The rediscovery of the century: the guan with the white wings

Fernando Angulo Pratolongo

When the globally threatened White-winged Guan *Penelope albipennis* was rediscovered in 1977, following exactly 100 years of obscurity, hopes for its conservation lay principally in a captive-breeding programme. Now, more than 30 years later, a committed conservationist integrally involved with the research and conservation work dedicated to this wonderful bird reviews our progress, and looks ahead to the future.



>> GLOBALLY THREATENED BIRD WHITE-WINGED GUAN

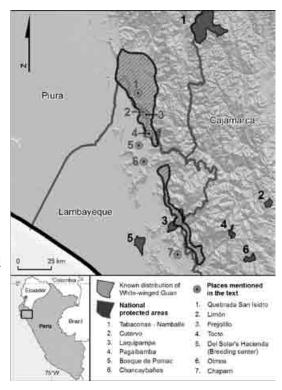
he search for the White-winged Guan *Penelope albipennis* at Frejolillo starts before dawn. Following Lino, the local guide, along narrow trails whilst the dawn chorus is commencing, eventually you reach a small hill, from where nothing but dense dry forest is visible in all directions. Meanwhile, Lino is scanning possible sites, looking for guans. There are two main ways to find White-winged Guan; one is by hearing its calls (alarms or wing drumming) given at first light, the other by spotting the flash of pure white on the wings in flight.

When the guide calls "pava aliblanca", it signals that he has found the birds. Normally a pair or, with luck, a family party high in the trees, on the branches of a large Ficus or Erythrina tree. However, the view of a White-winged Guan is that of bird gliding down the hillside, an adrenaline-filled experience without comparison, the pure white of the wings presenting an astonishing contrast with the darkness of the remainder of the bird and the surrounding forests, especially in the dry season. Once you have seen the guan, the birding can start! Other sites where it is possible to see White-winged Guans are Laquipampa Wildlife Refuge and, reintroduced birds, at Chaparrí private reserve.

Some history

Gustavo del Solar and John O'Neill looked at one another incredulously, as if they were watching something completely unbelievable. They had just witnessed the first White-winged Guan to be seen by researchers in over a century. The guan first came to scientific attention when a specimen (now in the Warsaw museum) was collected, by Jean Stolczmann, on 18 December 1876, on 'La Isla Condesa, a mangrove island at the mouth of the Tumbes River, on the northernmost section of the Peruvian coast, near the Ecuadorian border. A second specimen was collected by Konstanty Jelski at Hacienda Pabur, in the dry forests at the border between the departments of Piura and Lambayeque, on 10 January 1877. This bird was a female and was found with two chicks, one of which died and the other was raised by Jelski, whereupon it became the third specimen, now held at The Natural History Museum in Tring. The female is held at the Museo de Historia Natural "Javier Prado" in Lima.

It was on 13 September 1977 when Solar and O'Neill, together with their guide Sebastian Chinchay, arrived at the San Isidro quebrada, or stream. Chinchay had found a group of guans at the same site a few days earlier, and had walked for most of the day from his home in Puerta de



Querpon to inform Solar about his finding. He had been looking for some lost goats when he saw a virtually all black, turkey-like bird with white in the wings. Chinchay recalled Solar's description when he had asked him to keep a lookout for just such a bird.

In fact, Solar had received the same description from Maria Koepcke, when they met in 1969 at the Museo de Historia Natural in Lima, while Koepcke was curator of the ornithology department. Solar, a farmer and deer hunter living in Olmos, Lambayeque, visited the museum regularly to have his deer trophies mounted. When Koepcke learned that a hunter from the Olmos area was at the museum, she approached him and asked if he had seen a black turkey-like bird with white in its wings. Solar answered negatively, but promised to look out for it. Although Delacour & Amadon⁴ believed that the species was already extinct, Koepcke maintained hope that the species might yet survive in the deep, forested, valleys of Piura and Lambayeque (north-east of Olmos). Consequently, Solar started to spread the word among the local people of Olmos.

In the late 1970s, his hacienda was used as a base by many researchers, among them Ted Parker, Bill Eley, Tom Schulenberg, Bernie Peyton and Enrique Ortiz. Coincidentally, O'Neill happened to be at the hacienda when Chinchay arrived with the





Figure 1 (left). Forest inhabited by wild White-winged Guans *Penelope albipennis* at quebrada Frejolillo; this photograph was taken during the rainy season (Fernando Angulo Pratolongo)

Figure 2 (right). Unfortunately, despite many years of conservation work, White-winged Guans *Penelope albipennis* are still hunted (Fernando Angulo Pratolongo)

news, so he and Solar headed out next day to look for the guan. They found about eight guans at San Isidro, one of which was collected and immediately recognised by O'Neill as a wild *P. albipennis*. The rediscovery, which had come exactly 100 years after the last specimens had been collected, was filmed using an 8-mm camera by Solar, helping to document 'the rediscovery of the century'.

The news was covered by several newspapers at the time, among them Peruvian press such as *El Comercio* and *La Prensa*, as well as major international papers such as the *International Herald Tribune* and *New York Times*. The new specimen was prepared at Louisiana State University and then sent to the Museo de Historia Natural. Tragically, Maria Koepcke never learned of the rediscovery, she having died in a plane crash in 1971.

Given the previous lack of knowledge, the validity of *albipennis* had been doubted⁹, with some authors having speculated that the specimens represented partially albino Baudó Guans *Penelope ortoni*, but following the rediscovery it became clear that the taxon did indeed merit species rank⁵.

First conservation action

The response to conserve and implement research on the species did not take long to materialise, via both private and government initiatives. Solar started a captive-breeding programme, with the aim of reintroducing the species in the future in 1978, and by 1986 he had produced the first captive-bred chick. Concurrently, Enrique Ortiz began a survey of the wild population, initially finding 62 individuals in 1978⁷.

Also in 1978, the Lambayeque Regional Forestry Authority prohibited hunting and wood

extraction within the White-winged Guan's range. In 1980, a ministerial resolution declared an official hunting ban on the species, and in 1982 the Peruvian government created a protected area in Laquipampa, specifically to conserve the wild population. White-winged Guan was included in the checklist of globally threatened birds in 1988³ and on the Peruvian list of threatened birds in 1990.

In 2001, with the captive population by now sufficiently large, 16 guans were reintroduced into Chaparrí private reserve. Subsequently, between 2002 and 2005, a further 45 guans were released in the reserve. Finally, in 2007, eight birds were released at Laquipampa Wildlife Refuge, following a feasibility study². A total of 69 guans has left the breeding centre as part of the reintroduction programme run by the NGO, Asociación Cracidae Perú.

The current situation

The greatest threats to the White-winged Guan at present are hunting, habitat destruction and degradation, and population and habitat fragmentation. Fragmentation into two populations (north and south) has resulted from the construction of the Chiclayo—Jaen—Tarapoto highway, and associated human colonisation, which has formed a physical barrier. Furthermore, the construction of a tunnel to bring water from the east slope of the Andes for an irrigation project has increased disturbance in the area.

Habitat destruction is caused by agriculture, including cattle ranching, and wood extraction. Forest is cleared to make way for crops, cattle ranching damages water holes (known as *jaguey*), which are scarce in the dry forest, and also reduces natural regeneration of tree seedlings, many of









Clockwise from top left

Figure 3. Education campaigns are being undertaken throughout the species' range by Asociación Cracidae Perú to inform local people about the White-winged Guan's *Penelope albipennis* status, with the aim of reducing hunting (Fabiola Riva)

Figure 4. There are still a couple of hundred Whitewinged Guans *Penelope albipennis* in the wild, in the departments of Lambayeque, Piura and Cajamarca (Andre Baertschi / wildtropix.com)

Figure 5. Due to the work of several conservation organisations led by Asociación Cracidae Perú, Whitewinged Guan *Penelope albipennis* has been reintroduced at two sites in north-west Peru (Andre Baertschi / wildtropix.com)

Figure 6. White-winged Guans *Penelope albipennis* breed once p.a. during the rainy season and usually have two chicks that remain with their parents for approximately one year; the adults nest in areas well covered by vine tangles (Andre Baertschi / wildtropix.com)









Clockwise from top left:

Figure 7. Peruvian Plantcutter *Phytotoma raimondii* (Endangered) is a Tumbesian endemic easily observed at Bosque de Pomac. This rare bird is happily being found at more sites on the Peruvian coast (Roger Ahlman / www.pbase.com/ahlman)

Figure 8. Rufous Flycatcher *Myiarchus* semirufus (Endangered) is a strange member of its genus, found in open areas and *Prosopis* forests in the Tumbesian lowlands (Roger Ahlman / www.pbase.com/ahlman)

Figure 9. Tumbes Tyrant *Tumbezia salvini* (Near Threatened) is a beautiful tyrant that adds colour to the dry forests (Roger Ahlman / www.pbase.com/ahlman)

Figure 10. White-winged Guan Penelope albipennis was feared extinct until 1977 and its rediscovery by Solar & O'Neill in a quebrada in north-west Peru (Roger Ahlman / www.pbase.com/ahlman)

them part of the guans' diet. Wood extraction is selective and small-scale, and is mainly used for flooring, fruit boxes, house construction and religious uses, among others.

Hunting still occurs, despite many years of conservation effort, public awareness and educational campaigns. However, it is possible that awareness campaigns have not been directed at the correct audiences. Once, during a White-winged Guan field survey, I found the remains of a recently killed guan and subsequently I met the hunter. In response to my questioning why he had killed an endemic, threatened, protected species, he answered, "I didn't know that, I thought it was as widespread as the doves". And he was right. Why should he have known that this was a threatened species? With this in mind, Asociación Cracidae Perú started a project in 2005 to assess the socioeconomic situation of the entire human population within and around the guan's range, to determine the best way to implement an awareness campaign. Specifically, the survey assessed how much the local population knew about the guan and the best means of providing information to the campesinos living in the mountains and the surrounding towns⁶.

The results from this research demonstrated that hunting was not a regular practice but more opportunistic, with 15% of the population sporadically engaged in it. However, more importantly, hunters stated that they were unaware of the species' conservation status. Another 'positive' outcome was that not a single family derived its income from the hunting and / or selling of guan meat (unlike in the Peruvian Amazonia), probably due to the bird's small size (c.1.6 kg), especially compared to White-tailed Deer *Odocoileus virginianus* or Collared Peccary *Pecari tajacu*, the two most popular hunted species in the area, which weigh 17–50 kg.

Consequently, Fabiola Riva of Asociación Cracidae Perú, commenced a new awareness campaign, using the method which the socioeconomic survey had identified as potentially the most effective: radio. A message containing critical information on the guan and its status was prepared, and broadcast throughout the species' range for several months, at the time of day when families were generally together. The campaign was reinforced using posters and banners in nearly 40 towns throughout the guan's range. To evaluate the campaign's impact, we measured the level of knowledge of the White-winged Guan's situation before and after; the result was an increase of 30% in knowledge of the species.

Because none of the local population base their economy on guan hunting (but some do rely on agriculture within the guan's range), it might be expected that by informing local people of the guan's importance and status, hunting will cease. Moreover, several laws prohibit hunting the species, although in practice, these offer only a partial solution, because their enforcement is difficult in remote parts of northern Peru.

Current status and distribution

The White-winged Guan's range extends over a mountainous region of dense, equatorial, dry forests (so called Tumbesian forest) in northwest Peru, on the west slope of the main Andean chain. Its range occupies an area approximately 175–190 km north to south by 5–40 km wide, and ranging in altitude from 500 to 1,385 m, within the departments of Piura, Lambayeque and Cajamarca. Overall, the guan's range covers >1,553 km² and is divided into two subpopulations, north and south. The current population numbers c.200 individuals, with the northern population containing 70% of the total wild population. Of the total population, 22 wild individuals are protected within Laquipampa Wildlife Refuge, located in the south of its range1.

Birding

The Northern Peru birding route was first mentioned as a concept in the *Annotated checklist of the birds of Peru*⁸. The route has become substantially better over the years with the addition of new sites and even 'new' species. Longwhiskered Owlet *Xenoglaux loweryi*, previously of near-mythical status, is now possible to see, and additional highlights include Peruvian endemics such as Marvelous Spatuletail *Loddigesia mirabilis*, Ochre-fronted Antpitta *Grallaricula ochraceifrons*, several inca finches (the genus *Incaspiza* as a whole is endemic to Peru), and of course, Whitewinged Guan.

The Northern Peru birding route is very well developed now, and the best place to see Whitewinged Guan in the wild is quebrada 'Frejolillo', near the town of Limón. This site was discovered by Gustavo del Solar in the 1980s, and became very popular among birders due to pioneering trips led by Barry Walker. The first birding trip to the site was made in May 1996, when Walker and Solar took Phoebe Snetsinger to see the guan. Thereafter, quebrada 'Caballito' near El Tocto previously favoured as a guan-watching site, became obsolete.

At present Frejolillo is not protected, but given that the local population, especially the local guide, Lino Rico, receives income from birders, it is not threatened with destruction or degradation, and the birds may even persist in circumstances better than within a protected area. Nonetheless, a formal proposition to include this and other quebradas within a regional protected area in Piura has been made.

Frejolillo is also en route to two other great birding destinations: Abra de Porculla, the lowest pass in the Andean cordillera, at 2,137 m, and Bosque de Pomac, the best-protected *Prosopis* pallida (mesquite) forest anywhere in northwest Peru. Tumbesian endemics are the major 'draws' at both sites and taking the three localities together, a total of 43 of 55 Tumbesian endemics can be found, among them Peruvian Plantcutter Phytotoma raimondii, Tumbes Tyrant Tumbezia salvini, Piura Chat-Tyrant Ochthoeca piurae, Rufous Flycatcher Myiarchus semirufus, Tumbes Swallow Tachycineta stolzmanni and Black-cowled Saltator Saltator nigriceps. Thereafter, the route continues eastward, into the realm of the Marañón endemics and the specialties of the east slope, among others.

Future recommendations

In the coming years, White-winged Guan will face more severe habitat fragmentation due to increasing demands for land brought by human population growth. This fragmentation will be made more severe if hunting also continues, so it is recommended to maintain public awareness and education campaigns, to ensure that the conservation message reaches the maximum number of people and is understood.

It is also very important to create and manage additional protected areas harbouring wild populations, other than Laquipampa. At present, there are two proposals to create regional conservation units within the guan's range, one in the north and another in the south. The latter will be important in complementing Laquipampa, although the creation of a habitat corridor will be necessary.

Mining concessions were granted in the north of the species' range in 2008, in the upper río Piura drainage. If minerals are found and exploited, then much suitable habitat will be affected. This threat will increase pressure on the species, and must be considered by local authorities and conservation groups.

In Peru there is a specific law that declares the conservation of the White-winged Guan to be of national interest. The legal system is important, but the real conservation work to save the species from extinction lies with us. There is still hope and

energy, and I am confident that we can achieve our goal.

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