## Neotropical Birding

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# Important Bird Areas of the Neotropics: Argentina

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In the second installment of our series on the Important Bird Areas of the Neotropics, ornithologists from Aves Argentinas (BirdLife in Argentina) set out how they identified and documented key sites for bird conservation in South America's second-largest country.

rgentina is a vast nation of nearly 2.8 million km<sup>2</sup> in the Southern Cone of South America. Its great range of latitudes and climates results in a diverse geography. To the east, the Atlantic coast runs for 4,725 km through both temperate and cold climates. In the west, the Andes extend over 5,500 km, with a rich gradient from montane forests and *puna* in the north to glaciers and Patagonian forests in the south. The Chaco is the second-largest forest formation in South America after the Amazonian forest and lies mainly in central northern Argentina. In the extreme north-east (Misiones province) an enclave of well-conserved Interior Atlantic Forest persists; this habitat has almost disappeared in adjacent Brazil and Paraguay. In the south, the shrubby steppes of Patagonia extend over nearly 450,000 km<sup>2</sup> of near-uninhabited terrain, similar to the wild landscapes of the *puna* and the Andes. Another important biome is the *pampas*, a sea of grass covering 500,000 km<sup>2</sup> where natural grassland has been transformed to crops and other types of agriculture since the days of early settlement.

## Argentina's avifauna: rich and diverse, but threatened

Approximately 1,000 bird species live in these enormously diverse habitats. Nearly all Neotropical bird families are represented, some—such as woodpeckers, ovenbirds and tyrant flycatchers—by many species.

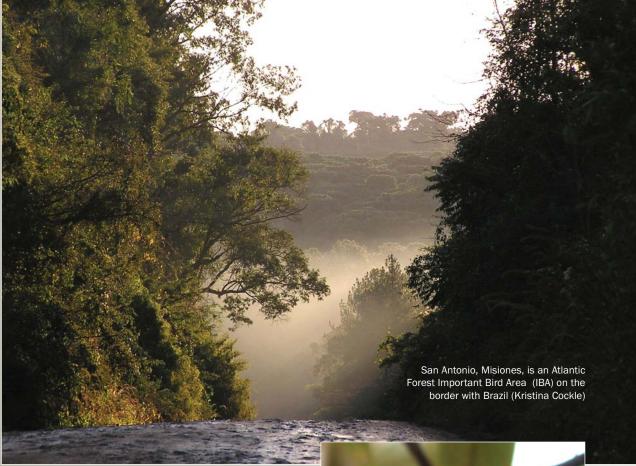
Argentina contains all or part of six Endemic Bird Areas (EBAs)<sup>7</sup>. Two EBAs are restricted to Argentina. The Sierras Centrales holds two endemic cinclodes: Cordoba *Cinclodes comechingonus* and Olrog's *C. olrogi*. The Mesopotamian grasslands hold breeding populations of three

globally threatened

seedeaters:

Narosky's

Strange-tailed Tyrant *Alectrurus* risora (Germán Pugnali)



Sporophila zelichi (Critically Endangered), Marsh S. palustris (Endangered) and Chestnut S. cinnamomea (Vulnerable). The mysterious Salinas Monjita Xolmis salinarum, a Near Threatened species described as recently as 1979, is locally common in halophytic shrubland of Salinas Grandes and Ambargasta, a Secondary Area of endemism exclusive to Argentina. Other regions of endemism are more speciose, with c.50 restricted-range species split between EBAs in the High Andes, Yungas, Atlantic Forest and Patagonian forests.

Unfortunately, Argentina's rich birdlife and spectacular natural landscapes are threatened throughout the country by constant changes in land use. Populations of globally threatened

Right top: Black-capped Piprites Piprites pileata is a Vulnerable Atlantic Forest endemic that has been recently rediscovered in Argentina at the proposed Provincial Park Caá Yarí in the Yabotí IBA, Misiones province, subsequent research being funded by a Neotropical Bird Club Conservation Award (Nick Athanas/Tropical Birding)

Right bottom: Yellow Cardinal *Gubernatrix cristata* is threatened by the cagebird trade in the Mesopotamian provinces of Entre Ríos and Corrientes (Roberto Güller)





grassland birds such as Saffron-cowled Blackbird *Xanthopsar flavus* (Vulnerable), Strange-tailed Tyrant *Alectrurus risora* (Vulnerable: see the Photospot on pp. 72–77), Black-and-white Monjita *Xolmis dominicanus* (Vulnerable) and various seedeaters *Sporophila* have been significantly reduced. Remaining populations are also increasingly fragmented due to the intensification of cash crop production (particularly soya) and spread of plantations of exotic trees—all to the detriment of the last natural woodlands, grasslands and wetlands.

Wetlands and coasts are also suffering from commercial enterprises such as drainage, urbanisation, rice farms and fish farming using non-native species. Bird species such as the Hooded Grebe *Podiceps gallardoi* (Near Threatened), discovered in 1978 and nearendemic to Argentina, are threatened by salmon farming in desert lakes in the Patagonian tablelands.

Other threatened and endemic birds are under pressure from trafficking, persecution and hunting. Narosky's Seedeater, for example, is one of the world's rarest birds with an estimated global population of 50–249 individuals¹, but continues to be trapped by animal traffickers in the *pampas*. Hunting of *Chloephaga* geese is threatening the increasingly scarce Ruddy-headed Goose *C. rubidiceps*. This species joins flocks of Upland Goose *C. picta* and Ashy-headed Goose *C. poliocephala* that migrate north from Patagonia to winter in wheat fields in southern Buenos Aires province. Hunting, already very popular, is expanding due to an increase in international wildfowling tourism.

Argentina also has many migratory bird species that cross political borders. More than 40 species of shorebirds, terns, raptors and passerines migrate south from the Northern Hemisphere to spend the boreal winter in Argentina. The Eskimo Curlew *Numenius borealis* is considered by many to be extinct (although officially clings onto life as Critically Endangered), after more than 60 years without any confirmed records on its former wintering grounds in the pampas. The disappearance of natural grassland affects migratory birds, but the intensification of agriculture in agro-ecosystems can also produce severe mortalities, as in 1995-96 when 20,000 Swainson's Hawks Buteo swainsoni died due to organophosphate poisoning.

In addition to north–south migration, a third of bird species in Argentina undergo seasonal or altitudinal movements. The near-endemic Tucuman Parrot *Amazona tucumana* descends from temperate montane forests in the Yungas to winter in lowland forests. Many species also move from Patagonia northwards to warmer latitudes in winter, examples being Tawny-throated Dotterel *Oreopholus ruficollis* and Chocolate-vented Tyrant *Neoxolmis rufiventris*. Such movements mean that conservationists need to plan for action throughout species' annual cycles.

### The history of bird study and conservation in Argentina

The Sociedad Ornitológica del Plata was founded in 1916 and based in the Museo Nacional de Historia Natural in Buenos Aires. Later renamed Asociación Ornitológica del Plata and now known as Aves Argentinas, this was the first institution of its kind in Latin America. From the outset it became the meeting place for zoologists and others who studied Argentine birds. A pioneering organisation in nature conservation and ornithological study, the society rapidly assembled an important library that remains one of the most impressive collections of ornithological journals and books in South America. In October 1917, the society launched the journal El Hornero, the first internationally available publication dedicated to Neotropical ornithology.

Today, Aves Argentinas is a lead conservation non-governmental organisation, working actively with the government and private sector. Supported by more than 1,000 members, Aves Argentinas manages conservation projects on seabirds, grasslands, the Chaco and wind farms. The organisation also organises educational projects in urban nature reserves and trains birdwatchers and naturalists.

## Argentina's Important Bird Area programme

Argentina's Important Bird Area (IBA) programme originated from a BirdLife International meeting held in Quito, Ecuador, in 1997. The Argentine programme formally started two years later and was funded by Vogelbescherming Nederlands (BirdLife in the Netherlands). As part of a larger initiative on the conservation of globally threatened grassland birds, our primary objective was to conduct the first ornithological inventories of two ecoregions defined by Burkart *et al.*<sup>2</sup>: the *pampas* and *campos y malezales* (literally, 'fields and undergrowth').

We rapidly identified sites with remaining populations of Saffron-cowled Blackbird, Strangetailed Tyrant and Narosky's Seedeater among nearly 20 species seriously threatened by the incessant advance of agriculture.

By 2001, the preliminary inventory of grassland IBAs was complete; conservation and research activities started immediately at some of the most critical sites. This enabled us to identify two sites as being of particularly high conservation concern: the río Aguapey area in Corrientes province and the district of Gualeguaychú in Entre Ríos. Thanks to the results of this project, these two sites were later included in the 'Global Gap Analysis'6 which highlighted unprotected areas containing congregations of threatened species that required urgent conservation attention at the global level.

In 2002, information on threatened species and potential sites for IBAs was collected for the rest of the country. We soon found some 500 sites to analyse in greater detail. Our team being very small, we decided to consult widely among Argentine ornithologists and conservationists. In 2003, 190 experts from all over the country attended a series of regional workshops, providing the data needed to select sites that complied with BirdLife's global IBA criteria. Marine IBAs were excluded from our analysis, being the subject of a dedicated inventory led by a group of international experts including several Argentines—a new challenge for Aves Argentinas and the BirdLife Partnership.

The workshops were key to the preparation of the IBA inventory, as participants provided up-to-date information on land ownership, level of protection, habitats, land use, threats and bird species. Participants also contributed to an indepth discussion on the application of the criteria and advised on site boundaries. Professional ornithologists, researchers, birdwatchers, park wardens, technicians from government agencies and other people interested in the programme all played active roles. For each site, local experts were invited to contribute detailed descriptions and assessments of ornithological significance.

During 2004, 100 authors collaborated to write texts covering every IBA. The resulting IBA inventory, in book form³, was launched at the 11th Argentine Ornithological Conference in September 2005, to demonstrate the commitment to bird conservation of the country's ornithological community. The next step was to seek formal recognition of the IBA concept (and our recommended network of areas) from

#### **SOME KEY IBAS**

Reserva Ecológica El Bagual, Formosa province. This 3,336-ha private reserve in the Chaco, owned by Alparamis S.A., has been managed by Aves Argentinas since 1995. Biodiversity studies on plants, mammals, birds, herptiles and arthropods are run from a biological research station. The reserve holds five globally threatened and eight Near Theatened bird species. Most notable are important populations of Strange-tailed Tyrant (studied here for ten years) and Sharp-tailed Tyrant Culicivora caudacuta (Vulnerable). Several threatened seedeaters Sporophila and, in some years, Crowned Eagle Harpyhaliaetus coronatus also occur.

**Acambuco**, Salta. This 200,000-ha site is the largest remaining tract of low- to mid-altitude subtropical forest in the southern Yungas. Although only partly protected, the forest remains contiguous and in good condition. Argentina's only population of Military Macaw inhabits certain deep forest valleys, and scarce raptors such as Black-and-chestnut Eagle *Spizaetus isidori* (Near Threatened) and Black-and-white Hawk-Eagle S. *melanoleucus* are common.

**Río Aguapey**, Corrientes. This 250,000-ha area in the pampas ecoregion is one of the last refuges for eight globally threatened and four Near Threatened grassland birds. The former include Saffron-cowled Blackbird, Black-and-white Monjita, Marsh Seedeater and Narosky's Seedeater. Aguapey is a mixed landscape of wet grassland and patches of subtropical forests, and is severely threatened by forestation with non-native pine plantations.

**Yabotí**, Misiones. This 254,000-ha biosphere reserve is one of Argentina's two largest remaining blocks of Interior Atlantic Forest. It holds two globally threatened species, including Black-fronted Piping Guan *Pipile jacutinga* (Endangered), 16 Near Threatened taxa and more than 50 Atlantic Forest endemics.

**Gulf of San Jorge**, Chubut. This 500,000-ha stretch of Patagonian coast holds important breeding populations of marine birds such as Olrog's Gull *Larus atlanticus* (Vulnerable) and three Near Threatened species: Magellanic Penguin *Spheniscus magellanicus*, Southern Giant Petrel *Macronectes giganteus* and White-headed Steamer Duck *Tachyeres leucocephalus*.

governmental authorities and the principal landowners of the IBAs. The latter activity was particularly important, given that 90% of













Above top to bottom:

The Hooded Grebe *Podiceps gallordoi* was discovered only 30 years ago and is under pressure from salmon and trout farming (Edwin Collaerts)

Buff-breasted Sandpiper *Tryngites subruficollis* is an indicator species for a 'best practice' programme for livestock production in Buenos Aires conducted by Aves Argentinas, Wetlands International and Fundación Vida Silvestre Argentina (Roberto Güller)

Adult male Chestnut Seedeater *Sporophila* cinnamomea is threatened by land use change and capture for the cagebird trade (Anibal Parera)

Above top to bottom:

Female Black-and-white Monjita *Xolmis dominicanus*, a Vulnerable species threatened by agricultural transformation of grasslands and the expansion of the forestry industry in Corrientes (Roberto Güller)

Tawny-throated Dotterel *Oreopholus ruficollis* is an austral migrant that breeds on Patagonian steppes and migrates north to winter in temperate grasslands (Lee Dingain)

Reserva Provincial Tromen in Neuquén is an IBA protecting steppes and wetlands (Darío Podesta)







#### Clockwise from top:

Salinas Monjita *Xolmis* salinarum is one of the least known Neotropical tyrannids and was the subject of a Photospot in *Neotropical Birding* 1: 78–80 (Nick Athanas/Tropical Birding)

The few remaining populations of Ruddy-headed Goose *Chloephaga rubidiceps* on the South American continent are threatened by hunting and transformation of grasslands (Santiago Imberti)

There are important breeding populations of Southern Giant Petrel *Macronectes giganteus* along the Patagonian coast (James C Lowen; www.pbase.com/james\_lowen)

The last Argentine populations of the Saffron-cowled Blackbird *Xanthopsar flavus* inhabit mixed landscapes with natural grasslands in Entre Ríos and Corrientes, and are threatened by drastic habitat transformation (Roberto Güller)



Argentine land is privately owned. The Argentina IBA inventory was subsequently updated in 2007<sup>4</sup>. It is available as a printed book, DVD and internet download (www.avesargentinas.org.ar/cs/conservacion/aicas/).

#### **Argentina's IBAs: an overview**

A total of 273 IBAs has been identified in Argentina, their land area covering 12% of the country. The number of IBAs per province varies considerably. At the lower end of the scale, San Luis and San Juan each contain just two IBAs. At the upper end, the provinces with the highest numbers of IBAs are Salta (30), Jujuy (27), Misiones (25) and Buenos Aires (25). Salta, Jujuy and Misiones lie in forest ecoregions that have high species richness. Buenos Aires has a high diversity of habitats and birdlife despite the great environmental transformation that has resulted from agriculture and urbanisation: the province provides 80% of the country's agricultural production and houses 40% of its population.

However, simple numbers of IBAs are not everything. We also assessed the land area formed by the IBAs. Entre Ríos has the lowest percentage area covered by IBAs of any province (less than 3%); moreover, provincial protected areas are scarce. These two facts are alarming because clearing of *espinal* woodland for soya bean cropping is increasing. It follows that even the tiny area covered by this province's IBAs is very valuable for the conservation of 16 globally threatened birds, such as Yellow Cardinal *Gubernatrix cristata* (Endangered).

At the time we prepared the IBA inventory, BirdLife International classified 117 bird species occurring in Argentina as globally threatened or Near Threatened. Ninety-eight of these have one or more populations in the selected IBAs; an impressive coverage. Of the 19 'missing' species, seven are pelagic and thus outside the remit of this inventory, and two Critically Endangered taxa-Eskimo Curlew Numenius borealis and Glaucous Macaw Anodorhynchus glaucus—have not been recorded in Argentina (or anywhere else!) for many years making it impossible to identify an IBA for them. Other bird species may be nationally extinct or exceptionally rare so no IBAs could be identified for them. Fortunately, populations of two such species have been discovered recently within the limits of existing IBAs: Black-capped Piprites Piprites pileata (Vulnerable) at the Yabotí Biosphere Reserve in

Misiones and Orinoco Goose *Neochen jubatus* (Near Threatened) at two IBAs in Salta.

As a result of such recent fieldwork, all globally threatened species with populations in Argentina occur in at least one IBA. While this is good news, certain species remain poorly represented. Five are known only from a single IBA in the Atlantic Forest of Misiones: Crested Eagle Morphnus guianensis (Near Threatened), Red-spectacled Parrot Amazona pretrei (Vulnerable), Barethroated Bellbird *Procnias nudicollis* (Vulnerable) and a bamboo-dependent duo, Purple-winged Ground Dove *Claravis godefrida* (Critically Endangered) and Buffy-fronted Seedeater Sporophila frontalis (Vulnerable). Other species are in a similar situation, occurring in only two or three IBAs. These include Brazilian Merganser Mergus octosetaceus (Critically Endangered) in Misiones, Military Macaw Ara militaris (Vulnerable) in the Yungas and Salinas Monjita in the Chaco. In contrast, our work revealed that some threatened species were remarkably well represented, an example being Crowned Eagle Harpyhaliaetus coronatus (Endangered), found in an amazing 72 IBAs.

BirdLife International's criteria for IBAs at the global level are not just restricted to globally threatened and restricted-range species. Other factors to take into account are biome-restricted assemblages and species occurring in globally important concentrations. In Argentina, 239 species are restricted to particular biomes<sup>8</sup>, for which we have selected 258 IBAs. Finally, 48 IBAs were selected for their concentrations of particular birds. These comply with Ramsar Convention criteria for the designation of wetlands of international importance, and ten have been declared as Ramsar sites.

#### **Conservation in Action**

Identifying and designating IBAs is only part of the solution. There is no legal protection for 52% of Argentine IBAs; a further 12% are only partially protected. With only a third or so of our IBAs fully protected, we must continue to work hard to conserve important areas for biodiversity. We need to think hard about where to focus our resources; more than 90% of IBAs in Catamarca and Santiago del Estero provinces are unprotected, whereas all IBAs in Mendoza and San Juan lie in protected areas. The priority provinces for management intervention are Salta and Jujuy, where IBAs are numerous but protected areas few.

The conservation work of Aves Argentinas and our allies continues to strengthen. Together, we are focusing on education, advocacy, legal recognition, effective site protection, threat control, data management and further research, with specific on-the-ground support to communities and other local stakeholders who benefit from IBA conservation.

Current projects include population monitoring and improving our understanding through rapid surveys of sites with few ornithological data. Examples include the avifaunal inventory of Acambuco and counts covering the entire *pampas* ecoregion to assess the status of migratory grassland birds such as Buffbreasted Sandpiper Tryngites subruficollis, a Near Threatened Neartic migrant. Aves Argentinas also plays a key role in BirdLife International's 'Alliance for the Conservation of Southern Cone Grasslands'; among other activities, the Alliance is promoting the development of biodiversitycompatible, economically viable production systems in grassland IBAs (for which see Lowen<sup>5</sup> for a synopsis).

We are also developing the ecotourism potential of the IBAs through the first 'IBA Green Route' initiative. Legal support for IBAs is being advocated for several provinces, and we are marketing the IBA brand, deploying banners displaying flagship species to improve public awareness. Finally, we are expanding the national network of local bird clubs to promote birding as a hobby and to act as a driving force for future action in and around IBAs.

#### **ACKNOWLEDGEMENTS**

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"all globally threatened species with populations in Argentina occur in at least one IBA." Lowen, Anibal Parera and Darío Podesta kindly provided the photographs that illustrate this article.

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