird or terrestrial species,
- (iii) 20,000 or more waterbirds or 10,000 pairs or more of seabirds of one or more species, or
- (iv) The numbers exceed thresholds set for migratory species at bottleneck sites.

Since designation of Egyptian IBAs, no monitoring or assessment of sites criteria, threats, habitats and birds population were performed. In Egypt 34 sites were designated as important birds areas in 1999 as part of the IBA Program in Africa which started in 1993 with the main goal to identify and document the IBAs in Africa and its associated islands, through the international program of IBAs designation, Birdlife International launched in 1989 and aimed at identifying, monitoring and protecting a network of critical sites for the world's birds.

This report will present monitoring IBAs in Egypt and will be baseline evaluation for the sites which does not assessed since designation for future monitoring and evaluation. During this process we are trying to identify information gaps and set methodology for data collection to solve data shortage problems in future and facilitate IBAs monitoring process in Egypt, considering IBAs key site for conservation adopting to birdlife guidelines and approach.

**Objectives:**

- 1- Update information about IBAs in Egypt for bird conservation using available information in protected areas network.
- 2- Identify information gaps and adapting national guidelines and procedures for IBAs monitoring.
- 3- Promote and involve site based experts in data collection and monitoring process.
- 4- Establish a database for critical IBAs information in a way that can be maintained, updated and made available in individual site.
- 5- Promote learning and capacity building for IBAs staff on monitoring and assessment procedures.
- 6- Raise awareness about the project of Mainstreaming of migratory soaring conservation activities within target productive sectors in Rift Valley and Red Sea Flyway and its role in birds conservation.

**2- MONITORING IMPORTANT BIRDS AREAS IN EGYPT**

The BirdLife global strategy (BirdLife International 2004a) sets objectives under the themes of species, sites, habitats and people. The strategy recognizes the need to monitor progress against these objectives.

The IBA program aims to identify and protect a network of sites critical for the long-term viability of wild bird populations, across the range of those bird species for which a sites-based approach is appropriate. IBAs are sites of international biodiversity conservation importance, chosen using agreed, objective, quantitative and scientifically defensible criteria. As such they form part of the set of key biodiversity areas (see Eken *et al.* 2004, Langhammer *et al.* in press).

**2.1- Principles and approach:**

IBA monitoring is needed both to assess the effectiveness of conservation measures and to provide an early warning for problems. The results should feed directly into national reporting, adopting to BirdLife's Global Strategy which designed to consolidate the following monitoring processes:

1. Update of IUCN Red List status (all bird species) and actions (Globally Threatened Birds)
2. Simple monitoring of Pressure, State and Response (including safeguard status) at all IBAs in network countries, supplemented by remote sensing (within and outside the network)
3. Population trend assessment for all Critically Endangered species, using a 'species guardian' approach
4. Assessment of trends in relative abundance of a set of common bird species using birders' day lists
5. Regular update from network NGOs on membership, number and membership of affiliated Local Conservation Groups (LCGs), and self-evaluation against criteria of sustainability and stability.

Monitoring schemes are much more likely to succeed if they are planned systematically. Figure 1 shows the steps needed to design an ideal monitoring scheme. This process may seem complex, but it really amounts to the consideration of five questions in sequence:

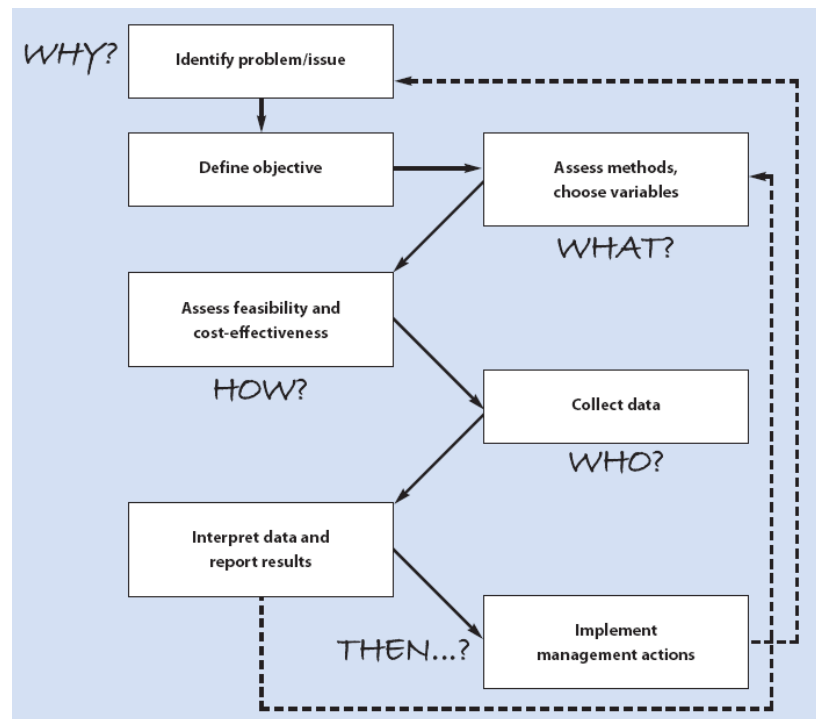
- Why monitor?
- What should we monitor?
- How should we monitor?
- Who should monitor?
- What happens next?

All these questions are important, but the first and last generally receive far less attention than the others. Techniques for data collection are well documented, but there is less advice available on how to design the system in the first place and how to use the information collected to achieve real conservation objectives.

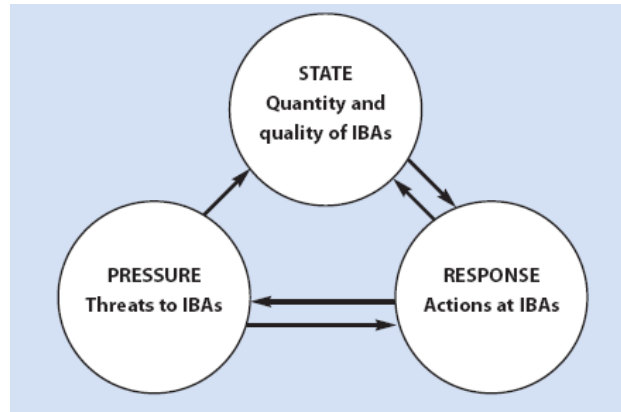
This is partly because people often think of monitoring as just the business of collecting data. In fact, monitoring is a process and a means to an end – that end, in this case, is better conservation. It involves the stages of design, data (including collection, storage, analysis and interpretation) and application. A good monitoring scheme also has appropriate feedback loops built in at each stage. At the site level, we monitor IBAs in order to:

- Detect and act on threats in good time. Monitoring data provide ammunition for advocacy and information for designing interventions.
- Assess the effectiveness of conservation efforts. Is investment in conservation actually bringing about an improvement? Are 'sustainable use' approaches really proving sustainable?

**Figure 1:** Simplified steps to design monitoring scheme.



**Figure 2.** The relationship between indicators of pressure, state and response



Monitoring data should inform action planning for IBAs. Site action plans should include monitoring as a priority activity, and ensure that there are clear mechanisms for adapting management according to monitoring results. If monitoring reveals a conservation problem, there need to be ways to deal with it. It is important to develop clear procedures for taking action.

Monitoring is also imposed to improve the human resource and raise capacity through adding monitoring and assessment processes, principles and approaches in routine activities for site based conservation activities. With the support of Migratory soaring birds conservation project the objective during monitoring IBAs procedures to improve knowledge about IBAs monitoring procedures, guidelines, and filling forms and collect information required for IBAs assessment. During the first stage of monitoring Egyptian IBAs network, about 20 individuals in different protected areas learned how to fill the standardized form of IBAs monitoring accomplished by Birdlife International, and their inputs are the base for this report where all information, assessment and scores are done by these personnel attended preliminary training by project

staff, those will be contact points in the future for regular monitoring and data collection which support conservation of Egyptian IBAs network as key sites for biodiversity conservation.

The project aims to establish basic team focusing in principle on all birds monitoring and researches activities within Egyptian IBAs network and leading activities in a site bases, also create active communication mechanism to ensure data exchange and learning from others experience is crucial to update birds information and establish national data base to guide decision making and support planning and conservation of trigger birds species and protect its favorable habitat.

### 2.1.1- Assessing and scoring Important Bird Areas

Some sites may support 'trigger' species that differ in their conservation status, or depend on habitats that are changing in different ways. In these cases, the scoring system uses a 'weakest link' approach. This means that IBA scores are based on the 'worst' case indicator score (e.g. the most threatened species or the least intact habitat). This approach is precautionary and gives a simple decision rule to use when only incomplete information is available.

This section presents the method for assessing and scoring the threats to IBAs, the condition of IBAs, and conservation actions taken at IBAs. It involves assigning simple scores to selected indicators for each of Pressure (threats), State (condition) and Response (actions). These indicator scores are then used to obtain overall IBA status and trend scores. Although the details of scoring Pressure, State and Response differ, the resulting scales are the same for each. **Status scores** are assigned on a simple, four-point scale, from 0 to 3 (or -3 in the case of Pressure). **Trend scores** can be calculated by comparing status scores between assessments, on a scale of -3 to 3. An overview to the scoring system is given below.

**Figure 3:** Monitoring Important Bird Areas: scoring overview.

| VARIABLE                | STATUS                      |                      | TREND   |
|-------------------------|-----------------------------|----------------------|---|
|                         | <b>Pressure</b>             |                      |   |
|                         | <b>Scores</b>               | <b>Status scores</b> | <b>Trend scores</b>                                       |
| Timing                  | 0,1,2,3                     |                      |   |
| +                       | +                           |                      |   |
| Scope                   | 0,1,2,3                     |                      |   |
| +                       | +                           |                      |   |
| Severity                | 0,1,2,3                     |                      |   |
| =                       | =                           |                      |   |
| Total (Impact)          | 0-9                         | → 0,-1,-2,-3         | → Status score from<br>Year 2 – Year 1 → -3,-2,-1,0,1,2,3 |
| <b>State</b>            |                             |                      |   |
|                         | <b>percentage remaining</b> |                      |   |
| Populations or habitats | <40, 40-70, 70-90, >90      | → 0,1,2,3            | → Status score from<br>Year 2 – Year 1 → -3,-2,-1,0,1,2,3 |
| <b>Response</b>         |                             |                      |   |
|                         | <b>Scores</b>               |                      |   |
| Designation             | 0,1,2,3                     |                      |   |
| +                       | +                           |                      |   |
| Planning                | 0,1,2,3                     |                      |   |
| +                       | +                           |                      |   |
| Action                  | 0,1,2,3                     |                      |   |
| =                       | =                           |                      |   |
| Total                   | 0-9                         | → 0,1,2,3            | → Status score from<br>Year 2 – Year 1 → -3,-2,-1,0,1,2,3 |

Timing, scope and severity scores are then combined to give a **Threat** score as follows:

**a)- Timing of threat Timing score**

|  |   |
|--|---|
| Happening now  | 3 |
| Likely in short term (within 4 years)                | 2 |
| Likely in long term (beyond 4 years)                 | 1 |
| Past (and unlikely to return) and no longer limiting | 0 |

**b)- Scope of threat Scope score**

|                                   |   |
|-----------------------------------|---|
| Whole population/area (>90%)      | 3 |
| Most of population/area (50-90%)  | 2 |
| Some of population/area (10-50%)  | 1 |
| Few individuals/small area (<10%) | 0 |

**c)- Severity of threat Severity score**

|  |   |
|--|---|
| Rapid deterioration (>30% over 10 years or 3 generations, )    | 3 |
| Moderate deterioration (10–30% over 10 years or 3 generations) | 2 |
| Slow deterioration (1–10% over 10 years or 3 generations)      | 1 |
| No or imperceptible deterioration (<1% over 10 years)          | 0 |

**Impact score of threat** = timing score + scope score + severity score

**Important:** if the score for any of timing, scope or severity for a given threat = 0, then the impact score for that threat = 0. (This means that the impact score never has the value 1 or 2.)

Using the ‘weakest link’ approach, the highest impact score of any threat is then used to assign a threat status to the IBA on a scale of 0 to -3, as follows:

**Highest impact score of any threat IBA threat status score & its description**

|     |    |           |
|-----|----|-----------|
| 0   | 0  | Low       |
| 3-5 | -1 | Medium    |
| 6-7 | -2 | High      |
| 8-9 | -3 | Very high |

**2.1.2- Assessing and scoring condition (State):**

The condition (State) assessment may be based on:

- Population sizes for one or more ‘trigger’ species or each ‘trigger’ species assessed individually.
- The area and quality of the key habitats on which the ‘trigger’ species depend, as an indirect measure, or ‘surrogate’, for population size.

Scores must also take into account a comparison of the population sizes of ‘trigger’ species to either:

- Their size when the IBA was first identified, assuming there is no indication that species’ populations then were declining or depleted
- The optimum for the site, based on the estimated extent of potential habitat and population density in undisturbed conditions.

Similarly, scores must also take into account the existing areas and quality of key habitats compared to the estimated potential optimum for the site. These comparisons are used to calculate or estimate the percentage of potential population or habitat remaining as follows:

**% potential population or habitat remaining** = (remaining population or area / estimated optimum population or area) x 100%

Using a ‘weakest link’ approach, the IBA is assigned a condition status score based on the percentage of potential population or habitat (after adjusting for quality) remaining of the ‘worst’ species or habitat, as follows:



**% potential population or habitat remaining IBA condition status score & its description of ‘worst’ species or habitat**

|        |   |           |
|--------|---|-----------|
| >90%   | 3 | Good      |
| 70-90% | 2 | Moderate  |
| 40-70% | 1 | Poor      |
| <40%   | 0 | Very Poor |

**2.1.3- Assessing and scoring actions (Response):**

Three complementary measures of response – the levels of (1) formal designation for conservation, (2) management planning and (3) implementation of conservation action are scored, as follows:

**a)- Conservation designation Score**

|  |   |
|--|---|
| Whole area of IBA covered by appropriate conservation designation (>90%)                 | 3 |
| Most of IBA covered (including the most critical parts for the trigger species) (50–90%) | 2 |
| Some of IBA covered (10–50%)   | 1 |
| Little/none of IBA covered (<10%)  | 0 |

**b)- Management planning Score**

|   |   |
|---|---|
| A comprehensive and appropriate management plan exists that aims to maintain or improve the populations of qualifying species | 3 |
| A management plan exists but it is out of date or not comprehensive   | 2 |
| No management plan exists but the management planning process has begun   | 1 |
| No management planning has taken place  | 0 |

**c)- Conservation action Score**

|   |   |
|---|---|
| The conservation measures needed for the site are being comprehensively and effectively implemented                               | 3 |
| Substantive conservation measures are being implemented but these are not comprehensive and are limited by resources and capacity | 2 |
| Some limited conservation initiatives are in place (e.g. action by LCGs)  | 1 |
| Very little or no conservation action is taking place   | 0 |

The IBA is assigned an overall response status score based on the summed status scores for the three different action types as follows:

**Summed action scores IBA action status score & its description**

|     |   |            |
|-----|---|------------|
| 8–9 | 3 | High       |
| 6–7 | 2 | Medium     |
| 2–5 | 1 | Low        |
| 0–1 | 0 | Negligible |

Generally, Soaring birds in particular are using different varieties of habitats during migration time in their annual life cycle, where it is dependent in weather conditions which may force it to very difficult and critical situations. Concerning this circumstances, the project focused in the first stage of IBAs monitoring to depend on protected areas network which situated in the migration flyway of soaring birds as key site and base for future progress and improvement of IBAs monitoring outside protected areas building on resource and capacities promoted and developed in the first stage inside protected areas.

The target sites in the first stage of monitoring were sites designated as IBAs and known from literature that intensively used by soaring birds during migration periods and distributed through the flyway from north to south Egypt, these sites are, Zaranik, Ras Mohamed, El Qa Plain, Hurghada Archipelago, and Wadi El Gemal Island.

### 3- TARGET SITES:

#### 3.1- Zaranik Protected Area (EG002):

**Background:** Zaranik Protected Area is about 25000 ha, located at the eastern end of Lake Bardawil with coordinates 33° 25.00' East 31° 7.00' North and encompasses an eastern extension of that lake: the Zaranik Lagoon. The lagoon is shallow, with numerous small islets scattered throughout it, most of which are covered with dense saltmarsh vegetation. Extensive mudflats and saltmarshes are found along the lagoon's shores, merging into sabkha and sand-dunes further inland. A saltworks was established in 1997 at Zaranik in the early 1980s, prior to its declaration as a protected area, consisting of a pumping station, extensive evaporation pools and salt pans. The area was assessed and the criteria for IBAs designation were conformed in 2001 since then no more assessment was accomplished. The site was declared as IBAs based on two criteria (A1, A4i)

**A1-** The site regularly holds significant numbers of a Globally Threatened species, or other species of global conservation concern. (Pallid Harrier *Circus macrourus* and Corncrake *Crex crex*).

**A4i-** The site is known or thought to hold, on a regular basis, 1% or more of a biogeographic population of a congregatory waterbird species.

Zaranik's importance is primarily as a bottleneck area for migrant Palearctic waterbirds (See Box below). Every autumn, hundreds of thousands of waterbirds flying along the eastern Mediterranean coastline concentrate at Zaranik or pass through the area, many landing to rest and feed before resuming their journey southwards across Sinai or westwards to the Nile valley.

The maximum counts (seasonal totals) of some of the most numerous autumn migrants recorded during four seasons between 1979 and 1992 at Zaranik are as follows: *Pelecanus onocrotalus* (2,122), *Ixobrychus minutus* (4,162), *Nycticorax nycticorax* (2,742), *Ardeola ralloides* (5,487), *Casmerodius albus* (4,239), *Ardea cinerea* (6,194), *Ardea purpurea* (5,349), *Anas querquedula* (221,616), *Recurvirostra avosetta* (6,828), *Glareola pratincola* (490), *Charadrius hiaticula* (1,909), *Charadrius alexandrinus* (5,687), *Charadrius leschenaultii* (197), *Calidris alba* (5,776), *Calidris minuta* (15,503), *Calidris alpina* (8,134), *Limosa limosa* (1,254), *Larus genei* (2,011), *Sterna hirundo* (12,433), *Sterna albifrons* (1,810), *Chlidonias hybridus* (950) and *Chlidonias leucopterus* (18,436).

Some 270 bird species have been reported in Zaranik. Only 10 species are known to breed in the Protected Area, of which *Sterna albifrons* and *Charadrius alexandrinus* are the most numerous and prominent. Zaranik is also the only locality in Egypt where *Recurvirostra avosetta* is known to breed on a regular basis (five pairs in summer 1994), and large numbers also winter (up to 700, December 1998).

| Species                                       | Season  | Min-Max       | Criteria |
|---|---------|---------------|----------|
| Greater Flamingo <i>Phoenicopterus roseus</i> | winter  | 10000 - 10000 | A4i      |
| Great Cormorant <i>Phalacrocorax carbo</i>    | winter  | 5000 - 5000   | A4i      |
| Pallid Harrier <i>Circus macrourus</i>        | passage | -             | A1       |
| Corncrake <i>Crex crex</i>                    | passage | -             | A1       |
| Slender-billed Gull <i>Larus genei</i>        | winter  | 2000 - 2000   | A4i      |

#### 3.1.1- Current status and trend:

##### a)- Threats:

during designation The saltworks and bird-catching were the main threats considered to cause impact on habitat and birds. Where salt production was considered to cause large-scale, ecological changes in the Zaranik Lagoon, but did not appear to have had a negative impact on birds and seem to have large positive. The production of salt also has caused limited disturbance so far. Since 2001 the effectiveness of the Protected Area in preventing bird-catching activities (primarily during autumn) has been fairly high with some violations happening, where Falcon-catching activities in particularly stilt difficult to control.

Current assessment is concerning the same threats in addition to nomadic grazing, and drought with some other threats (see table below).

| Threat Type                   | Timing | Scope | Severity | Impact score 2001 | Impact score 2009 |
|-------------------------------|--------|-------|----------|-------------------|-------------------|
| Nomadic grazing               | 3      | 1     | 2        | 6                 | 6                 |
| Housing & urban areas         | 3      | 0     | 2        | 0                 | 0                 |
| Commercial & industrial areas | 3      | 1     | 1        | -                 | 5                 |
| Tourism & recreation areas    | 3      | 1     | 0        | 0                 | 0                 |
| Roads & railroads             | 3      | 1     | 0        | 0                 | 0                 |
| Utility & service lines       | 3      | 0     | 0        | 0                 | 0                 |
| Fishing                       | 3      | 1     | 1        | -                 | 5                 |
| Hunting & trapping            | 3      | 1     | 1        | 6                 | 5                 |
| Gathering plants              | 3      | 1     | 3        | -                 | 7                 |
| Drought                       | 3      | 1     | 2        | -                 | 7                 |
| Industrial salt production    | 3      | 0     | 1        | 0                 | 0                 |

The IBA threat status score in its second assessment is -2 (= 'HIGH') based on the threat from **Grazing** Livestock, **Drought and gathering plants**, (happening now, over some of the area, causing deterioration moderate and rapid) which has the current highest impact score of the selected threats (and which is therefore used as the 'weakest link'). The IBA threat trend score is 0 (= 'NO CHANGE') based on the difference between the status scores of grazing between the two assessments in 2001 and 2009. the impact score of collecting wild vegetation and drought have high impact according to scoring system of IBAs but was not assessed in the first evaluation therefore it needs to be concerned carefully in the future, the score is considered as baseline for the next assessment.

**Hunting and trapping** birds the first assessment was -2 (= HIGH) while in the second assessment was -1 (= MEDIUM) showing trend score = 1 (SMALL IMPROVEMENT) indicating effective control of bird catching in the site.

#### b)- State

**b.1- Bird population:** There was no update for the collected information about birds species where in the first assessment there were counts for five species, about 34,000 individuals were counted.

**b.2- Habitat:** in the current assessment the IBA classified into two general habitat types; Marine and Terrestrial which represent (68% and 32%) respectively. And the quality of both habitat scored as good (> 90% of the optimal habitat) (see table below) .

| Habitat classes | Calculated Optimum area for IBA (ha) | Calculated area (2001) | Quality (2001) | Adjusted % habitat remaining (year 1) | Calculated area (2009) | Quality (2009) | Adjusted % habitat remaining (2009) |
|-----------------|--------------------------------------|------------------------|----------------|---------------------------------------|------------------------|----------------|-------------------------------------|
| Marine          | Unknown                              | < 40%                  | Good           | >90                                   | < 40%                  | Good           | > 90%                               |
| Shoreline       | Unknown                              | < 40%                  | Good           | >90                                   | < 40%                  | Good           | > 90%                               |
| Terrestrial     | Unknown                              | < 40%                  | Good           | >90                                   | < 40%                  | Good           | > 90 %                              |

The IBA condition status score in its second assessment is 3 (= 'GOOD') because the area of different habitat types is the same and the quality is still optimal, according to the available information.

The IBA state trend score in its second assessment is 0 (= 'NO CHANGE') based on stable quality of different habitat.

#### c)- Response:

Zaranik is protected by Prime Ministerial Decree 1429/1985. An administrative building and visitor centre have recently been opened. There is an ongoing GEF-MedWet-EEAA project to develop the management and infrastructure of the reserve. The assessment of conservation actions is shown in the next table.

| Action type Status score | 2001     | 2009     |
|--------------------------|----------|----------|
| Conservation designation | 3        | 3        |
| Management planning      | 1        | 3        |
| Conservation action      | 2        | 2        |
| <b>Total</b>             | <b>6</b> | <b>8</b> |

According to the IBA action status score, the second assessment of Zaranik is 3 (= 'HIGH') based on the combined status scores for Whole area of IBA covered by appropriate conservation designation, planning and action (comprehensive and appropriate management plan exists, and substantive but limited actions in place).

The IBA action trend score for this IBA in its second assessment is +1 (= 'SMALL IMPROVEMENT') based on the difference in total status scores between the two assessments for the three different action types (previously no management planning and limited action in place).

### 3.2- Ras Mohammed National Park (EG033)

**Background:** Ras Mohammed is a headland at the southernmost tip of the Sinai Peninsula, overlooking the juncture of the Gulfs of Suez and Aqaba with coordinates 34° 15.00' East 27° 44.00' North form about 48000 ha. It is composed of uplifted coral reefs, which in places rise steeply from the sea forming high cliffs. These are interspersed with sandy bays and some intertidal flats. A stand of mangrove *Avicennia* is found at the southern end of Ras Mohammed. Coral reefs fringe the headland in almost all directions. Although Ras Mohammed is primarily a marine park, its boundaries encompass a considerable diversity of desert habitats, including sandstone mountains, gravel-plains, wadis, and sand-dunes. The site meets two criteria for designated as IBAs, A1, A4iv;

**A1-** The site regularly holds significant numbers of a Globally Threatened species, or other species of global conservation concern.

**A4iv-** The site is known or thought to hold, on a regular basis, The numbers exceed thresholds set for migratory species at **bottleneck sites**.

Ras Mohammed is important bottleneck for migratory soaring birds, which concentrate in the area in large numbers and regularly stop to rest. *Ciconia ciconia* is the most numerous and prominent soaring bird occurring at Ras Mohammed. In autumn, birds of this species tend to concentrate in southern Sinai, where huge flocks build up at Ras Mohammed. A total of 275,743 individuals was counted over 27 days in August and September 1998, but the actual number of birds passing through was estimated to be 390,000-470,000. Many of the birds congregating in the area descend to rest on the sandy beaches, particularly on the western side of the peninsula, overlooking the Gulf of Suez. Smaller numbers also rest on higher ground in the surrounding desert. An estimated daily average of 12,000 birds rests at Ras Mohammed during peak autumn migration. After resting for some hours, the birds attempt to make the crossing to the western side of the Gulf of Suez. However, it appears that most of the birds seen at Ras Mohammed cross the Gulf further north near El Tor. Other prominent migrants concentrating at Ras Mohammed regularly include *Pelecanus onocrotalus*, *Ciconia nigra*, *Milvus migrans*, *Buteo buteo* and *Accipiter brevipes*. Spring migration is much less pronounced and no significant concentrations have been noted. Notable breeding species include *Egretta gularis*, *Falco concolor*, *Pandion haliaetus* and *Charadrius alexandrinus*(see table below).

| Species                                      | Season  | Criteria |
|--|---------|----------|
| Lesser Kestrel <i>Falco naumanni</i>         | passage | A1       |
| Pallid Harrier <i>Circus macrourus</i>       | passage | A1       |
| Eastern Imperial Eagle <i>Aquila heliaca</i> | passage | A1       |
| White-eyed Gull <i>Larus leucophthalmus</i>  | winter  | A1       |

#### 3.2.1- Current status and trend:

##### a)- Threats:

At designation time, Storks have been colliding with the wires of the communication tower in the park. The main threat to migrating birds is to the east, at Sharm El Sheikh, a rapidly expanding tourism resort along the southern Sinai coast. Garbage, waste-water and green areas are attracting birds from the main migration route to land at Sharm El Sheikh, where they are subject to a variety of man-made threats. Thousands of storks die at Sharm and others may die while migrating further south, from injuries or illness sustained while in the vicinity of this site.

In the current assessment the main threats are from human impacts represented by disturbance, domestic and waste water, garbage and solid waste as a result of intensification tourism activities and expansion of tourism and recreational areas. Recently, oil pollution is addressed as a new threat not in the first assessment (see table below).

| Threat Type                  | Timing | Scope | Severity | Impact score 2001 | Impact score 2009 |
|------------------------------|--------|-------|----------|-------------------|-------------------|
| Tourism & recreation areas   | 3      | 2     | 1        | 5                 | 6                 |
| Flight paths                 | 3      | 1     | 0        | Unknown           | 0                 |
| Recreational activities      | 3      | 1     | 1        | 5                 | 5                 |
| Domestic & urban waste water | 3      | 1     | 1        | 5                 | 5                 |
| Garbage & solid waste        | 3      | 1     | 1        | 5                 | 5                 |
| Oil Pollution                | 3      | 1     | 1        | Unknown           | 5                 |
| Communication tours          | 3      | 0     | 0        | 0                 | 0                 |

The IBA threat status score in its second assessment is -2 (= 'HIGH') based on the threat from, **tourism and recreational areas**, (happening now, over most of the area, causing slow deterioration) which has the current highest impact score of the selected threats (and which is therefore used as the 'weakest link'). The IBA threat trend score is -1 (= 'SMALL DECLINE') based on the difference between the status scores of **tourism and recreational areas** in the two assessments in 2001 and 2009 where this threat is continuous and increasing due to rapid tourism development in the area.

#### b)- State

**b.1- Bird population:** There was only update for passing number of White Stork, in the first assessment estimate of 12,000 of daily passing individuals of species and the actual number estimated to be (390- 470 thousand). Recently, A count of migrants birds result was 250000- 150000 White Stork, and 6-8 individuals of Sooty Falcon and Osprey.

**b.2- Habitat:** in the current assessment the IBA classified into four main habitat types and the quality of both habitat scored as good (> 90% of the optimal habitat) (See Table).

| Habitat classes   | Calculated Optimum area for IBA (ha) | Calculated area (2001) | Quality (2001) | Adjusted % habitat remaining (year 1) | Calculated area (2009) | Quality (2009) | Adjusted % habitat remaining (2009) |
|-------------------|--------------------------------------|------------------------|----------------|---------------------------------------|------------------------|----------------|-------------------------------------|
| Shoreline         | Unknown                              | Unknown                | Good           | >90                                   | 40-70%                 | Good           | > 90%                               |
| Mangrove and bays | Unknown                              | Unknown                | Good           | >90                                   | 40-70%                 | Good           | > 90%                               |
| Terrestrial       | Unknown                              | Unknown                | Good           | >90                                   | 40-70%                 | Good           | > 90 %                              |

The IBA condition status score in its second assessment is 3 (= 'GOOD') because although threats are relatively increasing, the quality is no longer optimal, thus the % remaining habitat still the same.

The IBA state trend score in its second assessment is 0 (= 'NO CHANGE') based on the quality of its habitat, and the birds are passing through area, not depending to large extent on habitat.

#### c)- Response:

Ras Mohammed was declared a National Park by Prime Ministerial Decree 1068/1983, adjusted by Prime Ministerial Decree 2035/1996. This is Egypt's oldest protected area. Since 1989, the EEAA, with support from the EU, has been developing the park management and infrastructure, making it the country's most famous and best-managed protectorate. The current assessment about the conservation actions, shown in next table.

| Action type Status score | 2001     | 2009     |
|--------------------------|----------|----------|
| Conservation designation | 3        | 3        |
| Management planning      | 3        | 2        |
| Conservation action      | 3        | 2        |
| <b>Total</b>             | <b>9</b> | <b>7</b> |

According to the IBA action status score, the second assessment of Ras Mohamed is 2 (= 'MEDIUM') based on the combined status scores for Whole area of IBA covered by appropriate conservation designation, planning and action (out of date and not comprehensive plan , and substantive but limited actions in place).

The IBA action trend score for this IBA in its second assessment is -1 (= 'SMALL DECLINE') based on the difference in total status scores between the two assessments for the three different action types (plan and actions are not comprehensive and limited, no longer as pervious situation).

### 3.3- El Qa plain (EG032):

The site is a wide plain that flanks the South Sinai mountain massif on the west and separates it from the Gulf of Suez, with coordinate 33<sup>0</sup> 40.00' East 28<sup>0</sup> 10.00' North. It is elongate, with a north-west to south-east axis, being more than 100 km long and 20 km wide. The IBA is mostly concerned with the coastal portion of the plain, and extends from Wadi Feiran in the north to Ras Mohammed in the south, where migratory birds tend to concentrate and often land in vast numbers. The plain is dissected by many wadis that flow from the mountains of Sinai into the Gulf of Suez. To the north of El Tor a narrow mountain range separates the plain from the Gulf of Suez. This mountain, immediately overlooking the Gulf, is thought to be a very important departure point for many of the soaring birds that attempt to cross the Gulf of Suez in autumn. Sparse scrub vegetation and scattered *Acacia* trees cover sizeable sections of the plain. The town of El Tor is located within the area of concern and is the only major human settlement in the region. The site meets two criteria for designated as IBAs, A1, A4iv;

**A1-** The site regularly holds significant numbers of a Globally Threatened species, or other species of global conservation concern.

**A4iv-** The site is known or thought to hold, on a regular basis, the numbers exceed thresholds set for migratory species at **bottleneck sites**.

The area is a major corridor for hundreds of thousands of migratory soaring birds in both autumn and spring. Almost 70% of *Ciconia ciconia* counted at Ras Mohammed in autumn 1998 actually make the crossing over the Gulf of Suez further north towards the town of El Tor. In a study of bird migration across the Middle East, all *Ciconia ciconia*, monitored by means of satellite transmitters, were observed to make the critical crossing of the Gulf of Suez over the El Qa Plain. The area probably holds one of the largest remaining breeding populations of *Chlamydotis undulatan macqueenii* in Egypt (see box below).

| Species                                      | Season  | Criteria |
|--|---------|----------|
| Lesser Kestrel <i>Falco naumanni</i>         | passage | A1       |
| Pallid Harrier <i>Circus macrourus</i>       | passage | A1       |
| Eastern Imperial Eagle <i>Aquila heliaca</i> | passage | A1       |

#### 3.3.1- Current status and assessment:

##### a)- Threats:

At designation time development, especially for tourism, on the coastline along the El Qa plain cause disturbance and threaten migrating birds. The construction of powerlines near the coast, which could lead to avian collisions, especially in the spring when birds tend to fly at low altitudes as they come ashore after crossing the Gulf of Suez, these were the main threats for migratory birds. In the current assessment, Livestock grazing, expansion of housing and urban areas, gathering plants and logging and draught due to rainfall scarcity and high temperature are the main threats for El Qa plain (see table below).

| Threat Type  | Timing | Scope | Severity | Impact score 2001 | Impact score 2009 |
|--|--------|-------|----------|-------------------|-------------------|
| Livestock farming & ranching – <b>Nomadic grazing</b>              | 3      | 1     | 3        | Unknown           | <b>7</b>          |
| Housing & urban areas  | 3      | 1     | 2        | Unknown           | <b>6</b>          |
| Commercial & industrial areas                                      | 3      | 1     | 1        | Unknown           | <b>5</b>          |
| Roads & railroads  | 3      | 1     | 0        | Unknown           | <b>0</b>          |
| Utility & service lines  | 3      | 1     | 0        | Unknown           | <b>0</b>          |
| Indirect mortality (bycatch) of 'trigger' species – <b>hunting</b> | 3      | 0     | 3        | Unknown           | <b>0</b>          |
| Gathering plants   | 3      | 2     | 1        | Unknown           | <b>6</b>          |
| Logging  | 3      | 2     | 1        | Unknown           | <b>6</b>          |
| Drought  | 3      | 3     | 2        | Unknown           | <b>8</b>          |
| Temperature extremes   | 3      | 3     | 2        | Unknown           | <b>8</b>          |

The IBA threat status score in its second assessment is -3 (= 'HIGH') based on the threat from, **Drought**, (happening now, over whole of the area, causing moderate deterioration) which has the current highest impact score of the selected threats (and which is therefore used as the 'weakest link'). The IBA threat trend score can not be assessed without previous assessment but the situation is showing worst condition where threats started to be diverse with high impact score indicating to Small or Moderate Decline based on high impact score of threats (5- 8).

#### b)- State

**b.1- Bird population:** There was no update for birds species information but in the first assessment there were counts for tow breeding species, about 85 pairs were counted.

**b.2- Habitat:** The site encompasses four main habitat which is not assessed may due to lack of data(See Table).

| Habitat classes      | Calculated Optimum area for IBA (ha) | Calculated area (2001) | Quality (2001) | Adjusted % habitat remaining (2001) | Calculated area (2009) | Quality (2009) | Adjusted % habitat remaining (2009) |
|----------------------|--------------------------------------|------------------------|----------------|-------------------------------------|------------------------|----------------|-------------------------------------|
| <b>Gravel desert</b> | <b>Unknown</b>                       | <b>Unknown</b>         | Good           | >90                                 | <b>Unknown</b>         | <b>Unknown</b> | Need to be assessed                 |
| <b>Desert Wadi</b>   | <b>Unknown</b>                       | <b>Unknown</b>         | Good           | >90                                 | <b>Unknown</b>         | <b>Unknown</b> |                                     |
| <b>Sabkhas</b>       | <b>Unknown</b>                       | <b>Unknown</b>         | Good           | >90                                 | <b>Unknown</b>         | <b>Unknown</b> |                                     |
| <b>Wood land</b>     | <b>Unknown</b>                       | <b>Unknown</b>         |                |                                     | <b>Unknown</b>         | <b>Unknown</b> |                                     |

#### c)- Response:

The area was not protected but there is some conservation actions from Ras Mohamed national park and South Sinai protected areas management sector (see box below).

| Action type              | Status score | 2001     | 2009     |
|--------------------------|--------------|----------|----------|
| Conservation designation |              | 0        | 0        |
| Management planning      |              | 0        | 0        |
| Conservation action      |              | 1        | 2        |
| <b>Total</b>             |              | <b>1</b> | <b>2</b> |

According to the IBA action status score, the second assessment of El Qa plain is +1 (= 'LOW') based on the combined status scores for the area of IBA not covered by appropriate conservation designation, planning and action (No management planning, and substantive but limited actions in place).

The IBA action trend score for this IBA in its second assessment is +1 (= 'SMALL IMPROVEMENT') based on the difference in total status scores between the two assessments for the three different action types (in the two assessment no plan and only some limited actions in place).

### 3.4- Hurghada archipelago (EG015)

**Background:** The archipelago encompasses 22 uninhabited islands, plus a handful of very small islets, scattered from the Straits of Gubal (at the mouth of the Gulf of Suez) to Hurghada, it is about 150000 ha, with coordinate 33° 49.00' East 27° 28.00' North. Most are small or medium-sized and fairly flat coralline islands, such as Tawila and Ashrafi, but some are quite large and hilly. Shadwan is the largest of the Egyptian Red Sea islands, being c.56 km<sup>2</sup> in area and reaching some 300 m at its highest point. The area of the IBA includes adjacent marine waters.

Many of these islands have an igneous core ringed by fossil coral reefs that were raised and exposed by uplifting of the core. The igneous core is visible at the centre of many of the larger islands. Typically, the islands have elevated rocky shores on their north-eastern sides and gently sloping sandy shores on the south-western sides. This is most probably a result of erosion by prevailing north-easterly winds and currents. Extensive inter-tidal flats (coral table) fringe some of the islands, particularly on the southern and western shores, while deep waters surround others.

Vegetation is sparse and consists mainly of saltmarsh, including *Halocnemum*, *Arthrocnemum* and *Nitraria*. The islands of North Qeisum, Abu Mingar, Ashrafi and Shadwan have small- to medium-sized stands of mangrove *Avicennia*.

The archipelago meets three criteria of IBAs, which are (A1, A4i, A4ii)

**A1-**The site regularly holds significant numbers of a Globally Threatened species, or other species of global conservation concern. (Pallid Harrier *Circus macrourus* and Corncrake *Crex crex*).

**A4i-** The site is known or thought to hold, on a regular basis, 1% or more of a biogeographic population of a congregatory waterbird species.

**A4ii-** The site is known or thought to hold, on a regular basis, 1% or more of the global population of a congregatory seabird or terrestrial species.

The Hurghada Archipelago holds the largest known breeding population of *Larus leucophthalmus* in the world. A total of 6,500 adults was counted attending the sprawling Hurghada city rubbish-dump in May 1996. It is almost certain that all these birds breed on the Hurghada archipelago and, probably, represent only part of the local breeding population. The fact that all birds counted were adults in breeding plumage indicates that the total population of the area, if immatures and juveniles are accounted for, should be much larger than the previous estimate of 1,500-2,000 pairs. The current estimate made here for the Hurghada archipelago is of at least 3,000 breeding pairs, or a total population of some 10,000 birds. In addition, the Hurghada archipelago supports a considerable diversity of other breeding seabirds and waterbirds. At least 15 species are known to breed or to have bred: *Sula leucogaster*, *Phaethon aethereus*, *Butorides striatus*, *Egretta gularis*, *Platalea leucorodia*, *Pandion haliaetus*, *Falco concolor*, *Charadrius alexandrinus*, *Larus hemprichii*, *Sterna caspia*, *Sterna bergii*, *Sterna bengalensis*, *Sterna anaethetus* and *Sterna repressa*. A large colony of the last species (c.1,150 pairs) was discovered in July 1996 on an islet off Tawila island. These islands also appear to play an important role as a stepping-stone for some soaring migrants crossing the mouth of the Gulf of Suez, with some birds landing on the islands (see next table, population estimate of key species).

| Species                                       | Season   | Min-Max(pair) | Criteria |
|---|----------|---------------|----------|
| Sooty Falcon <i>Falco concolor</i>            | breeding | 44 - 44       | A4ii     |
| White-eyed Gull <i>Larus leucophthalmus</i>   | breeding | 3000 - 3000   | A1, A4i  |
| Caspian Tern <i>Sterna caspia</i>             | breeding | 200 - 200     | A4i      |
| Lesser Crested Tern <i>Sterna bengalensis</i> | breeding | 500 - 500     | A4i      |
| White-cheeked Tern <i>Sterna repressa</i>     | breeding | 1500 - 1500   | A4i      |



### 3.4.1- Current status and assessment:

#### a)- Threats:

At designation time tourist developments extend from about 30 km north of Hurghada nearly all the way to Safaga. All this development has taken place with little regard for the natural environment, obviously with severe negative impact, particularly on littoral and marine habitats. There is, likewise, increasing pressure for tourism development on the islands. Two eco-facilities have been established for day use on Giftun Kabir island and others are planned.

Increased tourist activity in the area was severely affecting Breeding success of birds breeding species on offshore islands. Tourists landing on the islands during the breeding season cause disturbance to seabird colonies. Egg- and chick-collection by local fishermen is known, but is thought not to be widespread, although the impact could be considerable. There is a constant threat of inappropriate activities on the islands; for example, the use of dune buggies for recreational purposes has been reported from many islands.

Oil pollution is a chronic problem in this region of the Red Sea and one of the most serious for wildlife. Badly operated oil-production facilities contribute the most, although the busy shipping lanes of the Gulf of Suez are an important source of oil pollution, as well as solid waste. The use of dynamite in submarine oil-exploration and fishing was a common practice in the past and it was expected that it is still be practised in some parts of the Red Sea at the time of the first assessment. Feral cats have been introduced on several islands by army personnel stationed there. The impact of these and other introduced fauna on nesting birds could be very destructive but it was not assessed at that time.

In the current assessment the threats for the IBA resulted mainly from natural and human impacts such as solid wastes disposal result from tourism and recreational activities the impact from oil pollution have been greatly reduced. Disturbance from tourism activities, use of dynamites and Egg- and chick-collection may be no longer threaten the IBA and its bird life or there is data deficiency and needs more investigation (see table below).

| Threat Type                | Timing | Scope | Severity | Impact score 2001 | Impact score 2009 |
|----------------------------|--------|-------|----------|-------------------|-------------------|
| Tourism & recreation areas | 3      | 0     | 0        | 8                 | 0                 |
| Flight paths               | 3      | 2     | 0        | -                 | 5                 |
| Oil Pollution              | 1      | 1     | 1        | 7                 | 3                 |
| Garbage & solid waste      | 3      | 2     | 2        | 7                 | 7                 |

The IBA threat status score in its second assessment is +2 (= 'HIGH') based on the threat from, **solid wastes**, (happening now, over some of the area, causing moderate deterioration) which has the current highest impact score of the selected threats (and which is therefore used as the 'weakest link'). The IBA threat trend score is 0 (= 'NO CHANGE') based on the difference between the status scores of Garbage and solid waste between the two assessments in 2001 and 2009. Tourism and recreational activities caused in disturbance and it was severely threatened islands and birds populations in the past. There is also a potential impact from presence of main flight pass over Hurghada town and Archipelago.

#### b)- State

**b.1- Bird population:** There was an estimate for some birds in which about 5000 individuals was counted out of 22 species. No estimated for breeding species.

**b.2- Habitat:** in the current assessment the total area of islands is still the same as in the first assessment (2001) 127.27 km<sup>2</sup>. While the quality is ranging from BAD (40-70% of the optimal habitat) to GOOD (> 90% of the optimal habitat) on site based assessment (See next Table).

| Habitat classes        | Calculated Optimum area for IBA (km) | Calculated area (2001) | Quality (2001) | Adjusted % habitat remaining (year 1) | Calculated area (2009) | Quality (2009) | Adjusted % habitat remaining (2009) |
|------------------------|--------------------------------------|------------------------|----------------|---------------------------------------|------------------------|----------------|-------------------------------------|
| Ashrafi                | 3                                    | 3                      | GOOD           | >90%                                  | Ashrafi                | GOOD           | >90%                                |
| Qeisum                 | 19.5                                 | 19.5                   | GOOD           | >90%                                  | Qeisum                 | GOOD           | >90%                                |
| Gubal ElSaghir         | 4                                    | 4                      | GOOD           | >90%                                  | Gubal ElSaghi          | POOR           | 40-70%                              |
| Gubal ElKabir          | 15                                   | 15                     | GOOD           | >90%                                  | Gubal ElKabir          | GOOD           | >90%                                |
| Um El Heimat El Saghir | 2                                    | 2                      | GOOD           | >90%                                  | Um El Heimat El Saghir | GOOD           | >90%                                |
| Um El Heimat ElKabir   | 4                                    | 4                      | GOOD           | >90%                                  | Um El Heimat ElKabir   | POOR           | 40-70%                              |
| Tawila                 | 35                                   | 35                     | GOOD           | >90%                                  | Tawila                 | GOOD           | >90%                                |
| Siyul El Saghir        | 0.02                                 | 0.02                   | GOOD           | >90%                                  | Siyul El Saghir        | POOR           | 40-70%                              |
| Siyul ElKabir          | 0.25                                 | 0.25                   | GOOD           | >90%                                  | Siyul ElKabir          | MODERATE       | 70-90%                              |
| Giftun ElKabir         | 35                                   | 35                     | GOOD           | >90%                                  | Giftun ElKabir         | GOOD           | >90%                                |
| Giftun El Saghir       | 5                                    | 5                      | GOOD           | >90%                                  | Giftun El Saghir       | MODERATE       | 70-90%                              |
| Um Gawish ElKabir      | 1                                    | 1                      | GOOD           | >90%                                  | Um Gawish ElKabir      | GOOD           | >90%                                |
| Um Gawish El Saghir    | 0.5                                  | 0.5                    | GOOD           | >90%                                  | Um Gawish El Saghir    | POOR           | 40-70%                              |
| Abu Mingar             | 3                                    | 3                      | GOOD           | >90%                                  | Abu Mingar             | GOOD           | >90%                                |

The IBA condition status score in its second assessment is 1 (= 'POOR') because the quality of four islands reduced from GOOD (>90%) in the first assessment to POOR (40-70%) due to solid waste and disturbances from tourism and recreational activities in and around the islands.

The IBA state trend score in its second assessment is -2 (= 'MODERATE DECLINE') based on a decline in the quality of its islands, owing to an pollution and disturbance.

**c)- Response:**

The islands south of 27°15 N are protected as part of the Elba National Park, declared by Prime Ministerial Decree 450/1986, adjusted by Prime Ministerial Decree 1186/1986 and Prime Ministerial Decree 642/1995. Northern Islands are now protected as part of Red Sea protected areas. (see box below).

| Action type Status score | 2001     | 2009     |
|--------------------------|----------|----------|
| Conservation designation | 1        | 2        |
| Management planning      | 0        | 3        |
| Conservation action      | 1        | 3        |
| <b>Total</b>             | <b>2</b> | <b>8</b> |

According to the IBA action status score, the second assessment of Hurghada archipelago is 3 (= 'HIGH') based on the combined status scores for most of area of IBA covered by appropriate conservation designation, planning and action (A comprehensive and appropriate management plan exists that aims to maintain or improve the populations of qualifying species, and The conservation measures needed for the site are being comprehensively and effectively implemented).

The IBA action trend score for this IBA in its second assessment is +2 (= 'MODERATE IMPROVEMENT') based on the difference in total status scores between the two assessments for the three different action types (previously no plan and only some limited actions in place and most of the area designated as protected area).

### 3.5- Wadi El Gemal Island (EG017):

**Background:** A small coralline island in the Red Sea, covers 200 ha about with coordinate 35° 10.00' East 24° 40.00' North, fringed by coral reefs to the north-east, with good sea-grass beds offshore to the south-west. A small mangrove stand is located in an isolated pool in the middle of the island, and another occurs on the south-west shore, which slopes very gently, forming extensive mudflats. A moderate-sized saltmarsh is found along the inland fringe of the coastal mangrove, and many isolated halophytic shrubs are scattered over the rest of the islands. **The site meets three criteria of IBAs which are A1, A4i, A4ii.**

**A1-**The site regularly holds significant numbers of a Globally Threatened species, or other species of global conservation concern. (Pallid Harrier *Circus macrourus* and Corncrake *Crex crex*).

**A4i-** The site is known or thought to hold, on a regular basis, 1% or more of a biogeographic population of a congregatory waterbird species.

**A4ii-** The site is known or thought to hold, on a regular basis, 1% or more of the global population of a congregatory seabird or terrestrial species.

Nine bird species are known to breed on Wadi Gimal island: *Phaethon aethereus*, *Butorides striatus*, *Egretta gularis*, *Platalea leucorodia*, *Pandion haliaetus*, *Falco concolor*, *Larus hemprichii*, *Larus leucophthalmus* and *Sterna caspia*. The smaller number of breeding birds on this, and other southern Egyptian Red Sea islands, is probably due to the limited ornithological coverage of this region, rather than to a lack of birds or suitable breeding habitats.

| Species                                     | Season   | Min-Max | Criteria |
|---|----------|---------|----------|
| Sooty Falcon <i>Falco concolor</i>          | breeding | 10 - 10 | A4ii     |
| White-eyed Gull <i>Larus leucophthalmus</i> | breeding | 75 - 75 | A1, A4i  |

#### 3.5.1- Current status and trend:

**a)- Threats:** At designation time Pollution, particularly by oil, and disturbance by an increasing number of tourists and fishermen, who occasionally collect the eggs and young of breeding birds, are the main threats to birds on the island. The expanding tourist development taking place along the coast in this vicinity is leading to increased human disturbance and other threats to the island and its bird population. In the current assessment new threats in the site were resulted from natural and human impacts such as solid wastes disposal result from tourism and recreational activities near the island, draught due to rainfall scarcity and high temperature (see table below).

| Threat Type                            | Timing | Scope | Severity | Impact score 2001 | Impact score 2009 |
|--|--------|-------|----------|-------------------|-------------------|
| Tourism & recreation areas             | 3      | 2     | 0        | 5                 | 0                 |
| Fishing                                | 3      | 1     | 1        | -                 | 5                 |
| Fishing & harvesting aquatic resources | 3      | 1     | 0        | -                 | 0                 |
| Oil pollution                          | 1      | 1     | 2        | 6                 | 4                 |
| Garbage & solid waste                  | 3      | 2     | 2        | -                 | 7                 |
| Habitat shifting & alteration          | 3      | 1     | 1        | -                 | 5                 |
| Drought                                | 3      | 3     | 1        | -                 | 7                 |
| Temperature extremes                   | 3      | 3     | 0        | -                 | 0                 |
| Storms & floods                        | 3      | 3     | 0        | -                 | 0                 |
| Eggs and chicks collection             | 1      | 2     | 1        | 6                 | 4                 |

The IBA threat status score in its second assessment is -2 (= 'HIGH') based on the threat from, **Drought and solid wastes**, (happening now, over some and most of the area, causing low and moderate deterioration) which has the current highest impact score of the selected threats (and which is therefore used as the 'weakest link'). The IBA threat trend score is +2 (= 'MODERATE IMPROVEMENT') based on the difference between the status scores of oil pollution and Eggs and chicks collection between the two assessments in 2001 and 2009 where these threats were prevailing but nowadays the regulations of protection prevent island access for tourism and fishing activities resulting in disturbance impact on islands and birds populations.

**b)- State**

**b.1- Bird population:** There was no update for birds species information but in the first assessment there were counts for tow breeding species, about 85 pairs were counted.

**b.2- Habitat:** in the current assessment the IBA classified into four main habitat types and the quality of both habitat scored as good (> 90% of the optimal habitat) (See Table).

| Habitat classes | Calculated Optimum area for IBA (ha) | Calculated area (2001) | Quality (2001) | Adjusted % habitat remaining (year 1) | Calculated area (2009) | Quality (2009) | Adjusted % habitat remaining (2009) |
|-----------------|--------------------------------------|------------------------|----------------|---------------------------------------|------------------------|----------------|-------------------------------------|
| Mangrove        | Unknown                              | < 40%                  | Good           | >90                                   | < 40%                  | Good           | > 90%                               |
| Salt Marsh      | Unknown                              | < 40%                  | Good           | >90                                   | < 40%                  | Moderate       | 70 – 90 %                           |
| Shoreline       | Unknown                              | < 40%                  | Good           | >90                                   | < 40%                  | Good           | > 90 %                              |

The IBA condition status score in its second assessment is 2 (= 'MODERATE') because although < 40% of its Salt marsh habitat still remains, the quality is no longer optimal, and thus the % remaining has been 'devalued' accordingly score guidelines of Birdlife international of IBAs monitoring. The salt marsh habitat is the worse of the other key habitats.

The IBA state trend score in its second assessment is -1 (= 'SMALL DECLINE') based on a decline in the quality of its salt marsh habitat, owing to an increase in the impacts from drought.

**c)- Response:**

The island is part of the Elba National Park, which was declared by Prime Ministerial Decree 450/1986, adjusted by Prime Ministerial Decree 1186/1986 and Prime Ministerial Decree 642/1995. Recently, the island is part of Wadi El Gemal protected Area which was declared in 2003, based on its biological, geological and historical value with particular concern to its important for birds life (see box below).

| Action type Status score | 2001     | 2009     |
|--------------------------|----------|----------|
| Conservation designation | 0        | 3        |
| Management planning      | 0        | 3        |
| Conservation action      | 1        | 3        |
| <b>Total</b>             | <b>1</b> | <b>9</b> |

According to the IBA action status score, the second assessment of Wadi El Gemal is 3 (= 'HIGH') based on the combined status scores for Whole area of IBA covered by appropriate conservation designation, planning and action (A comprehensive and appropriate management plan exists that aims to maintain or improve the populations of qualifying species, and The conservation measures needed for the site are being comprehensively and effectively implemented).

The IBA action trend score for this IBA in its second assessment is +3 (= 'LARGE IMPROVEMENT') based on the difference in total status scores between the two assessments for the three different action types (previously no plan and only some limited actions in place).

#### 4- TRENDS OF SELECTED EGYPTIAN IBAS

The site based assessment of Egyptian IBAs shows changes at particular sites, and give as detailed a health check as possible for any sites assessed in urgent of conservation action. It should highlight the significant threats, state changes and guidance for conservation measures taken and future needs to address threats and improve state or reduce decline. This would also be an appropriate for a brief review of how well the monitoring process itself has worked.

Five important areas were assessed in term of pressure, state and response using the available information depending on the field work that protected areas staff conducting during their daily routine, although nothing was planned specially for IBAs monitoring, resulting in some information gaps and shortage, the result was very interesting and the available information was very useful. The sites assessed in this stage of monitoring were five as start for monitoring all IBAs in Egypt which are Zaranik, Ras Mohamed, El Qa Plain, Hurghada Archipelago, and Wadi El Gemal Island.

There is a general increasing number and magnitude of pressure (threat) on natural habitats and IBAs from different aspects of development, as tourism and recreational activities, causing habitat destruction, disturbance, in addition to solid waste and urban and waste water, were revealing problems in the assessed sites. There was no assessment for the impact of powerline, communication towers and wind turbines particularly in Red Sea where there is the largest wind farm in Egypt which expected to have sever impact in migrating soaring birds which are forced by wheatear condition where in unfavorable condition it will be difficult for these big, slow birds to avoid collision.

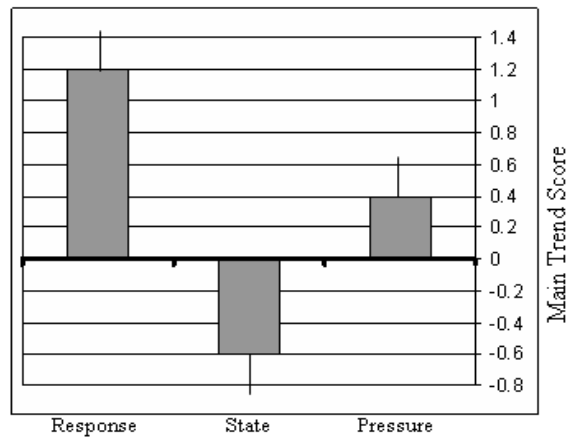
The IBAs status and trends showing continues pressure (threat) on the IBAs with no change in 2 sites, small decline (threat increase) and small and moderate improvement, in Zaranik and Wadi El Gemal Island respectively.

The state assessment of IBAs (quality of habitat) shows small and moderate decline in state trend while the state of other IBAs were still relatively the optimum since the first assessment at the time of designation as IBAs. Although there is no obvious improvement of habitat quality and quantity acccordin to the current assessment, the response (conservation management and actions) are improving in all sites (Except Ras Mohammed NP) which differ from small (Zaranik and El Qa plain), moderate (Hurghada archipelago) to large (Wadi El Gemal Island) improvement in conservation status (see next table), indicating high concern of Natural Conservation Sector to manage natural and biological resource in a scientific bases using compressive management planning and substantive conservation measures.

The main trend score showing increased pressure, declining state and improving response this my be in some sites due to declining in habitat quality as a result of drought severity from scarce rainfall and high temperature in fragile desert habitat (Fig. 4).

Summary of pressure, state and response in selected IBAs in Egypt during 1999- 2009.

| IBAs                              | Pressure trend |                      | State trend |                  | Response trend |                      |
|-----------------------------------|----------------|----------------------|-------------|------------------|----------------|----------------------|
| <b>Zaranik Protected Area</b>     | +1             | Small Improvement    | 0           | NO CHANGE        | +1             | Small Improvement    |
| <b>Ras Mohammed National Park</b> | -1             | Small Decline        | 0           | NO CHANGE        | -1             | Small Decline        |
| <b>El Qa plain</b>                | 0              | NO Change            | 0           | NO Change        | +1             | Small Improvement    |
| <b>Hurghada archipelago</b>       | 0              | No Change'           | -2          | Moderate Decline | +2             | Moderate Improvement |
|                                   |                |                      |             |                  |                |                      |
| <b>Wadi El Gemal Island</b>       | +2             | Moderate Improvement | -1          | Small Decline    | +3             | Large Improvement    |
| <b>Main Trend (Sum/No)</b>        | <b>0.4</b>     |                      | <b>-0.6</b> |                  | <b>1.2</b>     |                      |



**Fig.4:** Summary of selected IBAS monitoring results in Egypt for 1999-2009.

## 5- RECOMMENDATIONS

- 1- Promote and improve planning and management procedures to strength birds conservation activities within IBAs network.
- 2- Initiate and innovate mechanisms for trigger birds species and bottleneck conservation.
- 3- Initiate plans for designation of new IBAs in Egypt.
- 4- Prepare wild birds red list using IUCN criteria to identify priorities species and habitat for conservation activities.
- 5- Use assessment and monitoring of IBAs in planning and management of priority sites and habitat.
- 6- Including IBAs monitoring activities in the annual action planning of protected areas.
- 7- Prepare and implement training program for migratory birds monitoring.

## 6- REFERENCES

- Baha el Din, M. (1996). A report on hunting management in Egypt with recommendations for potential actions. Report to the organizational support program, EEAA.
- Baha el Din, S. M (1997). Report on the vertebrate fauna of Elba protected area. Report to the natural conservation sector, EEAA.
- Celmins, A. and Baha el Din, M. (in prep.). Observation of bird migration through southern Sinai with insights on migration strategies.
- Frazier and Salas (1984), Goodman and Meininger (1989), Jennings *et al.* (1985).
- Frazier, J. and Salas, S. (1984). The status of marine turtles in the Egyptian Red Sea. Biological conservation 30:41-67, Elsevier.UK.
- Goodman, S. M., and Meininger, P. L. (1989). The birds of Egypt. Oxford University press, Oxford.
- BirdLife Africa Partnership Secretariat, Nairobi Information on the IBA is available on [www.birdlife.org/datazone](http://www.birdlife.org/datazone)
- **Citation** BirdLife International 2007 BirdLife's online World Bird Database: the site for bird conservation. Version 2.1. Cambridge, UK: BirdLife International. Available: <http://www.birdlife.org> (printed 16th September 2008)

