# Report on Ramsar Advisory Mission No. 60

Alagol, Ulmagol Ajigol, Ramsar site 49 Islamic Republic of Iran, 14-16 May 2009

### by Dr Mike Moser, Consultant to the Ramsar Secretariat

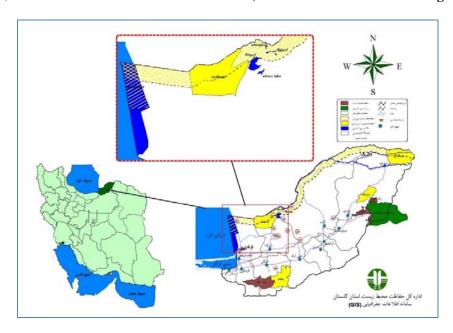
#### **Overall Conclusion**

The Alagol, Ulmagol, Ajigol Ramsar site in the Islamic Republic of Iran was designated on 23 June 1975 and added to the Montreux Record on 16 June 1993. The Department of Environment has taken a strategic and proactive approach to reducing the threats for which this Ramsar site was added to the Montreux Record. This has been achieved through the national and provincial budgets of the DOE, and an increasingly high level of cooperation with other governmental stakeholders, and with the local communities and NGOs. The DOE are therefore to be warmly congratulated for all that has been achieved and for their ambitious future plans for the management of this Ramsar site.

The individual threats for which the site was added to the Montreux Record were: a) high levels of disturbance from wildfowl hunters; and b) the extraction of water for irrigation purposes which had lowered lake levels considerably especially during summer. These threats have both been reduced to levels which no longer threaten the ecological character of the Ramsar site. Furthermore, the water supply to the wetland (and limits to any abstraction from it) has been secured and improved through an agreement with the Water Authority, including special arrangements for drought periods. There is every indication that these improvements will be sustained. No other threats were identified during the mission which would justify maintaining the site on the Montreux Record.

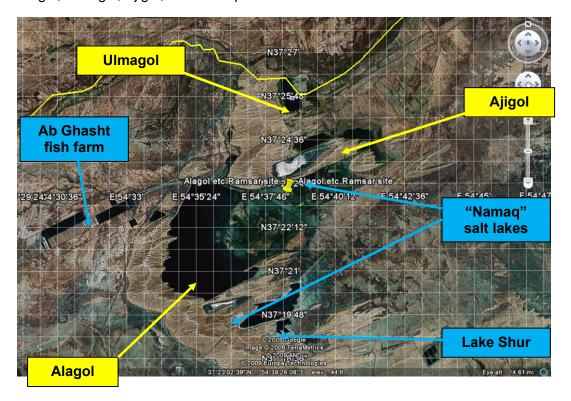
For the above reasons, the main conclusion of the mission is to recommend that the site be <u>removed</u> from the Montreux Record.

# A) Map (Iran, Golestan Province and Wetland Areas (Ramsar site = blue areas on right))



B) Google Earth image of Ramsar site area (2009)<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> NB. The individual wetlands of the Ramsar site were incorrectly labelled on the map in the report submitted by the Contracting Party to the Ramsar Secretariat in November 2008.



### Introduction

- 1. The Ramsar Convention gives special attention to assisting Contracting Parties in the management and conservation of listed sites whose ecological character is changing or likely to change as a result of technological development, pollution or other human interference. This is usually carried out through Ramsar Advisory Missions, a technical assistance mechanism formally adopted by Recommendation 4.7 of the 1990 Conference of the Parties (formerly known as the Monitoring Procedure and the Management Guidance Procedure). The main objective of this mechanism is to provide assistance to countries in solving the problems at particular Ramsar Sites related to the maintenance of their ecological character.
- 2. The Alagol, Ulmagol, Ajigol Ramsar Site was designated on 23 June 1975. It was added to the Montreux Record on 16 June 1993. There is no detailed background documentation held by the Ramsar Secretariat concerning the reasons or process that lead to the addition of the site to the Montreux Record. The only available information is provided in the most recent Ramsar datasheet (1997) where the Summary description states "Placed on the Montreux Record in 1993 due to high levels of disturbance from wildfowl hunters and the extraction of water for irrigation purposes, which has lowered lake levels considerably, especially during summer".
- 3. In November 2008, the Ramsar Secretariat received a report from the Iranian Government indicating that the threats facing the site had been addressed and that the site could be removed from the Record. As a result, the Secretariat hired a consultant (Dr Mike Moser) to make a Ramsar Advisory Mission to evaluate the Government's report and to report back with recommendations.

- 4. The Ramsar Advisory Mission took place from 14-16 May 2009, with the following specific objectives:
  - To meet with local settlers, government officials and other relevant stakeholders to:
    - gather information on type and severity of threats faced by the three lakes prior to their listing on the Montreux Record;
    - describe the actions taken by the government and any other stakeholder groups to address those threats.
    - verify the report submitted by the government to the Secretariat in November 2008 indicating that the threats to the lakes have been addressed and that the site can be removed from the Record, and
    - provide recommendation to the Ramsar Secretariat as to whether to endorse the submission by the government that the site can be taken off the Record
  - To visit the Alagol, Ulmagol, Ajigol Ramsar site to verify the statements made from meetings with the various stakeholders.
  - To provide recommendations to the Government of the Islamic Republic of Iran and the Ramsar Secretariat on the steps that should be taken for the future monitoring and management of the site to maintain the ecological character of the Alagol, Ulmagol, Ajigol Ramsar site and the livelihoods of the local stakeholders.

### The Alagol, Ulmagol, Ajigol Ramsar Site

5. The following 3 paragraphs summarise information from the RIS together with additional relevant observations. The Alagol, Ulmagol and Ajigol lake complex (1400ha) comprises three small lakes and associated marshes situated in the semi-desert steppes of Golestan<sup>2</sup> province (60km NE of Gorgan City³) at the SE corner of the Caspian Sea near the border with Turkmenistan (see Map 1). The lakes lie in the basin of the Atrak river, which is shared by Iran and Turkmenistan. Ulmagol and Ajigol Lakes contain freshwater and are seasonally-filled by autumn and winter rains as well as canals from the Atrak river, but dry out during drought periods when they become increasingly brackish. Alagol Lake, however, is slightly saline. The sites are not nationally designated as protected areas although, as with all wetlands in Iran, are under the jurisdiction of the Department of Environment.

6. At the time of designation, all three lakes regularly supported over 20,000 wintering birds, including four threatened species, i.e. Dalmatian Pelican Pelecanus crispus (Vulnerable), Lesser White-fronted Goose Anser erythropus (Vulnerable), White-headed Duck Oxyura leucocephala (Endangered) and Imperial Eagle Aquila heliaca (Vulnerable). The lakes also supported over 1% of the regional Middle East populations of Gadwall Anas strepera, Tufted Duck Aythya fuliqula and Coot Fulica atra. During wet years, the lakes supported a wide variety of waterfowl, including the Greater Flamingo Phoenicopterus ruber, and Anatidae such as Red-crested Pochard Netta rufina.

<sup>&</sup>lt;sup>2</sup> The Ramsar site was formerly located in Mazanderan province. Following provincial boundary adjustments it now lies in Golestan province.

The DIS (7/2) (1997)

The RIS (7/2/1997) incorrectly infers that the site lies SW of Gorgan City.

7. There are two small human settlements close to the lakes (Tangoli and Ochitappeh) and, at the time of designation the people used the lakes for fishing, grazing, reed-cutting and wildfowl hunting. The water from Alagol has also been used for irrigation by local farmers, and for a fish hatchery.

### Threats prior to 1993

9. Although detailed documentation of the reasons for the addition of the Ramsar site to the Montreux Record was not available, the following can be constructed from the RIS and discussions during the mission.

#### 10. Hunting

Ulmagol and Ajigol are easily accessible by road and lie close to two small villages (Tangoli, now 100 families, Ochitappeh; now 200 families). Prior to 1993 these two sites were highly disturbed by waterbird hunters causing impacts primarily through disturbance but also through overharvesting. Alagol on the other hand, is less accessible and so had a lower hunting pressure. No information is available on the number of hunters at this time.

### 11. Hydrological conditions

Prior to 1993, Alagol had been impacted by water extraction for irrigation and for a 500ha private fish hatchery constructed in 1983 (Ab Ghasht) which resulted in lower water levels, especially in summer. Additionally heavy sedimentation from the Atrak river had constrained the water supply to all three wetlands due to the gradual infilling of traditional canals. As a result of these threats, the site was placed on the Montreux Record.

# Current status of threats to the Ramsar site and management measures taken

12. The following table summarises the status of all current threats to the Ramsar site, as well as the specific measures taken to address those threats.

Threat	Impt.	Measures taken (or proposed)	Trend
<ul> <li>Habitat conversion inside the wetland</li> <li>There has been no significant conversion of wetland habitats within the Ramsar site boundary. Similarly, the margins of the wetlands have not been converted.</li> </ul>	LOW	• DOE are proposing to gazette Alagol and Ajigol wetlands as protected areas, to increase the level of protection from future developments. Ulmagol will not be included since it lies within the protected 7km border zone.	STABLE
<ul> <li>Population pressure in the vicinity of the Ramsar site is low. High soil salinity makes it unlikely that there will be significant development of irrigated agriculture. A 500ha private-sector fishfarm (Ab-ghasht) was built to the west of Alagol in 1983, but at the time of the mission was largely dry due to lack of permit to use water.</li> </ul>	LOW	<ul> <li>DOE is supporting the development of a Master Plan for the area</li> <li>Some of the fishponds have been turned back to wheat fields due to lack of water permits for operation.</li> </ul>	STABLE
<ul><li>Changes to water quantity</li><li>Main threat is from further development</li></ul>	LOW	Government Agreement signed with	BETTER

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Direct abstraction of water from the wetland for the fishfarm and local small-scale agriculture	LOW	<ul> <li>Turkmenistan giving Iran 50% of the waterflow from Atrak river (ca.1980)</li> <li>Agreement signed by DOE and the Ministry of Energy at national level to ensure minimum water flows to downstream wetlands</li> <li>Strong cooperation established by DOE with the Water Authority both at provincial and district level. Management regulations have been made for each wetland and an MOU signed with Water Authority (2000) prescribing the monthly minimum flows to be delivered to the wetlands. An option exists (and has been used) for special release of water from an upstream dam to the wetlands in drought years.</li> <li>Canals from Incheboroun cleaned to improve water supply to wetlands</li> <li>All future dams must consider minimum needs of downstream wetlands in their EIA</li> <li>Abstraction from the wetlands for local agriculture, and from Alagol for the Abghasht fishfarm and has been controlled through the MOU with the Water Authority. Only allowed in times of plentiful supply, by permit. Discussions also underway to grow drought tolerant crops</li> </ul>	BETTER
<ul> <li>Changes to water quality <u>Sediments</u></li> <li>Heavy sediment load from Atrak river causing shallower water</li> </ul>	LOW		BETTER
<ul> <li>Nitrates, phosphates, pesticides</li> <li>Relatively little agriculture in the catchment. Mainly dryland agriculture. Small pollutant loads brought in.</li> </ul>	LOW	<ul> <li>No conversion to agricultural lands allowed nearby</li> <li>Planned MOU with Jihad Agriculture (provincial) to limit agricultural inputs</li> </ul>	STABLE
<ul><li>Waste/garbage</li><li>Large amount of plastic waste at Ulmagol from Tangoli village</li></ul>	MED	<ul> <li>Municipality are planning to install a waste management system</li> <li>NGOs very active and cleaning 2X per week</li> </ul>	STABLE
<ul> <li>Overharvesting</li> <li>Overfishing</li> <li>All three wetlands are used for recreational and subsistence fishing by rod and line only.</li> </ul>	LOW		STABLE
Overhunting	LOW	See comments on hunting, below	BETTER
Overgrazing			

The wetland margins and surrounding steppe areas are heavily grazed by sheep, goats, cows and camels.	MED	<ul> <li>Grazing will be controlled in margins when the areas are protected (forbidden in one-fifth of area)</li> <li>Atriplex planted outside the protected areas as alternative grazing</li> <li>Use of <i>Phragmites</i> by local communities is allowed with permit from DOE</li> </ul>
<ul> <li>Disturbance of wildlife</li> <li>Disturbance of waterbirds by hunting</li> <li>Hunting of waterbirds was one of the reasons for the listing of this Ramsar site on the Montreux Record. Only illegal hunting occurs now, at much lower levels. As a result, the numbers of birds using the site, including threatened species, has increased.</li> </ul>	LOW	<ul> <li>Use of guns was previously forbidden within a 2km zone of the border with Turkmenistan. In 2002, this zone was extended to 7km, which includes Ulmagol and Ajigol wetlands. These areas are strictly patrolled by DOE Guards and border guards.</li> <li>Since the discovery of avian flu in Iran in 2007, all waterbird hunting has been banned</li> <li>The increased number of DOE guards onsite has resulted in a three-fold increase in arrests of illegal hunters since 2006. Such hunters have their guns confiscated, and may get fines and even prison sentences</li> </ul>
<ul> <li>Disturbance of waterbirds by boating and other recreation</li> <li>15 pedalos have been installed at the recreation facility at Ulmagol (only), for use by tourists (2007)</li> </ul>	LOW	<ul> <li>Pedalos can only be used in summer.</li> <li>Swimming is not allowed</li> </ul>
<ul> <li>Non-native species</li> <li>The 3 wetlands have been seriously affected by the introduction of nonnative fish species (probably before Montreux Record listing), but populations are beginning to decline. Populations of endemic species are greatly reduced</li> </ul>	MED	<ul> <li>Detailed study on non-native fish species published in 2007.</li> <li>Further introductions have been banned</li> <li>Fishing is targeted at the breeding areas of non-native species</li> </ul>

# Additional Management Measures taken since 1993

# 13. Inter-sectoral Coordination

Close inter-agency coordination at provincial and district level currently occurs on a bilateral basis, particularly with Water Authority, Jihad Agriculture, Natural Resources, Tourism Office, and the local Municipality.

# 14. Facilities and staff

Management responsibility for the Ramsar site is mandated to the Department of the Environment, and executed through the provincial DOE office of Golestan (Gorgan), the district office in Gonbad and the Guard post at Alagol.

• An impressive new guard post was constructed in 2008, overlooking the NW corner of Alagol wetland. It provides modern 2 storey accommodation suitable for 5-7 staff. This replaced a

- single metal hut suitable for 3 guards. The capital investment by DOE has been approximately USD100,000 for the building, plus USD 17,000 to bring electricity to the site.
- The number of guards for the site has been doubled to 6, and this can be supplemented during busy periods by additional staff from Gorgan
- Guards have the use of 2 boats, 1 car, 1 tractor and 4 motorcycles. Wireless radio, telephone and mobiles all available, plus 1 good telescope and binoculars. All staff are well trained and motivated. Plans are in place to purchase a 6-person hovercraft in 2009 to allow access to the shallow wetlands.
- 21 volunteers from a local NGO (Sport-fishing Committee with 600 members) help the guards with their work, including cleaning litter etc.. 5 were presented with certificates at a ceremony during the mission.
- Interpretation is limited to a simple name/signboard for each wetland, announcing that it is an "international" wetland.

### 15. Management Plan

• There is a strong intention to prepare a management plan for the Ramsar Site, although work on this has not yet begun (waiting for budget). DOE is studying the management plans prepared by the Conservation of Iranian Wetlands Project.

### 16. Wise use

- DOE has worked with the local Municipality to develop a low-intensity tourism/recreation facility at Ulmagol. Visitors pay an entrance fee. There is a small building at the entrance, many trees have been planted, there is a handicraft/refreshment shop, camp site (under development), picnic sites, and the possibility to hire 15 pedalos (\$1 per hour, summer only). The Municipality is planning to train more local people for tourism activities. This facility is providing important alternative livelihood for local communities. 160,000 visitors were recorded at this facility over 15 days at New Year in 2009, with a further 65,000 just for seeing the wetlands. There are relatively few visitors to Ajigol and Alagol wetlands, which will be reserved for birdwatching and education activities.
- Villagers appreciate the permission to use the wetland margins for grazing and continue fishing, which is important for subsistence, but would like to use nets. Sport-fishing is allowed (rod and line only) at all 3 wetlands, but with a 3-month closed season.
- Villagers have been allocated 150-200ha of land adjacent to the wetlands for agriculture, and would like to be able to abstract more water. This has not been allowed due to drought conditions.
- DOE is researching the capacity of the wetlands to support limited hunting by permit for local people once the problem of avian flu is resolved.

# 17. Public awareness and education

- A major effort has recently been devoted to public awareness activities for the Ramsar site.
   2009 World Wetlands Day celebrations for the province were held locally in Gonbad city. Key stakeholders, NGOs and local community representatives were invited to a number of presentations and a field visit was made to the Ramsar site.
- The meeting with village representatives suggested strong connections with, and awareness of the importance of the wetlands important for fish, grazing, water and alternative livelihoods (tourism)

- Brochures about the site have been prepared in farsi and turkmen languages and distributed widely
- A web site is being established (see www.naturalheritage.blogfa.com)
- Meetings have been organised by local DOE staff to gain the support of villagers, NGOs and Universities. Good relations have existed with NGOs for more than 10 years.
- Close links with the media. A broadcast on IRIB (national and provincial) was made during the mission
- A documentary on Alagol was made by the media in cooperation with DOE
- Results of bird census are distributed through the media
- Many student visits to the wetlands (schools and wetlands), also university theses. A lecture was given to more than 60 students during the mission.

#### 18. Research

There have been many MSc and PhD studies including detailed published studies of the status of non-native fish species (published 2007), and the role of local community participation in ecosystem management.

### 19. Monitoring

Existing programmes include:

- Annual midwinter waterbird census
- Breeding waterbird census
- Water levels: Alagol (daily), Ulmagol and Ajigol (2-3 times per annum)
- Water quality

### 20. Possible extension of the Ramsar site

DOE-Golestan expressed their wish to extend the Ramsar site to include Lake Shur, a 400+ha undisturbed saline wetland to the SE of Alagol wetland which is very important for waterbirds including a number of threatened species. DOE also proposed separately designating each of the wetlands in this complex, rather than retaining the current single designation (See recommendations, below).

NB. Although outside the purpose of the current mission, the consultant was also shown a 400-600ha shallow freshwater wetland to the East of Gorgan, called Bibishirvan. The rapid assessment of this site suggested that support should be given to DOE-Golestan's proposal to designate Bibishirvan as an additional (separate) Ramsar site.

# **Current status of biodiversity**

Evidence presented and witnessed during the mission indicated that as a result of a more secure water supply, the marginal wetland habitats around each wetland, particularly Alagol, have developed substantially in area. Indeed, wetlands habitats at Alagol alone are now more extensive than the official area of the entire Ramsar site (1400 ha). As a consequence of these enhancements, the biodiversity of the area has improved both in terms of habitats and species. Populations of wintering waterbirds are generally increasing (see Annex 2) including swans, flamingos and marsh harriers. Specifically, populations of globally threatened species (*Oxyura* 

leucocephala, Pelecanus crispus, Haliaetus albicilla, Anser erythropus and Aquila heliaca have all increased.

### **Management Recommendations**

The following recommendations are made, following discussion with officials from DOE-Golestan:

#### No. Recommendation

#### **ESSENTIAL ACTIONS**

- An inter-sectoral, local, Wetland Management Committee should be established before the end of 2009 to oversee the development and implementation of a management plan for the Ramsar site, and to address existing issues. This Committee should be chaired by the DOE and comprise representatives of related agencies, the local communities and NGOs.
- 2. By the end of 2010, a management plan should be prepared for the Ramsar site (in the context of its river basin), according to the Ramsar guidelines, and using experience gained through the Conservation of Iranian Wetlands Project.
- 3. By the end of 2010, a zoning system should be developed for Ulmagol wetland and its surroundings (and by end 2011 for the entire Ramsar site), to manage human use of the wetland. This zoning system should identify areas to be left undisturbed for wildlife, and areas for different human activities such as sport fishing, pedalos, other recreation etc.. Codes of practice should be developed for these activities and displayed/communicated to the users. The number of pedalos and fishermen should be limited through a permit system.
- 4. Additional interpretation/education facilities should be provided at Ulmagol, including an ecocentre, information boards, signed walkway/cycleway.
- 5. An updated Ramsar Information Sheet should be prepared and submitted to the Ramsar Secretariat together with a detailed map, both according to the guidelines.

### DESIRABLE ACTIONS

- 6. A detailed map of each wetland in the Ramsar site should be prepared, delimiting the boundary of the wetland and showing the distribution of wetland habitat types within the boundary. Methodology can be provided via the Conservation of Iranian Wetlands Project. The revised area of the Ramsar site should then be communicated to the Ramsar Secretariat.
- 7. Trials should be conducted of grazing exclosures (at all three wetlands), to experiment with the restoration of reedbeds and marginal vegetation which has been degraded by overgrazing. The results should be monitored carefully.
- **8.** A waste management system should be established for Ulmagol, particularly Tangoli village, to stop plastics entering the (margins of the) wetland. The emphasis should be to stop waste being distributed, not on cleaning it up!
- 9. Any proposal to allow fishing with nets should be approached with great caution, and will require strict seasonal and intensity limits, and zonation with a large no-fishing zone. Alternative consideration could be given to supporting villagers to establish a small cooperative fishfarm (1-3 ha) outside the wetland.
- 10. The proposal to extend the Ramsar site has considerable merit, due to the strong linkages with a number of other wetlands in the vicinity of Alagol, Ulmagol and Ajigol. It is recommended that an "ecosystem" scale designation be followed, rather than designating the wetlands separately. Strong support is given to adding Lake Shur to the designation, but also the highly saline "Namaqs" which although supporting a limited biodiversity are of ecological interest and characteristic of the area.
- 11. Establish an integrated monitoring programme for the Ramsar site, including publication of an integrated annual report on the condition of the wetlands
- 12. DOE-Golestan is encouraged to explore international funding sources to support further efforts for

the conservation and wise use of this Ramsar site, as described above. Such sources could include: a) the Ramsar Small Grants Fund; b) the UNDP-Iran Small Grants Programme; c) the Conservation of Iranian Wetlands Project; d) other funding sources.

### Acknowledgements

Warmest thanks are extended to the Department of the Environment in Golestan for their hospitality, openness and efficient organisation of the mission, particularly as it covered a weekend period. In particular, I thank Mr Alinejad (Director General), Mr Jafarinezad (Deputy of Natural Resources and Biodiversity) and Mr Karimi (Head of DOE-Gonbad) for their support. A special thank you to Ms Atefeh Anbarsouz (Ramsar Centre) for her efficient interpretation and kind attention. Dr Ali Nazaridoust (Conservation of Iranian Wetlands Project) kindly provided logistical support prior to the mission. Mr Lew Young (Ramsar Secretariat) provided contractual support.

### **Itinerary**

Thursday 14 May

o930-1030 Fly Tehran to Gorgan (Golestan Province) 1100-1300 Drive to Gonbad, via Bibishirvan wetland

1300-1600 Lunch and rest

1600-2000 Meeting with experts and authorities at DOE Gonbad

2000-2200 Dinner and visit local cultural sites

Friday 15th May

o800-1300 Field visit to Alagol and Ulmagol (including recreation centre)

Meeting with local community representatives

1300-1500 Lunch

1400-1600 Workshop/presentation to students and experts

Continue field visit - Alagol, Lake Shur and AbGhasht fishfarm

1600-1800 Return to Gorgan

Saturday 16th May

0900-1300 Wrap-up meeting with experts in DOE-Golestan

1500-1900 Visit to forests and writing-up

2030 Fly Gorgan – Tehran

NB. Upon return to Tehran, short wrap-up discussions were held with Dr Najafi (DOE Deputy for Natural Habitats) and Mr Abdoust (DOE Director General for Protected Areas).

# People contacted

Mr Alinejad DOE-Golestan, Director General

Mr Mohsen Jafari nejad DOE-Golestan, Deputy for Human Resources

Mr Vahid Kheirabadi DOE-Golestan, Head of Guards

Mr Mostaba Hosseini DOE-Golestan, Expert

Ms Fatemeh Khanpour DOE-Golestan, Expert (Natural Resources)

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Ms Azade Karami rad DOE-Golestan, Expert (Marine)
Mr Gholamreza Karimi DOE-Gonbad, Head of DOE-Gonbad
Ms Maryam Peymani DOE Headquarters, Wetland expert

Mr Ramezan Ali Ghaemi Head of Birdwatching NGO, former Head of Golestan NP

Mr Alireza Mehrjoo Retired DOE

Ms Ati Anbarsouz Ramsar Regional Centre (Interpreter) ati.anbarsouz@gmail.com

Staff of DOE Guard station at Alagol 7 representatives of the Tangoli local community Sportfishing NGO (Head and members) <a href="mailto:taher\_garkaz@yahoo.com">taher\_garkaz@yahoo.com</a>

#### **Annexes**

Annex 1. Photographs

Annex 2. Total waterbird counts

Annex 1 Photographs taken during the mission

















Annex 2

Total waterbird counts, 1998 – 2007 (Iranian years 1377-1386)

