Synthesis Report

BIRD HUNTING PRACTICES
In Mediterranean Third Countries of North Africa and the Middle East
Synthesis Report (I)

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October 2006

Project partners
1. Bird migration in the region

Many migratory birds which breed in central and western Asia and Europe follow traditional routes south across or around the Mediterranean during autumn migration in order to reach their wintering grounds and use similar routes in reverse on their return journeys in the spring. In addition, some Siberian breeding birds (e.g. ducks and thrushes) start by flying westwards to Europe before joining routes to the south. Some species, especially waterbirds, use a chain of stopover sites scattered along their flyways. Soaring bird species, such as storks, pelicans and many raptors choose narrow sea crossings (bottleneck sites) at the Straits of Gibraltar and Messina or follow the eastern Mediterranean coast. Many songbirds and some raptors migrate on broad fronts and fly straight across the Mediterranean, sometimes using islands for stopovers. Many migrants (especially waterbirds) stop and over-winter along the North African coast; other species continue further south to winter in sub-Saharan Africa. Three main routes, identifiable at bottleneck sites, are used to cross the wider Mediterranean region:

A. Eastern Mediterranean flyway (SSE):
East Mediterranean coast - the Bosphorus - Belen Pass - Jordan Rift Valley to Egypt and the Red Sea. This route extends south along the eastern coast of the Mediterranean, into the Jordan valley, through Sinai and across to the Nile valley. The majority of birds follow the eastern shore of the Mediterranean but evidence suggests that those birds heading further south in order to cross at Bab al Mandab branch off to the east in Syria and Jordan and travel down the eastern Red Sea coast of Saudi Arabia and Yemen. A few species migrate west along the Mediterranean coast of Egypt then south to winter in Chad.

B. Mid-Mediterranean flyway (SSW):
Straits of Messina (Italy) - Mediterranean Isles - Djebel El Haouaria (Tunisia). This route is used by migrants who can fly non-stop over the Mediterranean or use islands such as Sicily, Malta and the Tunisian islands for stop-overs. 24 species of raptors, including Pallid Harrier and Lesser Kestrel over-fly Djebel El Haouaria in spring, as do significant numbers of storks, cranes, owls and many songbirds. During autumn migration significant numbers of raptors and songbirds are recoded on the Tunisian island.

C. East Atlantic coastal flyway (SW Mediterranean):
East Atlantic coast - Strait of Gibraltar to Jbel Moussa (Morocco). Raptors, storks and cranes have been recorded passing across the Straits of Gibraltar at Jbel Moussa in northern Morocco. Birds migrating through this route spend their winter on the East Atlantic seaboard coasts of West Africa.
The migration routes are dominated by maquis and coastal and inland wetlands with abundant food resources and by deserts (other habitats include woodland, bush, grassland, agricultural land and forest). In some species such as White Stork, eastern European populations take the eastern and mid-Mediterranean flyways and western populations the western flyway. Certain groups, notably the harriers and falcons, tend to migrate on broader fronts, though they frequently engage in soaring and will join those species that follow the main routes, which they also use for their return journey in spring. Songbirds such Whitethroat and Garden Warbler follow wide-front routes as they can fly straight across the sea, but some make stop-overs on Mediterranean islands. Migratory waterbirds are dependent on the integrity of a succession of wetlands where they can replenish the reserves needed to continue their journey southward or northward. Long stretches of coastline and inland wetlands around the Mediterranean are important for migration or as wintering grounds for waders and ducks.

### 2. Numbers of hunters and hunting methods

#### 2.1 Scale of hunting

Despite clear differences between countries with regard to numbers of hunters per country and hunting practice, migratory bird hunting is an important socio-economic activity across the region, involving hundreds of thousands of people, particularly in rural areas. Methods include shooting, trapping, use of nets, snares, lime sticks, traps and decoys, falconry and use of poisons. Subsistence hunting occurs only at very low levels. ‘Sport hunting’ has become widespread and the number of migratory birds hunted overall is thought to be increasing as a result of people’s increased leisure time and disposable incomes, easier access to guns, cheaper ammunition and 4-wheel drive vehicles to gain access to remote areas. Diminishing populations of some native traditional ‘game’ species may also be leading to increases in numbers of hunters interested in migratory bird species.

Few countries in the region have accurate information on hunters or numbers of hunters employing different hunting methods. Those countries which record different hunting methods (e.g. Tunisia, Morocco) do so according to membership of hunting organizations or issue of hunting permits, not actual monitoring of activity (though some countries also make estimates of numbers of illegal hunters). Many people, particularly in rural areas, may own a gun and shoot migrant birds opportunistically but are not likely to be recorded as ‘hunters’ in any survey or recording scheme and numbers of foreign or tourist hunters are not recorded in many countries. The distinction between legal and illegal hunters is not always clear. Some countries (e.g. Tunisia) clearly distinguish between legal hunting (registered hunters using legal hunting methods to hunt designated game species respecting protected areas and other areas excluded from hunting and within the time limits fixed through the official hunting calendar and other rules) and poaching (illegal hunting).
However, most of the time good data is available for legal hunting, but reliable data on poaching is lacking. Falconers from the Gulf States for example are not recorded because their activity, hunting protected Houbara Bustard, is technically illegal and carried out without legal permits. In other countries, the distinction is even less clear; despite hunting bans in Syria and Lebanon, there are estimates for the number of hunters and reported fines for ‘illegal’ hunting; Palestine has no proper legal framework for authorized hunting.

National estimates of numbers of hunters include up to 1,000 (weapons) in Palestine, 11,400 registered hunters in Tunisia (no figure for illegal hunters), over 40,000 in Morocco, 92,000 in Algeria, up to 20,000 registered hunters in Lebanon according to the last official census by the National Society for Wild Hunting in 1995 and 500,000 (300,000 registered) in Syria. Out of the Syrian totals, sport hunters (not including tourists from the Gulf States) number about 400,000; falcon trappers 200 to 300 and about 20,000 people are estimated to hunt for a living. For Egypt, there are good local estimates, e.g. at least 10,000 individuals (10% of local population – mostly Bedouin communities) of the North Coast from Alexandria to the Libyan border engaged in bird hunting, 4,000 falcon catchers and 500 families carrying out traditional autumn Quail netting in North Sinai, fewer than 100 full-time waterbird hunters on Lake Manzalla in winter.

A significant feature of falconry and sport hunting throughout the region is that they are widely practiced by nationals of other countries (particularly the Gulf States) visiting the MTCs for this purpose. Many foreign hunters travel to Syria from the Gulf and Lebanon, for falconry and, increasingly, to hunt with guns. In Morocco, Algeria and Tunisia, falconry on protected Houbara Bustard is only practiced by foreign nationals from the Gulf States. Spanish hunters shoot partridge in Morocco and tourist bird hunters from Italy, France and Malta shoot thrushes in Tunisia. In Egypt most foreign hunters are Europeans visiting to shoot waterbirds, with smaller numbers from the Gulf and Lebanon (total of 990 foreign tourist hunters registered in 2000).

2.2 Hunting practices
Quantitative information on hunting methods is very limited. The use of guns (shotguns and air guns) appears to predominate in most countries of the region apart from localized parts of Egypt where the use of traditional nets and lime sticks is widespread. In Jordan, over an eight year period up to 2004, most hunting violations (over 60%) were from shotgun use, 17% from air guns and 13% from nets. In Lebanon, shooting is by far the commonest hunting method, followed by trapping and mist-netting, then cages and lime sticks and use of recorded bird calls and night-time light projectors to lure birds. Semi-automatic guns are used in Lebanon, as well as locally made ‘powder guns’. In Syria, it is estimated that 3 million cartridges are sold annually to hunters.
In Egypt, migrants are hunted all along the Mediterranean coast and in the Nile Delta, with regional variations. Autumn Quail netting is traditional in North Sinai, handmade traps are used to catch migratory songbirds in the Western Desert Oases and falcon trapping occurs in all desert areas, particularly the coastal deserts (North Sinai and the Eastern Desert). Falcons are caught using traps (sometimes with live bait), noose-harnessed pigeons and noose-baited falcons. Quail and songbirds are hunted by farmers and fishermen in the Nile Delta, for recreation or to supplement incomes. Methods used include traps, nets and lime sticks (used only in the Delta). Along the North Coast (Libya to Alexandria) autumn hunting of migrants is prevalent using traps and nets draped over trees. Fishermen hunt migratory waterbirds, particularly in winter, in the Nile Delta and along the coast from Alexandria to Port Said using clap-nets, shot guns, trammel (mist) nets, traps, sound lures and decoys.

In francophone North Africa, most hunting is with guns using a variety of techniques, some involving dogs and sometimes (e.g. in Algeria) hunters mounted on horses. These include “la chasse devant-soi” (walked-up or driven hunting for sedentary species, in Algeria over 80% of the hunting), “la chasse au poste” (shooting from a stationary position), “la chasse au passage” or “la chasse a la passée” (shooting flying birds, specifically waterbirds and migrants, at dawn or dusk, sometimes with dogs), “la chasse en battue” (for snipe in Morocco), “la chasse a la tire” (early morning), “la chasse au courre” (using Slougui dogs but most often for hare rather than birds).

In North Africa, there are significant levels of falconry, carried out principally by nationals of other countries (the Gulf States) hunting bustards, sandgrouse and gazelles in desert areas and using increasingly sophisticated methods (4-wheel drive vehicles, satellite navigation). Although in most cases this is technically illegal according to national legislation, it is tolerated by governments. In Tunisia, there is an important legal falconry tradition in the area of Cap Bon (El Haouaria and Kelibia), where a limited number of female Sparrowhawks are trapped in spring, used for hunting and then released in early June. Foreign hunters from the Gulf travel with their own falcons to southern areas of Tunisia and Algeria to hunt Houbara Bustard which is protected under Tunisian and Algerian legislation. In the past, falcons have also been trapped in countries such as Syria and Egypt for sale to falconers in the Gulf States but this export is thought to be declining. Nowadays falconers of the Gulf countries are often using hybrid falcons, for example between female of Gyr Falcon and male of Peregrine Falcon. These hybrids can escape and genetically pollute the local population of Peregrine Falcons.
3. Hunting seasons

Most hunting of migratory birds in the region takes place during autumn migration and in winter but there is also significant level of hunting in spring. In some countries there is a cultural resistance to shooting birds which are returning to breed in spring but this view is not held throughout the region. There are also behavioural differences in migration patterns which may make it easier to hunt some birds in autumn (higher numbers after the breeding season and greater tendency to congregate e.g. at water bodies). In Tunisia, illegal hunting of songbirds and other species occurs during spring migration, whereas thrushes and waterbirds are legally hunted in winter. The main Quail hunting period along the North African coast is autumn (mid-August to end of October in Egypt). Throughout North Africa, waterbird hunting peaks in winter (hunting of migrants over-wintering in the region). Falcon trapping in Egypt occurs from mid-September to early November. In Algeria the hunting season for migratory waterbirds is open from mid-September et January.

4. Hunting localities in the region

Hunting of migrant birds is obviously concentrated along the main migratory routes. However, some level of hunting occurs in most regions of most countries – for example, migratory songbirds are widely hunted in the Western Desert Oases in Egypt, around residential areas along the coast of Lebanon and (illegally) in Tunisia. Large, soaring migrants such as storks, cranes, pelicans and some raptors follow geographic features such as coastlines, the edges of mountain ranges and valleys because they rely on thermals to gain height. They tend to congregate at passes between high mountains and straits where large water bodies narrow and are easier to cross. Such “bottleneck” sites occur in most countries of the region and are often key hunting sites due to the large numbers of birds passing through on migration (e.g. the whole Jordan Valley, Jericho, the Gulf of Suez). Coastal wetlands around the Mediterranean are important stop-over and wintering sites for migratory waterbirds and waders and therefore preferred sites for waterbird hunters. Much of the Mediterranean coast of North Sinai and Egypt is a key location for autumn netting of Quail and songbirds. Desert oases throughout the region are localities for various forms of traditional spring migrant hunting (especially songbirds) as well as falcon catching and falconry.

5. Species hunted

The table below summarises to the migratory species hunted in the MTCs.
<table>
<thead>
<tr>
<th>Country</th>
<th>Main groups and species targeted by hunters</th>
<th>Globally-threatened species targeted and/or adversely affected at population level</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>possibly up to 200 migratory species hunted</td>
<td>Lesser Kestrel, Ferruginous Duck, White-headed Duck, Little Bustard</td>
<td></td>
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<tr>
<td>Lebanon</td>
<td>Huge range of groups are hunted: Quail; waders; songbirds (thrushes, larks, finches, buntings and many others); soaring birds (eagles, storks, cranes)</td>
<td></td>
<td>Lebanese hunters shoot migrants in preference to residents because they believe migratory birds have higher reproduction rates/ large populations; they provide no ecological benefit; the hunters feel no connection with them; they believe impacts of migrant hunting in Lebanon are insignificant compared with those in Turkey</td>
</tr>
<tr>
<td>Jordan</td>
<td>Quail; Turtle Dove; waterbirds; Goldfinch</td>
<td>Lesser Kestrel</td>
<td></td>
</tr>
<tr>
<td>Palestine</td>
<td>Quail; Turtle Dove; waterbirds; songbirds (pipits, thrushes, warblers, flycatchers, orioles, finches, serins, buntings)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>Quail (estimate of 250,000 netted annually); songbirds (especially warblers)</td>
<td>Bustards declining due to over hunting; Corncrake (9000 estimate killed annually); Ferruginous Duck, Imperial Eagle, Greater Spotted Eagle</td>
<td>Overall numbers of migrants caught are declining; probably due to decreasing bird populations and changes in coastal habitats due to human developments</td>
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<tr>
<td>Tunisia</td>
<td><strong>Legal</strong>: Quail; Woodcock; snipes; waterbirds (essentially ducks and few waders); Common Lapwing, thrushes, starlings, doves</td>
<td>Targeted: Houbara Bustard</td>
<td>The Ministry of Agriculture and Water Resources estimated the number of small game (all birds to the exclusion of partridge) per registered hunter was 26 (without distinguishing between migratory and sedentary species). The total number of birds hunted was estimated to be 377 214 (including 82 810 sedentary partridges). Figures (all 2004/05) do not include commercial hunting of starlings nor illegal hunting.</td>
</tr>
<tr>
<td></td>
<td><strong>Illegal</strong>: songbirds (finches, Linnet, Serin) and other passerines on spring migration; Houbara Bustard by illegal tourist hunters</td>
<td>Affected: Marbled Teal; White-headed Duck; Ferruginous Duck;</td>
<td></td>
</tr>
<tr>
<td>Algeria</td>
<td><strong>Legal</strong>: Quail; Woodcock; snipes; waterbirds (ducks); Common Lapwing; Turtle Dove; thrushes; starlings</td>
<td>Targeted: Outarde Houbara (population is rapidly declining due to poaching and habitat loss because of dough)</td>
<td>Algerian hunters are mainly hunting sedentary partridge (150 000 per year). About 40 000 quail are shot every year and 5 000 other game bird species.</td>
</tr>
<tr>
<td></td>
<td><strong>Illegal</strong>: Goldfinch; Houbara Bustard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td>Quail; Turtle Dove; waterbirds; waders; thrushes; starlings; larks</td>
<td></td>
<td>Some estimates of numbers caught annually: 6000 Quails; 25200 Turtle Doves; 800 ducks</td>
</tr>
</tbody>
</table>
6. **Examples of good hunting practice in the region**

Other Synthesis Reports in this series summarise regional information on aspects of migrant bird hunting (Policy and Legislation, Management, Religious/ Cultural/ Socio-economic Importance, Alternative Economic Models to Hunting). A few examples of current ‘best practice’ derived from these regional syntheses are listed here. Such examples can be promoted through the Sustainable Hunting Project as models for adaptation and replication in other countries.

**Example 1:**
**Lebanon: Best practice on stakeholder involvement in hunting regulation**

The Society for the Protection of Nature in Lebanon (SPNL) is successfully promoting the revival of the traditional ‘Hima’ system for sustainable management of natural resources in Lebanon. This system, which dates back 1500 years in Arabic culture, involves management by communities of their local protected area. Revival of this traditional system is facilitated by the new hunting legislation in Lebanon which permits private land owners and municipalities to forbid hunting on their lands. The approach has already been established successfully and has reduced hunting pressure at two key biodiversity sites of importance to migrant birds (Kfarzabad wetlands in the Bekaa Valley and Ebel es-Saqi in South Lebanon). The approach is successful because enforcement is driven locally and coupled with awareness-raising and educational activities as well as local income-generation (e.g. ecotourism, with benefits returning to the local group responsible for managing the Hima). There is widespread interest in replicating Himas more widely in Lebanon and they have the potential to reduce or eliminate hunting in other key sites for migrant birds (e.g. Important Bird Areas).

**Example 2:**
**Tunisia: Best practice in hunting legislation and management**

The Tunisian legislation is a good example for best practice because it specifies game species (for example 25 species of birds) and precise that all the other species are protected by the law.

Tunisia also prohibits tourist hunting of waterfowl and other migratory game birds (doves, quails) except thrushes and starlings and is one of the rare Mediterranean countries which succeeded in protecting migratory birds (essentially raptors and storks) on a migration bottleneck (El Haouaria on the Cap Bon) during spring migration.

Furthermore 40 out of the 46 Tunisian IBAs are benefitting of the “Hunting Reserves” status, which means that they are legally protected and that hunting is prohibited throughout the year.
Example 3: Morocco: Best practice in management of hunting areas and captive breeding

In Morocco, hunters are directly involved in the management of designated hunting areas. Hunters’ groups are granted concessions to hunt on and manage hunting areas which they lease under the Hunting Leasing Law. This generates income for hunting management and requires that hunters invest in conservation and habitat rehabilitation on the leased sites according to an annual management plan approved by the local forest service. Captive breeding programmes in Morocco (to release game birds to supplement hunted wild populations) also demonstrate good practice, alleviating some of the pressure on wild game bird populations and creating employment in rural areas. In this way they meet both social development and bird conservation policy objectives in the country.
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