
The Great Green Macaw *Ara ambigua guayaquilensis* in Ecuador: first nest with young

Karl S. Berg and Eric Horstman

Introduction and taxonomy

Throughout its disjunct range in the Neotropics, the Great Green Macaw *Ara ambigua* is one of the most threatened of all psittacids. The species is confined to the lowland and foothill tropical forests located to the west and north of the Andean chain (i.e. "trans-Andean"), and is nowhere common. The species poses an interesting taxonomic problem in that the individuals ascribed to the southern taxon, *A. a. guayaquilensis* are variable, and in many respects approach the Military Macaw *Ara militaris*. Indeed, it has been suggested that not only is *guayaquilensis* synonymous with *ambigua*, but that *A. ambigua* may be conspecific with *A. militaris*². It is possible that there is genetic instability between the various populations of the different taxa of the two species, in part brought about by the low population levels, which could result in further gene flow between different groups of birds. There is no doubt, however, that the two taxa comprising *A. ambigua* are giving

rise to serious concern among conservationists, with both occurring in areas subject to extensive deforestation.

First recorded nesting

In view of the concern over the status of this macaw, it is pleasing to report the nesting near Guayaquil, Guayas Province, Ecuador of a pair of *A. a. guayaquilensis*. It is doubly pleasing to report that every effort is being made by the Ecuadorean organisation, Fundación Pro-Bosque, to conserve the nesting site, and to make visiting birders welcome. The breeding, which is the first recorded for the southern taxon, occurred in the 2,000 ha dry tropical forest of Bosque Protector Cerro Blanco, located in the Chongón-Colonche hills of Guayas Province. On 14 August 1994 two adult macaws were reported occupying a cavity in a dead but standing "pigío" *Cavanillesia platanifolia* tree. Soon thereafter, a hide was constructed c.25 m from the base of the tree and daily observations were coordinated by

the reserve management. The nest was kept under 24-hour surveillance to prevent the chicks being stolen for the pet trade. On 6 September two nestlings were seen inside the cavity; these were seen again on 7 and 29 September. The nest was vacated by 1 October. Detailed notes were taken throughout this period on the birds' behaviour at the nest-site, and vocalisations of the adults were recorded.

The 1995 nesting season

Beginning in April 1995, a pair of macaws (possibly the same nesting pair) were observed returning to the nest-site where the two chicks successfully fledged the previous season. The pair were seen entering the nest-cavity on several occasions and all signs pointed to another nesting attempt when, in late July, the top part of the "pigío" tree, which was badly infested with termites, broke off leaving the nest-cavity exposed.

In an effort to make up for the loss of the 1994 nest-site and encourage new nesting activity in 1995, the Cerro Blanco reserve management constructed artificial nest-sites at two locations, one near the fallen tree, and another close to a toppled (again termites!) "pigío" tree where the macaws had been observed previously. The artificial nests were made of PVC piping and wooden boxes, based on a similar design successfully employed with other species of macaw in Peru.

Between 18 August and 23 November, 13

sightings of 2-4 individuals were noted in the vicinity of the 1994 nest-tree. Although the macaws were not reported to have used the artificial nest, the cavity was scrutinised on several occasions by the birds.

Conservation

Forest clearance, often associated with fires set by settlers staking a claim on the land, has increased dramatically outside the Cerro Blanco reserve. This, coupled with the continuing expansion of the city of Guayaquil towards Cerro Blanco, means that the reserve is destined to become an island of habitat surrounded by urban development and agricultural lands. To ensure the long-term survival of the wide-ranging *A. ambigua* in this area, it is clearly essential to identify and protect areas used by the birds for feeding and nesting outside of the existing reserve.

Significant progress was made to this end when, in October 1995, due to the generosity of La Cemento Nacional, c.280 ha of land were purchased and incorporated into the reserve boundaries, which now embrace 2,280 ha. The new area includes a cross-section of habitats from wetter forest to a drier area dominated by *Cavanillesia platanifolia*, and in which the macaws have frequently been recorded (e.g. two pairs seen at the end of December 1995). Other areas adjacent to Cerro Blanco have been identified for purchase and inclusion within the reserve although the necessary funds urgently need to be raised. Reforestation programmes and environmental education campaigns are also planned for 1996 in an attempt to safeguard the fauna and flora of this critical area, but these similarly need additional funds.

Site information and access for birders

The Bosque Protector Cerro Blanco is normally open from 08h00 to 16h00 for the visiting public, but other arrangements can be made in advance, especially for birders wishing to visit the site early in the morning. An entrance charge of \$5 is levied, and this includes the use of an excellent camping area. The reserve management is inaugurating a new trail to access more remote parts of the reserve. Cerro Blanco holds a number of birds characteristic of the Tumbesian Endemic Bird Area and many threatened species, and should feature on any birder's itinerary for this part of Ecuador. Reservations or enquiries can be made through: the Fundación Pro-Bosque office at *Multicomercio Bldg., Calle Cuenca y Eloy Alfaro, 2nd floor locale 91, Guayaquil* (Tel: +4/416975 and +4/417004); or the organisation's Administrative Centre at *Kilometro 15 via a la Costa, Guayaquil* (Tel: +4/872236 and +4/871900; Fax: +4/873528).

References

1. Berg, K. S. (1994) New and interesting records of birds from a dry forest reserve in south-west Ecuador. *Cotinga* 2: 14-19.
2. Fjeldså, J., Krabbe, N. & Ridgely, R. S. (1987) Great Green Macaw *Ara ambigua* collected in northwest Ecuador, with taxonomic comments on *Ara militaris*. *Bull. Brit. Orn. Club* 107: 28-32.

Karl S. Berg

Casilla 7343, Guayaquil, Ecuador

Eric Horstman

Bosque Protector Cerro Blanco, Apartado Postal 09-01-04243, Guayaquil, Ecuador