

World's Rarest Bird? The Long-whiskered Owlet of Peru

¿El buho más raro del mundo? El mochuelo peludo del Perú

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Abstract

The Long-whiskered Owlet (*Xeongluax loweri*) is without question one of the rarest and least known owls in the world. Thought to be a distant cousin of the desert-dwelling Elf Owl (*Micrathene whitneyi*) of the American Southwest, the Long-eared Owl is a denizen of the Rio Mayo cloud forest, perched 1800-2100 meters in the Department of San Martin in the Andes Mountains of northeastern Peru. Uncertain taxonomy and uncertain status in a rare and potentially endangered habitat all require a comprehensive conservation and management strategy that aims to protect both cloud forest and its fantastic owlet.

Key words: Long-whiskered Owlet, *Xeongluax loweri*, endangered, rare, smallest

Resumen

El Mochuelito de Lowery ó Mochuelo Peludo (*Xeongluax loweri*) sin duda es uno de los búhos mas raros y menos conocidos del mundo. Se cree que es un primo distante del Elf (llamado «enano» en Mexico) Owl (*Micrathene whitneyi*) que vive en el desierto del suroeste de los Estados Unidos y la región central de México. El Mochuelo Peludo es morador de la selva nubosa del Río Mayo, entre los 1800 y 2100 metros en el Departamento de San Martín en los Andes del noreste del Perú. Su taxonomía es inconclusa y su hábitat aun bastante desconocida y en peligro. Se requiere un plan comprensivo de conservación con el propósito de proteger la selva nubosa y este buho fantástico.

Palabras clave: El Mochuelo Peludo, *Xeongluax loweri*, en peligro, raro, mas pequeño

Introduction

The year 2007 marks the 30th anniversary year since the announcement of the discovery of the rarest owl in the world, and quite possibly the rarest bird in the world. The Long-whiskered Owlet (*Xenogluax loweri*) was discovered and named from three specimens collected in 1976 and formally recognized in 1977 (O'Neill and Graves). Its Spanish name is the Mocheulito de Lowery or strange owl of Lowery while to the French it is Chouette de Lowery. The Germans refer to it as the Lowery-Zwergkauz. Like the Loch Ness monster and legendary sea serpents this owlet is rarely seen and hardly ever photographed. In fact, virtually the only information that we have about this owl comes from three specimens, all collected in 1976, a few responses to mimicry of their calls, and a couple of very recent photographs that were deemed

sufficiently significantly to make headlines in web sites and science journals.

At 13-14 cm in length and 45-51 gm in weight the Long-whiskered Owlet ranks as one of the world's tiniest owls (Fig. 2). Its wing length is a scant 100-105 mm and the short tail measures slightly more than 50 mm. Only the Elf Owl of the deserts of the American Southwest is smaller and then only slightly measuring a centimeter shorter and a few grams lighter. Descriptively, this is a tiny owl marked by unique and very long whiskers around the base of the bill and on the sides of the facial disk. Plumage of collected specimens is predominately dark brown to blackish with white spots and fine wavy lines of dark brown. Its bill is grayish with a yellowish tip and the

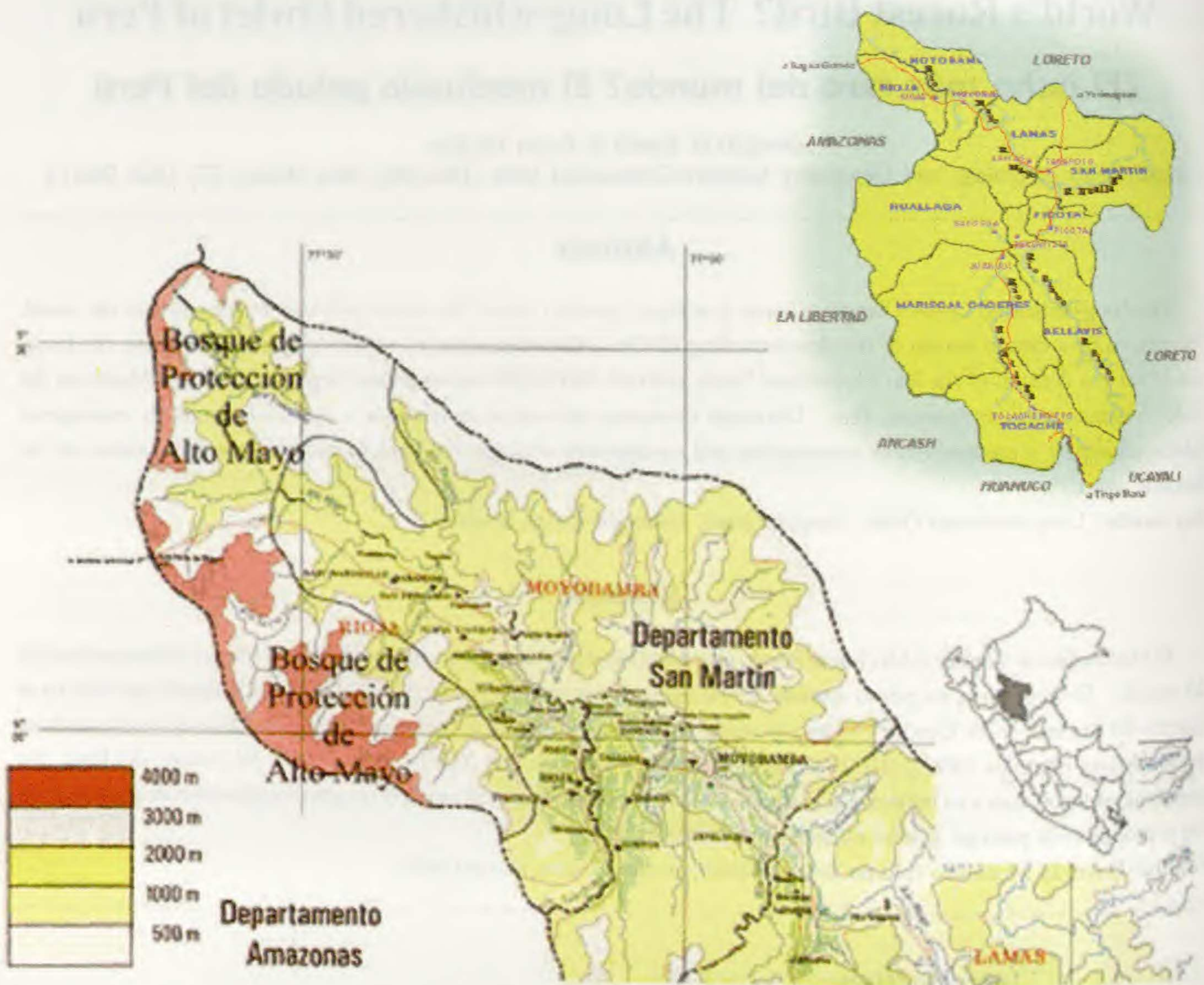


Fig. 1. Map showing the location of the area of the Rio Mayo in the Department of San Martín where the owl has been seen.

cere is pinkish gray. Its legs are pinkish or flesh colored and its talons are horned-colored with darker tips. Short white eyebrows frame its large, pale orange-brown or reddish-brown eyes.

No other owl can be confused with the Long-whiskered Owllet. The only other small owls within its immediate range are the pygmy owls of the genus *Glaucidium* which are somewhat larger and longer tailed. Pygmy owls are also brownish but their lower underparts are streaked rather than vermiculated and they have a pronounced facial orbit. They lack the distinctive long facial whiskers which give the Long-whiskered Owllet its common name.

An uncertain taxonomy

The full taxonomic name of the Long-whiskered Owllet is *Xenoglaux loweri* (O'Neill & Graves, GR, 1977). Its name means strange owl and is a reference both to the unusual appearance of its strange facial feathering and its rarity and remoteness. It is the sole member of the genus *Xenoglaux* and is therefore termed monotypic.

Taxonomic placement of this little owl is still conjectural, given the lack of specimens on which to build a firm foundation of relationships with other owls. The Long-whiskered Owllet is placed within the avian

Table 1. Information summary for the Long-whiskered Owlet.

Ecology	Status
Habitat	Cloud forest, microhabitat status unknown
Diet formation	Unknown, presumed insectivorous
Foraging Ecology	Unknown
Population Size	250-1000 individuals estimated on basis of overall extent of this cloud forest habitat.
Breeding Chronology	Unknown
Breeding Habitat	Unknown, presumed cloud forest nesting species
Breeding Site	Unknown, presumed cavity nesting species
Territorial Size and Behavior	Unknown, presumed establishes and maintains territory via songs/vocalizations
Courtship	Unknown
Nest Construction/Modification	Unknown, presumed that female or male makes a nesting scrap in cavity bottom
Number of eggs	Unknown
Incubation period	Unknown
Number of young	Unknown
Days from hatching to fledging	Unknown
Reproductive Success Rate	Unknown
Life History	Information Status
Longevity	Unknown

order Strigiformes and is a member of the Family Strigidae which includes all owls except the barn and bay owls. It belongs to the Subfamily Strigini, Tribe Strigini within which it is usually placed between the pygmy owls of the genus *Glaucidium* and the Elf Owl, the last another monotypic species which occurs only the deserts of the American Southwest. König et al (1999) regard the kinship between *Xenoglaux* and *Glaucidium* as «unlikely» but still placed it between *Glaucidium* and *Micrathene* genera as do other taxonomists. Characters that distinguish the Long-whiskered Owlet from these genera include the pronounced enlargement of facial

plumes and bristles at the base of the bill, bare feet and mostly bare tarsi, and several skeletal features such as the outward rotation of the precoracoid, a very unique carina of sternum which is markedly thinner than in any other owl.

Habitat and Ecology

Information regarding the ecology of the Long-whiskered Owlet is just as sketchy as the information regarding its taxonomic relationships. So far as is known, the Long-whiskered Owlet is identified only

from the high mountain valley of the Rio Mayo in the Department of San Martin of northeastern Peru (Fig. 1). There it is a resident of the humid cloud forests of the eastern Andes which occur at elevations from 1,890-2200 meters, an area known as the Yunga Fluvial or Selva Alta (Pulgar Vidal 1996).

Its habitat has been characterized as upper subtropical humid cloud forest of definitive complexity of undergrowth including often luxuriant layers of bamboo, mosses, orchids, and tall ferns all topped by an assortment of epiphytic layers of mosses, lichens, and orchids, the whole growing to 6-9 meters in height in valleys and diminishing to about 4 meters along the spine-like ridge tops where the three specimens were actually caught in mist nets. In 2007 one or more individuals were observed and photographed in this same area.

The most recent information regarding ecology and behavior of this owl comes from researchers working in the Area de Conservacion Privada de Abra Patricia-Alto Nieva. They recorded its calls at night and were able to photograph it on three separate occasions during daylight hours (American Bird Conservancy 2007).

Like all owls, the Long-whiskered Owlet uses vocalizations for territorial markings and possibly contact calls but the only vocalization so far known for this owl consists of short and soft or mellow whistles repeated at intervals of about 10 seconds. A second reported call consists of two distinct whistles followed by a rapid series of higher pitched notes rather somewhat suggestive of a territorial call but this has not been verified.

Information Status: Knowns and Unknowns

The Long-whiskered Owlet is remarkable for how little is known regarding anything about its status and ecology. We have no knowledge of the numbers, nesting, recruitment food, or foraging habits of this owl. All we have is presumptive information. We assume that because it is small it is primarily insectivorous, like its presumed cousin, the

insectivorous Elf Owl. But, neither pellets nor prey remains of the Long-whiskered Owlet have yet been discovered. Because it is small we presume that it is a cavity nesting species (again, like the Elf Owl which nests in cavities in cacti) but no one has ever discovered nests or young of this owl.

The Owl and its Cloud Forest: Conservation and Management

Because of its highly restricted range and possible habitat loss the Long-whiskered Owlet is listed as Near-threatened by Birdlife International and categorized as CITES II. It is assumed to occur in small numbers in the limited habitat of the cloud forest in this part of Peru. Only three specimens have been collected so far, and given its status further collections are unlikely and unwarranted as we have no way of estimating potential impact of removing even a single individual from this owl population.

The area attracts tourists and scientists because of the natural beauty and to a large extent its very remoteness. However, the ecotourism magnet functions as a double-edged sword. On the one hand, ecotourism offers hard cash for local economies and also monies to manage and conserve the cloud forest within which the Long-whiskered Owlet lives. Both remain keen and key economic advantages have resulted. On the other hand as ecotourism popularity increases it may soon threaten the very fabric of the habitat as tourists vie with one another for a glimpse of this shy and retiring owl. Other economic activities are presently affecting the area in other ways. The main activity in the department of San Martin is the production of palm oil amounting to 91% of Peru's production. San Martin ranks third in rice and yucca cultivation (El Popular 2005). Other crops provide a diverse economy. Oil, too, has been found. But, the greatest threat to the fauna is the increasing encroachment by loggers deforesting this otherwise pristine region. All of these activities have placed the Long-whiskered Owlet especially at risk. This region was unprotected until recently when the Area de Conservación Privada de Abra Patricia – Alto Nieva



Fig. 2. A young owlet drawing shows its unique features

was created by the Ministry of Agriculture in 2007 (El Comercio 2007). Ornithologists infer that the species is likely to be in serious decline because of habitat loss. By the way, this cloud forest supports several other birds that may be equally at risk including the Royal Sunangel, Ochre-fronted Antipitta, and Johnson's Tody-Tyrant.

Summary

Given the lack of information regarding this rare owl it should become the focus of a major and concerted study to learn more about it. Furthermore, its presumed rarity, restricted habitat, and ongoing habitat destruction from logging all pose an imminent threat of decline. Therefore, it is imperative that we obtain more information regarding its patterns of habitat selection and thereby habitat requirements. Conservation and management programs require certain factual information

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