OVERVIEW

The Former Yugoslav Republic of Macedonia occupies 25,715 km² with a population of 2,066,000 people. New data on Important Bird Areas (IBAs) are not available and therefore the 10 IBAs included here (Table 1, Map 1) are identical to those in the previous pan-European inventory (Grimmett and Jones 1989). The IBAs occupy 1,907 km², or 7% of the country’s surface area.

Four globally threatened or near-threatened species (Collar et al. 1994) occur. *Aquila heliaca* (003 possible breeder, 004) and *Falco naumanni* (007 and 008) meet the A1 criterion as breeding species. *Phalacrocorax pygmeus* (005, 006, 010) and *Pelecanus crispus* (006) occur as non-breeding birds or in winter.

The majority of IBAs are mountainous areas or river gorges. They hold important populations of species with an unfavourable conservation status in Europe (meeting the B2/B3 criteria), particularly breeding raptors, including *Gyps fulvus*, *Neophron percnopterus* and *Aquila chrysaetos*. In 1989 hunting, poisoning and trapping were recorded as common threats across the mountain IBAs. Three IBAs (005, 006, 010) are lakes of particular importance for wintering waterbirds, with one (site 005) holding more than 20,000 waterbirds in winter.
**SITE ACCOUNTS**

**Sara mountains [parts of]**

Admin region Macedonia Kosovo
Coordinates 42°00’N 21°00’E
Altitude — Area 12,000 ha

**Site description**
High mountainous region (includes the peaks of Titov Vrh, Popova Šapka, and Kobilica), with river gorges, cliffs and rocky hillsides, alpine pastures, and woodland (coniferous and deciduous). Land-uses include cattle-grazing and forestry. The area extends into Kosovo (the given area of 12,000 ha includes the part in Kosovo).

**Habitats**
- Forest and woodland (broadleaved deciduous forest; native coniferous forest), Grassland (alpine/subalpine/boreal grassland), Wetland (river/stream), Rocky areas (scrub/boulders; inland cliff)

**Land-use**
- Agriculture, Forestry

**Protection status**
National Partial None International None

**Conservation issues**

**Birds**

<table>
<thead>
<tr>
<th>Species</th>
<th>Season</th>
<th>Year</th>
<th>Pop min</th>
<th>Pop max</th>
<th>Acc</th>
<th>Criteria</th>
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<tr>
<td>Aquila chrysaetos</td>
<td>Golden Eagle</td>
<td>B</td>
<td>1989</td>
<td>6</td>
<td>7</td>
<td>B2</td>
</tr>
<tr>
<td>Bubo bubo</td>
<td>Eagle Owl</td>
<td>B</td>
<td>1989</td>
<td>3</td>
<td>5</td>
<td>B2</td>
</tr>
</tbody>
</table>

Other breeding species include *Persemna apivora* (1–2 pairs), *Falco peregrinus* (1 pair), *Bonasa bonasia*, *Alceoidea graca*, *Dryocopus martius*, *Saxicola rubetra*, *Larus canturius* and *Pyrhrococax pyrthocorax* (50–100 pairs), and possibly include *Tetrao urogallus*, *Strix uralensis*, *Aegolius funereus*, *Dendrocopos leucomelas*, *Pica pica*, and *Pyrrhocorax graculus*. *Gypaetus barbatus* (1) and *Gyps fulvus* (15–20) also occur.

**Protection status**
National Partial International None

**Conservation issues**

**Threats**
- Unsustainable exploitation (U)

Some illegal hunting and trapping of wildlife takes place.

**Babuna gorge, Topolka gorge, and Crn Kamen**

Admin region —
Coordinates 41°40’N 21°45’E
Altitude — Area 2,500 ha

**Site description**
The gorges of the Topolka, Vardar and Babuna rivers with cliffs, riverine vegetation, and scrub-covered hillsides. Land-uses include hunting and cattle-grazing.

**Habitats**
- Scrub (scrub), Wetland (river/stream), Rocky areas (inland cliff)

**Land-use**
- Agriculture, Hunting

**Protection status**
National None International None

**Conservation issues**

**Threats**
- Other (U), Unsustainable exploitation (U)

Other breeding species include *Circatha gallica* (1 pair), *Aquila chrysaetos* (1 pair), *Hieraetus pennatus* (possibly 1–2 pairs), *Falco biarmicus* (1 pair), *P. peregrinus* (2–3 pairs), *Bunosa bonasia*, *Caprimulga europaea*, *Alcedo atthis*, *Dryocopus martius*, and possibly *Dendrocopos leucucus*, *Dendrocopos medius* and *Picoides tridactylus*

**Birds**

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<td>B</td>
<td>1989</td>
<td>3</td>
<td>5</td>
<td>B2</td>
</tr>
</tbody>
</table>

**Protection status**
National Partial International None

**Conservation issues**

**Threats**
- Other (U), Unsustainable exploitation (U)

Other breeding species include *Ciconia nigra* (1 pair), *Neophron percnopterus* (2–3 pairs), *Circatha gallica* (1 pair), *Buteo rufinus* (2 pairs), *Aquila chrysaetos* (1 pair), *Falco naumanni* (a few pairs), *F. biarmicus* (1 pair), *F. peregrinus* (1 pair), *Alectoris graca*, *Bubo bubo* (1–2 pairs), *Caprimulga europaea*, *Alcedo atthis* and *Coracias garrulus*. *Gypaetus barbatus* and *Gyps fulvus* also occur.

**Other**

**Protection status**
National None International None

**Conservation issues**

**Threats**
- Other (U), Unsustainable exploitation (U)

Other breeding species include *Ciconia nigra* (1 pair), *Neophron percnopterus* (2–3 pairs), *Circatha gallica* (1 pair), *Buteo rufinus* (2 pairs), *Aquila chrysaetos* (1 pair), *Falco naumanni* (a few pairs), *F. biarmicus* (1 pair), *F. peregrinus* (1 pair), *Alectoris graca*, *Bubo bubo* (1–2 pairs), *Caprimulga europaea*, *Alcedo atthis* and *Coracias garrulus*. *Gypaetus barbatus* and *Gyps fulvus* also occur.

**Protection status**
National None International None

**Conservation issues**

**Threats**
- Other (U), Unsustainable exploitation (U)
There is possibly illegal poisoning of wildlife (‘Other’ threat) and the eggs and young of birds of prey are regularly stolen by foreigners. The area is a proposed Ornithological Reserve.

With an age of 2–4 million years, this is one of the most ancient lakes in the world, harbouring many endemic species among its aquatic fauna.

**River Bregalnica**

Site description

A river valley with damp woodland, steppe habitat, bare eroded land, bushes and trees. There is a small area of cultivation and cattle-grazing in winter. The area is used for hunting.

Birds

- *Aquila heliaca* Imperial Eagle
- *Bubo bubo* Eagle Owl

Other breeding species include *Milvus migrans* (1–2 pairs), *Neophron percnopterus* (2–3 pairs), *Circaetus gallicus* (1–2 pairs), *Circus pygargus*, *Aquila heliaca* (2–3 pairs), *A. chrysaetos* (1 pair), *Falco peregrinus* (1 pair), *Caprimulgus europaeus*, *Accipiter atthis* and *Coracias garrulus*, *Buteo rufinus*, *Falco cherrug* and *Tetrax tetrax* possibly breed. *Gyps fulvus* (18 birds) also occurs.

Protection status

National None International None

Conservation issues

There is possibly illegal poisoning of wildlife (‘Other’ threat).

**Lake Prespa**

Site description

A very large inland freshwater lake, surrounded by mountains and extending into Albania (Albanian site 003) and Greece (Limni Megali Prespa, Greek site 047). The area given is the entire area of the lake.

Habits Wetland (standing fresh water)

Birds

- *Phalacrocorax pygmeus* Pygmy Cormorant
- *Phalacrocorax aristotelis* Pygmy Cormorant
- *Pelicanus crispus* Dalmatian Pelican

No data are available for breeding birds. The International Waterfowl Census counts (in the Macedonian sector) in winters 1987 and 1988 recorded (1988 data unless stated) *Phalacrocorax carbo sinensis* (40), *Netta rufina* (80; 150 in 1987), *Aythya fuligula* (8,000) and *Fulica atra* (5,950). Additional reports of non-breeding birds include *Podiceps cristatus* (1,300), *Pelicanus crispus* (58), *Anser anser* (200) and *Mergus merganser* (90).

Protection status

National None International None

Conservation issues

Threats Unknown

**Lake Ohrid**

Site description

A large inland freshwater lake in a mountain basin, part of which is in Albania (see Albanian site 002).

Habits Wetland (standing fresh water)

Land-use Unknown

Birds

- *Podiceps nigricollis* Black-necked Grebe
- *Podiceps pygmygos* Pygmy Comorant
- *Netta rufina* Red-crested Pochard

No data are available for breeding season. The International Waterfowl Census counts in the Macedonian sector in winters 1987 and 1988 recorded (1988 data unless stated) *Tachybaptus ruficollis* (1,090), *Podiceps carbo sinensis* (70), *P. aristotelis* (10), *Cygnus olor* (100 in 1987), *Aythya ferina* (7,050), *A. fuligula* (2,200) and *Fulica atra* (32,100).

Protection status

National Partial International High

IBA covered by Ornithological Reserve. 25,100 ha of IBA covered by World Heritage Site (Ohrid Region; 25,100 ha).

**River Crna gorge**

Site description

A gorge with cliffs, scrub and woodland (including *Fagus* and *Quercus*), bare and eroded land, an artificial lake without vegetation, and grazing pasture. Land-uses include hunting, fishing, and cattle-grazing.

Habits Forest and woodland (broadleaved deciduous forest), Scrub (scrub), Grassland, Wetland (standing fresh water; river/stream), Rocky areas (inland cliff)

Land-use Agriculture, Fisheries/aquaculture, Hunting

Birds

- *Neophron percnopterus* Egyptian Vulture
- *Gyps fulvus* Griffon Vulture
- *Circus cyaneus* Short-tailed Eagle
- *Aquila chrysaetos* Golden Eagle
- *Falco naumanni* Lesser Kestrel
- *Bubo bubo* Eagle Owl

Breeding species include *Ciconia nigra* (2–3 pairs), *Buteo rufinus* (1 pair), *Aquila chrysaetos* (4–7 pairs), *Hieraaetus pennatus* (1 pair), *H. fasciatus* (1 pair), *Falco biarmicus* (1–2 pairs), *F. peregrinus* (2–3 pairs), *Bonasa bonasia*, *Alectoris graeca* and *Coracias garrulus*, *Gypaetus barbatus* (1), *Aegypius monachus* (2) and *Aquila heliaca* (2–3) also occur.

Protection status

National Low International None

IBA partly covered by small Hunting Reserve.
**Conservation issues**

Problems at the site include illegal trapping and probably poisoning of wildlife (‘Other’ threat), and house-building.

**Site description**

The site includes the Vardar gorge, Celovecka river and Krastavec ridge with cliffs and rocky hillsides, scrub, and woodland; there are also small areas of marsh, damp woodland, and some steppe habitat in the Vardar valley. Mainly inaccessible, some of the area is used as agricultural land, while hunting and cattle-grazing take place.

**Birds**

Breeding species include *Ciconia nigra* (2–3 pairs), *Pernis apivorus* (1–3 pairs), *Gypaetus barbatus* (1 pair), *Aquila pomarina* (1 pair), *A. chrysaetos* (3 pairs), *Hieraaetus fasciatus* (1 pair), *Falco peregrinus* (1 pair), *Bonasa bonasia*, *Alectoris graeca*, and possibly *Aegolius funereus*, *Coracias garrulus*, *Dendrocopos leucocephalus* and *Picoides tridactylus*. Small flocks of *Falco eleonorae* also occur during the summer.

**Protection status**

National None International None

**Conservation issues**

Problems at the site include hunting, illegal trapping and poisoning, and forestry.

**Lake Dojran**

Shallow eutrophic lake, with extensive reedbeds extending into Greece (site 023) There is an intensive traditional fishing industry.

**Birds**

Formerly important for breeding waterfowl including *Pelecanus onocrotalus*, *Egretta alba*, *Ardea purpurea*, *Cygnus olor* and *Oxyura leucocephala*; however, no data on breeding species are available for recent years. The International Waterfowl Census counts in winter 1987 and 1988 recorded (1988 data unless stated) *Gavia arctica* (10), *Podiceps nigricollis* (40), *Phalacrocorax carbo* (2–3 pairs), *Pelecanus onocrotalus* (1,150), and *Oxyura leucocephala* (6,350).

**Protection status**

National Partial International None

IBA protected by Ornithological Reserve.

**Conservation issues**

**REFERENCES**
