GENERAL INTRODUCTION

The Republic of Djibouti is a small country of 23,200 km² at the southern entrance to the Red Sea, bordered by Eritrea to the north, Ethiopia to the north-west, west and south, and Somalia to the south-east. The country forms the shape of a letter ‘U’ around the ‘V’-shaped Gulf of Tadjoura, with the capital, Djibouti-ville, on the southern coast of this ‘V’.

The human population is estimated at 620,000 (Direction de l’Environnement 1999) of which 65% live in Djibouti-ville. Based on figures from the 1991 human population census, it is estimated that another 10% live in the other regional capitals and 25% in rural areas, of whom approximately 20% are nomadic with just 5% sedentary rural dwellers. The census estimated that 12% of the population was of foreign origin (refugees and expatriates), although significant numbers of refugees have since been repatriated. Population growth is estimated at 6% per annum, of which 3% is due to natural growth and 3% results from immigration (Direction de l’Environnement 1999). Administratively, the country is divided into five districts: Djibouti, Ali-Sabieh, Dikhil, Tadjoura and Obock.

A harsh climate and lack of natural resources mean that Djibouti’s economy is highly dependent upon the tertiary sector (trade, financial and other services), with the primary and secondary sectors making up just 13% of the gross national product (Emerton 1998). Djibouti-ville is a busy port, linked by rail and road to Ethiopia, and port activities play a major role in the economy. The majority of the rural population are subsistence pastoralists, and almost all animal products traded in the cash economy are imported. Arable agriculture is minimal, with just 6,000 ha described as potentially suitable for irrigated cultivation, of which only a fraction is actually under production. The potentially rich marine resources are relatively under-utilized (c.800 tonnes per year in 1990; fishing is not a traditional activity), and efforts are being made to promote the fishing industry (Emerton 1998). Poverty levels are high, with 45% of the population classified as poor by the World Bank (World Bank 1997).
just north of the Gulf of Tadjoura, and are joined by the Darad chain, which contains a number of peaks over 1,000 m. In the south is the massif of Ali Sabieh, which reaches 1,292 m at Mount Arrebi close to the southern border with Ethiopia. Mont Moussa Ali, an isolated volcanic peak on the north-western border, is the highest point in the country at 2,021 m; Mont Garbi (1,688 m) is another high peak in the centre-west of the country.

The plateaux include Dukka and Kadda Garmari in the south-west, Yaguer in the centre west, Ali’a’adou, which stretches from the Goda massif north to the base of Mount Moussa Ali, Dësséina and Dalha in the centre-north, and the Obock plateau in the north-east. Plains and depressions include the plain of Göba’ad in the extreme south-western corner of the country, the Hanlé and Galafi plains in the south-west, in between the Dakkà–Garmari and the Yaguer plateaus, the Gaggadé and Dër-Elä plains in the centre east, Döda plains in the north-west, the sandy Grand and Petit Bara in the southern half of the country and the coastal plains between the Obock plateau and Douméra in the north and from Djibouti-ville south to the Somali border at Loyada. The lowest-lying depression is Lac Assal, a saline lake in the approximate centre of the country, which is 157 m below sea-level and fed from the sea through a rock fissure. Alol, a series of three parallel depressions in the north-west, is dominated by the introduced tree Salsola kali (VU—only known from Djibouti, Ethiopia and Somalia), Gazella dorcas pelzelni (VU—subspecies only known from Djibouti and Somalia), Phacochoerus africanus aeliani (EN—subspecies only known from Djibouti and Eritrea) and Dugong dugon (VU). The marine environment is rich, with 162 species of corals in 15 families (Obura 1999), and at least 1,850 species of fish (Magin 1999a). The marine turtles Dermochelys coriacea (EN) and Eretmochelys imbricata (CR) are commonly found along the coast and are believed to breed; Caretta caretta (EN) and Dermochelys coriacea (EN) are occasional visitors.

Vegetation cover today is significantly less than in the past, partly due to climatic changes (which has become hotter and drier), but also due to human impact. Overgrazing is affecting much of the country, especially the woodland. This is due to an increased human population, increased herd sizes and the provision of water-holes resulting in nomads remaining in certain areas with their livestock for longer periods. Deforestation is also a serious concern; the Forêt de Day, the country’s most significant wooded habitat, has been reduced in size from 7,500 ha, 200 years ago, to 2,300 ha in 1949 and, more recently, to 900 ha (Comité National pour l’Environnement 1991). What remains is extremely degraded; a large proportion of the juniper trees are either dead or dying and there are serious concerns over the future of this site (see site DJ001). Collection of firewood and wood for charcoal is also significant in the more wooded areas elsewhere, including the mangroves near Djibouti-ville (Said 1999). The coastal zone around Djibouti-ville is under increasing pressure from development, and mangroves on the coast and offshore islands are exploited for grazing, firewood and wood for construction. Increasing salinization of the soil and water and soil erosion are also concerns. In the marine environment, the collection of souvenirs (coral, shells, etc.) for personal use or sale may be having an impact in some areas although, as mentioned above, marine resources are under-utilized in Djibouti. Spear-fishing on the reefs, though illegal, is fairly common, practised mainly by expatriates. Oil pollution from shipping using the port at Djibouti is a chronic problem and the potential for a large-scale incident must be real. Indiscriminate refuse dumping is widespread.

### Table 1. Summary of Important Bird Areas in Djibouti.

<table>
<thead>
<tr>
<th>IBA Code</th>
<th>Site name</th>
<th>Administrative region</th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>A4</th>
</tr>
</thead>
<tbody>
<tr>
<td>DJ001</td>
<td>Forêt de Day</td>
<td>Tadjoura</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DJ002</td>
<td>Mabla</td>
<td>Tadjoura, Obock</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DJ003</td>
<td>Kadda Guène-Douméra</td>
<td>Obock</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DJ004</td>
<td>Les Sept Frères</td>
<td>Obock</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DJ005</td>
<td>Lac Abhé</td>
<td>Dikhil</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DJ006</td>
<td>Ali Sabieh-Assamou</td>
<td>Ali Sabieh</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DJ007</td>
<td>Dôda</td>
<td>Tadjoura</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Total number of IBAs qualifying: 4

### Criteria (see p. 11; for A3 codes, see Table 2)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Present at</td>
</tr>
<tr>
<td>A2</td>
<td>Not present</td>
</tr>
<tr>
<td>A3</td>
<td>Present at</td>
</tr>
<tr>
<td>A4</td>
<td>Not present</td>
</tr>
<tr>
<td>A5</td>
<td>Present at</td>
</tr>
</tbody>
</table>

7 IBAs covering 1,112 km²
around Djibouti-ville. While hunting of wildlife is illegal and not culturally endemic, some killing or live capture of animals does occur. Djibouti is also a centre for trade in wild animal products originating from outside the country, with products such as leopard skins and ivory openly on sale in the market.

**ORNITHOLOGICAL IMPORTANCE**

Despite its small size, Djibouti is relatively poorly known ornithologically. A checklist was published in 1990 (Laurent 1990), which, with additional records since then, give a total of 360 bird species confirmed as occurring; the potential occurrence of a further 79 species requires confirmation (Magin 1999a). Djibouti’s geographical location at the mouth of the Rift Valley, at the southern end of the Red Sea and relatively close to the Arabian peninsula, results in an interesting mixture of birds of African and Arabian affinities. In addition, the Bab-el-Mandeb straits off the coast of Djibouti (the narrowest part of the southern Red Sea), with the mountains of the Rift Valley on one side and Arabia on the other, form an important corridor for Palearctic–African migrants.

Seven bird species of global conservation concern occur in the country. The few wooded areas, notably the Forêt de Day and surroundings, support the country’s one endemic, *Francolinus ochropectus* (CR), which has a restricted range and whose geographical distribution defines the Djibouti juniper forests Secondary Area (s065). *Larus leucophthalmus* (VU) probably bred on the offshore island of Moucha and associated islets in the past (Laurent 1990), but up-to-date information is needed, and *Phoenicopterus minor* (NT) is a non-breeding visitor. The other four species are Palearctic migrant raptors (see below). A distinctive form of *Ptiliya melba* has been recorded at the Forêt de Day, the taxonomic position of which is unclear (Welch and Welch 1998).

Djibouti lies within the Somali–Masai biome (A08) and 17 of the 129 species restricted to the biome are known to occur. Elements of two other biome-restricted assemblages are also present, including 10 of the 29 species that are restricted to the Saharan–Sindian biome (A02) and four of the 16 that are restricted to the Sahel biome (A03).

The number of migratory raptors that regularly pass through Djibouti, crossing the Red Sea from Yemen, is of international significance. Over 246,000 individuals of 28 species were counted passing over the northern coast during a 38-day period in October–November 1987, making this one of the most important migration bottlenecks in Africa (Welch and Welch 1992). The most numerous species were *Buteo buteo* (98,339) and *Aquila nipalensis* (76,586), with *Circus macrourus* (NT), *Aquila clanga* (VU), *Aquila heliaca* (VU) and *Falco naumanni* (VU) also recorded. As well as raptors, smaller passerine species such as *Rhodophoneus cruentus* and *Burhinus capensis*. These waders also host Palearctic migrants in winter, such as *Lanias excubitor* and *Cercotrichas galactotes*.

Potentially important, though poorly known, numbers of waterbirds occur inland at Lac Abhé and, irregularly, at variably flooded areas may well have diminished these bird populations.

**CONSERVATION INFRASTRUCTURE AND PROTECTED-AREA SYSTEM**

The Direction de l’Environnement, a part of the Ministère d’Habitat, de l’Urbanisme, de l’Environnement et de l’Aménagement du Territoire, was created in 1996 to deal with environmental matters. There are just two protected areas in Djibouti, which cover parts of the reefs surrounding the islands of Moucha and Maskali. These protected areas, the Parc Territorial de Moucha and the Reserve Intégrale de Maskali Sud, are theoretically under the joint management of the Office National du Tourisme et de l’Artisanat (this task having been allocated to them before the creation of the Direction de l’Environnement) and the Ministère de l’Environnement, de l’Aménagement du Territoire, de l’Urbanisme, de l’Habitat, de l’Urbanisme, de l’Environnement et de l’Aménagement du Territoire, may well have diminished these bird populations.

**Table 2. The occurrence of biome-restricted species at Important Bird Areas in Djibouti. Sites that meet the A3 criterion are highlighted in bold.**

<table>
<thead>
<tr>
<th>IBA code:</th>
<th>Number of species recorded:</th>
</tr>
</thead>
<tbody>
<tr>
<td>001 002 003 004 005 006 007</td>
<td>1 2 4 1 9 1 1</td>
</tr>
</tbody>
</table>

**A02 – Sahara–Sindian biome**

(10 species in Djibouti; two sites meet the A3 criterion)

<table>
<thead>
<tr>
<th>IBA code:</th>
<th>Number of species recorded:</th>
</tr>
</thead>
<tbody>
<tr>
<td>001 002 003 004 005 006 007</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

**A03 – Sahel biome**

(four species in Djibouti; one site meets the A3 criterion)

<table>
<thead>
<tr>
<th>IBA code:</th>
<th>Number of species recorded:</th>
</tr>
</thead>
<tbody>
<tr>
<td>001 002 003 004 005 006 007</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

**A08 – Somali–Masai biome**

(17 species in Djibouti; three sites meet the A3 criterion)

<table>
<thead>
<tr>
<th>IBA code:</th>
<th>Number of species recorded:</th>
</tr>
</thead>
<tbody>
<tr>
<td>001 002 003 004 005 006 007</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>
Djibouti has developed a strategy and action programme, completed in 2000, for the conservation of its biological resources under a Global Environment Facility project, administered by the United Nations Development Programme (UNDP). Through another UNDP project, the government, led by the Direction de l’Environnement, has also recently completed a Plan d’Action National pour l’Environnement (National Environmental Action Plan).

A law banning all hunting of wildlife was passed in 1971. However, some hunting or capture of animals still occurs; for example, sea-turtles are killed for their carapaces and, sometimes, meat, and their eggs are poached, while gazelle and other small mammals are occasionally captured for sale as pets. There is also evidence of some local hunting of Francolinus ochropectus. A control programme for the introduced Corvus splendens was started in 1999.

Traditionally, grazing was divided among families and some areas were set aside for use only in severe drought, following authorization of the tribal chief. Cutting of trees was similarly regulated. With increasing flock sizes, and the fact that herds are at lower altitudes or on better-watered slopes) A. procera and/or B. hildebranti, with some B. hildebranti. The woodland is dominated by trees of Juniperus procera, a species referred only to the high-altitude juniper forest in the area, the lower-altitude wooded areas to the north and east also contain important avifauna and have been included. At upper altitudes, the landscape is rugged, with high plateaus, cliffs and steep mountain slopes, intersected by many wadis. Above c.950 m, the vegetation is dominated by trees of Juniperus procera, with some Olea africana, and an understorey dominated by Buxus hildebranti and/or Tarchonanthus camphoratus. However, the Junipers are in regression and is becoming or (particularly at lower altitudes or on better-watered slopes) Terminalia brownii, both mixed with Acacia spp. The wadis are more densely vegetated, with large Ficus spp. and, in a few areas, palm trees. There are several villages within the IBA. The area is used for grazing cattle, camels and goats, and supplies building poles, palm fronds for furniture, and, from the lower slopes, firewood; a number of small market gardens have been created. It is also popular with visitors from Djibouti-ville, and there are three tourist camps and one hotel within the IBA.

Three sites qualify for the Somali–Masai biome, between them holding 15 of the 17 species of the biome that are known from the country (Table 2). In addition, two sites qualify for the Sahara–Sindian biome, holding seven of the 10 species in Djibouti, and one site does for the Sahel biome, holding all four species in the country; none of these sites have, however, been designated solely on the occurrence of Sahara–Sindian or Sahel biome species.

None of the sites has any official protection. The site of most concern is undoubtedly the Forêt de Day (site DJ001), the more important of the two sites which hold Francolinus ochropectus, as it is severely degraded in parts and under significant human pressure. Security risks have prevented ornithologists visiting the only other known site for the species, the Mabla mountains (site DJ002), since the late 1980s. In 1985, the population of Francolinus ochropectus in the Mabla mountains was estimated at only c.200 birds, so it is likely that the Forêt de Day area is critical to the survival of the species. The state of Lac Abhé (site DJ005) is also cause for concern, if the recent rate of diminishment of water-level continues.

### Comments on the Inventory
- Place names and spellings are taken from the 1:200,000 Carte General de Djibouti (Institut Geographique National, Paris). Site boundaries are defined with reference to this map also, or the 1:100,000 series for the country (also produced by the Institut Geographique National, Paris).
- Information on some sites is minimal (e.g. site DJ007) or, possibly, as it dates from the mid-1980s, obsolete (e.g. DJ002 and DJ004).

### Acknowledgements
This inventory has drawn very heavily on the work of Geoff and Hilary Welch and Alain Laurent, who have also provided invaluable comments on the text. The Rapport National Environnement (Comité National pour l’Environnement 1991) was extensively used in compiling the ‘General information’ section. Thanks also to M. Houssein Abdillahi Rayaleh, M. Mohammed Ali Moumin, Director of the Direction de l’Environnement, and Dr Chris Magin for their input.

### Glossary
sebkhla salt pans.
Other threatened/endemic wildlife
The most important known site for Livistona carinensis (VU) in Djibouti is Bankoualé, within the IBA. This palm, the sole Livistona species found in Africa and Arabia, is only known to occur in around a dozen sites in Yemen, Somalia and Djibouti. Scattered trees of Dracaena onobet (EN) occur on steep slopes, and Juniperus procera (LR/nt) is common, though declining. The mammals Papio hamadryas (LR/nt), Oreotragus oreotragus (LR/ed), Phacochoerus africanus acuanti (EN) and Odomps martienseni (VU) also occur.

Conservation issues
At least part of the area was apparently declared a National Park in 1939, but this designation is no longer valid and any official information has proved impossible to trace. There is some local hunting of Francolinus ochropectus; while the current extent of this activity is not clear, there are reports that it may have escalated recently (Welch and Welch 1999). The juniper forest is in an extremely poor state of health, with a high percentage of the trees dead or dying, with 53% dead and 38% in ill health in one small sample counted in October 1998 (pers. obs.). Precise causes are unclear, but a combination of factors including overgrazing, acid rain resulting from a past volcanic eruption, climate change and a fungal disease have all been suggested. Overgrazing by cattle, camels and goats is certainly a problem in much of the forest; collection of firewood may also be having an impact in the lower part of the site. Projects examining the environmental and socio-economic issues in the area have been carried out by the government and international agencies (including development of a FAO-sponsored forest/angeland management plan for part of the site), but the measures prescribed have never been implemented, partly due to internal unrest in Djibouti in the early 1990s.

Further reading

Site description
The site comprises a wooded area on the Mabla mountain massif, c.25 km west of Obock. The site is little-known biologically, partly because security problems have restricted visits since c.1990. The area consists of mountains and plateaus, intersected by numerous narrow wadis. Some remnants of Juniperus woodland reportedly exist, but most of the woodland is degraded, with signs of significant human disturbance. The secondary woodland is dominated by Acacia seyal (characteristic of disturbed areas) and Buxus hildebrandii, with Acacia ethiopica locally dominant and B. hildebrandii the main species in the densely vegetated wadis. Several villages occur within the IBA or just outside, and the area is used for grazing livestock and firewood-collection.

Birds
See Box and Table 2 for key species. The site is one of only two known for Francolinus ochropectus (Critically Endangered); in 1985 the population was estimated at c.200 birds, but current figures and trends are unknown. The site is little-known ornithologically but, in addition to six species of the Somali–Masai biome, two Sahel and one Sahara–Sindian biome species are also found here (see Table 2). In 1985, the site held one pair of resident Aquila verreauxii and the only known breeding colony of Gyps rueppelli in the country (Welch et al. 1986); the distinctive yellow-tailed form of Ptytilia melba, of uncertain taxonomic status, has been seen here (Welch and Welch 1998).

Other threatened/endemic wildlife
A few remnant trees of Juniperus procera (LR/nt) occur. The mammal Papio hamadryas (LR/nt) is reasonably common and Oreotragus oreotragus (LR/ed) has been recorded.

Conservation issues
From the little information available, it would appear that the woodland has been heavily used for firewood and grazing, and that conservation measures, including a socio-economic programme, are needed to relieve human pressure on the habitat. However, the area remains inaccessible to outsiders due to security concerns.

Further reading
Blot (1985), Welch and Welch (1985).

Kadda Guéni–Douméra
Admin region Obock
Coordinates 12°27’N 43°17’E
Area c.20,000 ha
Altitude 0–138 m
Unprotected

Key species
A1 Francolinus ochropectus
A2 (s065) Francolinus ochropectus
A3 (A02) Sahara–Sindian biome: Four of the 10 species of this biome that occur in Djibouti have been recorded at this site; see Table 2.
A3 (A08) Somali–Masai biome: Nine of the 17 species of this biome that occur in Djibouti have been recorded at this site; see Table 2.

Site description
This IBA is a 61-km stretch of coast in the north-east of the country, between the rocky outcrop at Kadda Guéni and the border town of Douméra, and includes the peninsulas at Ras Siyyan and Douméra. The site is a flat, largely featureless sand- or gravel-plain with sparse herbaceous vegetation and scattered rocky outcrops, the largest (on the peninsula at Ras Siyyan) rising to 138 m. The shoreline is a mixture of rocky areas (e.g. around Ras Siyyan), old coral reefs, which are exposed at low tide (around Moulhoulé, a village approximately midway along the coast) and sandy beaches (e.g. Douméra). There is a lagoon with sandy shores and a small area of mangrove at Ras Siyyan, a further small area of mangrove and a village at Khôr Angar, and other settlements at Moulhoulé and Douméra.

Birds
See Box for key species. Lying at the narrowest point of the Bab-el-Mandeb Straits, the site is a migration bottleneck, with huge numbers of raptors, and significant numbers of other birds, crossing the Red Sea from the Arabian peninsula in the autumn (spring migration has not been investigated). This is one of the most important sites in Africa for migrating raptors, with over 246,000 individuals of 26 species being counted during a 38-day period in October–November 1987. The most numerous species were Buteo buteo (98,339) and Aquila nipalensis (76,586). Also recorded were 67 Circus macrourus, 70 Aquila heliaca and 20 A. clanga, as well as eight Falco naumanni. In addition to raptors, smaller numbers of Ciconia nigra, C. abdimii, C. ciconia and Grus grus were also recorded. Four Sahara–Sindian, one Sahel and one Somali–Masai biome species also occur at the site (see Table 2).

Key species
A1 Circus macrourus
Aquila heliaca
Aquila clanga
A4iv More than 20,000 storks, raptors and cranes regularly pass through this site on migration.

Other threatened/endemic wildlife
The sea-turtle Chelonia mydas (EN) is frequently recorded off the coast and on the sandy beaches in the Douméra area, and Eretmochelys imbricata (CR) possibly occurs. The mammal Dugong dugon (VU) has also been sighted offshore.

Conservation issues
There are currently no known threats to the birds migrating through this area. However, given the great importance of the site for migrating raptors, protection is recommended to safeguard against inappropriate future developments. Although hunting of wildlife is prohibited in
Les Sept Frères
Admin region Obbok
Coordinates 12°26’S 43°23’E
Area c.4,000 ha Altitude 0–112 m
A4i Unprotected

Site description
The site is an archipelago of six small volcanic islands in the mouth of the Red Sea at the Bab-el-Mandeb straits (the peninsula at Ras Siyyan, not included in this IBA, makes the seventh member of the group, from which the archipelago takes its name). The islands are rocky and virtually unvegetated. They are surrounded by a rich marine environment; the mixing of warm Red Sea waters from the north and west with cold, nutrient-rich upwelling water from the Somali-Arabian Sea region to the east, results in an unusual coral-reef habitat. The area is visited sporadically by sport-divers, and by fishermen, largely Yemeni.

Birds
See Box for key species. A colony of Sterna bengalensis and Sterna bergii was recorded nesting on one of the islands, Ounda Dâbali, in September 1985. Other species which breed, in unknown numbers, on the archipelago include Sula leucogaster, Pandion haliaetus and Falco concolor, the latter a Sahara–Sindian biome species (see Table 2).

Key species

<table>
<thead>
<tr>
<th>Key species</th>
<th>Breeding (pairs)</th>
<th>Non-breeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterna bengalensis</td>
<td>1,000+</td>
<td>–</td>
</tr>
<tr>
<td>Sterna bergii</td>
<td>500+</td>
<td>–</td>
</tr>
</tbody>
</table>

Further reading
Welch et al. (1986), Welch and Welch (1992).

Other threatened/endemic wildlife
There is high diversity of fish, with endemics from both the Red Sea–Gulf of Aden region and the Arabian Sea region occurring. Turtles—most commonly Eretmochelys imbricata (CR), probably also Chelonia mydas (EN)—are seen around the islands. Three species of black coral have been recorded.

Conservation issues
Egg-collecting is known to be a threat to the nesting terns. The coral reefs and marine environment in general are currently in a good condition, although spear-fishing (illegal in Djibouti, but widely practised), other tourist damage and overfishing could threaten the site if adequate controls are not introduced and implemented. Protection of the islands on biological grounds has been recommended to the Government, principally to safeguard their rich marine life, but also acknowledging their value for nesting birds (Obura 1999).

Further reading

Lac Abbé
Admin region Dikhil
Coordinates 11°10’N 41°50’E
Area c.11,100 ha Altitude 222–400 m
A1, A3 (A02), A4i Unprotected

Site description
This site is the eastern part of a saline lake that Djibouti shares with Ethiopia and is the largest permanent inland wetland in the country. The Ethiopian part of the lake is also an IBA, the Lake Abe wetland system (ET008). The lake is fed principally by the Awash river in Ethiopia as well as by a few small, temporary wadis which drain into the lake on the Djibouti side. The size of the lake has decreased by more than two-thirds in 50 years, due (it is thought) to an increasingly arid climate and the construction of dams on the Awash river in Ethiopia, to allow irrigated cotton cultivation. The north-eastern shore of the lake is bordered by rocky hills; on the eastern and southern shores, the land that used to be submerged under the lake has become ‘sebkha’ or saltlans. Several hot freshwater springs that once fed into the lake now emerge on these saltlans. Minerals crystallizing from the spring water have formed a series of chimneys that are now exposed, creating a bizarre landscape of some tourist interest. Some low vegetation has developed around the springs and a few of these areas are fenced off by local pastoralists for use as a dry season food source for livestock. Apart from these areas, and a few stands of Tamarix trees along the temporary wadi beds, the shoreline is virtually devoid of vegetation.

Birds
See Box and Table 2 for key species. The site is little known. Although no thorough counts have been undertaken, an estimated 6,500 Phoenicopterus ruber and 250 P. minor were recorded in January 1999, with an estimated further 10,000 Phoenicopterus spp. at too great a distance for specific identification. From these figures a total of approximately 16,000 P. ruber and 600 P. minor can be deduced. Breeding Pelecanus onocrotalus, Vannellus spinosus and Charradris pecuarius have been reported, while migrant waders such as Calidris minuta occur. Rhodopechys githaginea, a species of the Sahara–Sindian biome, has been recorded at the site and nearby; three other species of this biome also occur (see Table 2). The Ethiopian part of the lake qualifies as an IBA for the presence of over 20,000 waterbirds, which may also be true for the Djibouti portion.

Key species

<table>
<thead>
<tr>
<th>Key species</th>
<th>Breeding (pairs)</th>
<th>Non-breeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Phoenicopterus minor</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>A1 P. ruber</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Other threatened/endemic wildlife
The mammal Gazella dorcas pelzelnii (VU) occurs on the lake shore and freshwater fish are reportedly present in the spring-fed watercourses.

Conservation issues
The drastic drying-out of the lake is of concern. However, no conservation measures or projects are known to exist or are planned.

Further reading

Ali Sabieh–Assâmô
Admin region Ali Sabieh
Coordinates 11°03’N 42°48’E
Area c.42,300 ha Altitude 446–1,292 m
A3 (A08) Unprotected

Site description
The site comprises a lightly wooded, hilly region in the south-east of the country next to the border with Ethiopia. The majority of the site is sparsely vegetated with low (4–5 m) Acacia spp. and seasonal herbaceous cover; vegetation is denser in the many small wadis, with occasional large Ficus trees. There are settlements at Ali Addé and Assâmô, with small gardens cultivated in the wadi at Assâmô. The whole site is used for livestock-grazing; the human population has been greatly augmented in recent years by several thousand refugees from Somalia.

Birds
See Box and Table 2 for key species. Six of the Somali–Masai biome species are only known in Djibouti from this site. In addition, two Sahara–Sindian species and one Sahel biome species have also been recorded (see Table 2). The red-tailed Newell’s and Buteo augur also occurs and Circus galiicus has been recorded wintering.

Key species

<table>
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<tr>
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<th>Non-breeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 P. ruber</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Further reading
Welch et al. (1986), Welch and Welch (1992).

Important Bird Areas in Africa and associated islands – Djibouti

<table>
<thead>
<tr>
<th>Site name</th>
<th>Admin region</th>
<th>Coordinates</th>
<th>Area</th>
<th>Altitude</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Les Sept Frères</td>
<td>A4i</td>
<td>12°26’S 43°23’E</td>
<td>c.4,000 ha</td>
<td>0–112 m</td>
<td>Unprotected</td>
</tr>
<tr>
<td>Ali Sabieh–Assâmô</td>
<td>A3 (A08)</td>
<td>11°03’N 42°48’E</td>
<td>c.42,300 ha</td>
<td>446–1,292 m</td>
<td>Unprotected</td>
</tr>
<tr>
<td>Lac Abbé</td>
<td>A1, A3 (A02), A4i</td>
<td>11°10’N 41°50’E</td>
<td>c.11,100 ha</td>
<td>222–400 m</td>
<td>Unprotected</td>
</tr>
</tbody>
</table>

See Box for key species. A colony of Sterna bengalensis and Sterna bergii was recorded nesting on one of the islands, Ounda Dâbali, in September 1985. Other species which breed, in unknown numbers, on the archipelago include Sula leucogaster, Pandion haliaetus and Falco concolor, the latter a Sahara–Sindian biome species (see Table 2).

Key species

<table>
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<th>Non-breeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterna bengalensis</td>
<td>1,000+</td>
<td>–</td>
</tr>
<tr>
<td>Sterna bergii</td>
<td>500+</td>
<td>–</td>
</tr>
</tbody>
</table>

Other threatened/endemic wildlife
There is high diversity of fish, with endemics from both the Red Sea–Gulf of Aden region and the Arabian Sea region occurring. Turtles—most commonly Eretmochelys imbricata (CR), probably also Chelonia mydas (EN)—are seen around the islands. Three species of black coral have been recorded.

Conservation issues
Egg-collecting is known to be a threat to the nesting terns. The coral reefs and marine environment in general are currently in a good condition, although spear-fishing (illegal in Djibouti, but widely practised), other tourist damage and overfishing could threaten the site if adequate controls are not introduced and implemented. Protection of the islands on biological grounds has been recommended to the Government, principally to safeguard their rich marine life, but also acknowledging their value for nesting birds (Obura 1999).

Further reading
Other threatened/endemic wildlife
Among mammals, the only Djibouti records of Dorcatragus megalotis (VU) are from two locations within the site, while Papio hamadryas (LR/nt), Litocranius walleri (LR/cd) and the tree Dracaena ombet (EN) also occur.

Conservation issues
Overgrazing and firewood-collection are both long-term problems, which are likely to have been exacerbated by the influx of refugees from Somalia.

Further reading

Dôda
Admin region Tadjoura Coordinates 12°05’N 42°20’E Area c.15,000 ha Altitude 229–240 m

REFERENCE


