

Atlas of the Breeding Birds of Arabia

Summary: The Atlas of the Breeding Birds of Arabia (ABBA) project commenced in 1984, with the objective of documenting the distribution of breeding birds within the states of the Arabian Peninsula, including the Socotra Archipelago. Since 1984, almost 500 observers have contributed information to the ABBA database. Virtually all the literature concerning Arabian ornithology and some museum collections have been examined to collate distributional information. In addition, 40 ABBA field surveys were undertaken in all parts of the Arabian Peninsula to collect information, especially from those regions that were poorly known in terms of their local bird communities.

The period of the data collection (1984-2009) has seen great changes to the Arabian environment and this has had a dramatic effect on breeding birds. Notably, many additional species have found breeding niches in “new habitats” that have been created, such as manmade wetlands or extensive agricultural areas, habitats that hardly existed previously. In addition, numerous introduced bird species have become feral and are now a permanent feature of the Arabian avifauna. The 20 established exotic species, which are mainly concentrated in cities of the Arabian Gulf, now make up 7% of all breeding species, although less than 1% of the total population of all birds.

The special factors affecting the Arabian avifauna are reviewed, including the unique zoogeographical position of the Arabian Peninsula, the phenomenon of nomadism in arid regions and the high degree of endemism in the south-west of the Peninsula and Socotra. In total, 23 endemic species are recognised, or 8% of all species and 5% of the total population of all birds. There are also many migratory species and breeding visitors, which add an extra dimension to the avifauna. These aspects are overlaid with a considerable variety of landforms, climatic conditions, altitude range and vegetation patterns. Ten ornithological regions are identified and the bird communities and calendar of each described.

Altogether 273 species of birds have been confirmed to breed, or have bred, and there are a further 24 species for which there is strong evidence that they probably breed or are likely to breed in the near future in the Peninsula. In all they represent 65 families. The total includes one endemic taxon, the Arabian Ostrich, which became extinct in Arabia during the 20th Century. For each breeding, or potentially breeding, species an account provides details of taxonomy, world distribution, the status and population in Arabia (usually by state), comments on habitats and ecology within Arabia and details of its breeding biology and phenology within the Peninsula. All proven breeding species are illustrated and breeding distribution maps are provided. These maps show by means of different sizes and shaped symbols the breeding distribution with changes through time, identified by colour codes in the 1142 half degree grid squares that make up the atlas area. The maps include notations to important range extensions, reintroduction sites or breeding in special circumstances.

Traditionally, human communities in Arabia conserved plants, animals and the environment, but they struggle to keep up with the conservation requirements facing Arabia's rapidly changing environment today. The most significant changes are to habitats through human development needs, such as urban and industrial infrastructures, agricultural development and recreational requirements. Pollution, hunting and wildlife exploitation issues are relevant, as everywhere, and these are discussed and set against local and national conservation initiatives. To date, there is little evidence of any effect on bird distribution from global warming, but some previously common arid land species are becoming less common for no apparent reason; this is a cause for concern and needs to be watched closely.

The atlas includes 106 colour plates of Arabian breeding birds and their habitats, with numerous figures and maps illustrating various aspects of Arabian birds.