

The Tres Marías Islands— Mexico’s mini-Galapagos

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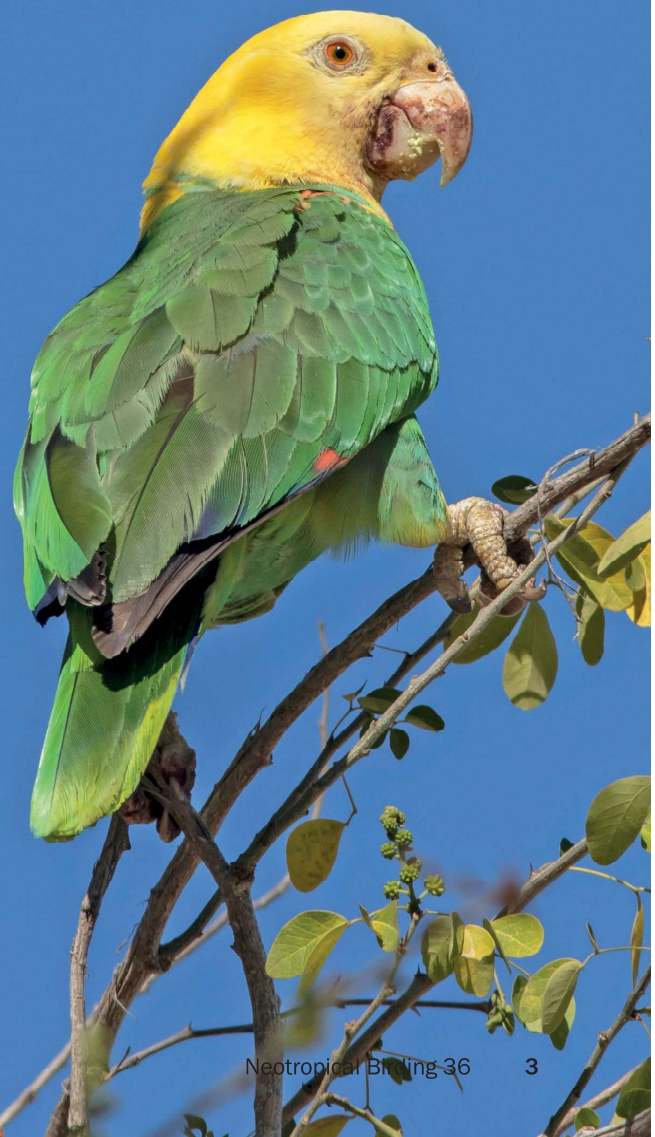
So near yet so far, Mexico’s Tres Marías Islands have been closed to the world for over a century by virtue of their status as a high-security penal colony. But that all changed a few years ago, when the prison closed down. Today, birding in this remarkable and intriguing archipelago is now possible. And the birds? Well, this article highlights a unique and still poorly known island bird community, one where no endemic taxon has been lost—a refreshing change from the tales of extinction that haunt so many islands around the world.

Some dreamed-of birding sites are simply too remote to access; others would cost too much for most people to reach. But visiting Mexico’s Tres Marías Islands (or Islas Marías) has not been possible for a very different reason—in 1905 the main island was established as a high-security penal colony, and the small archipelago became off limits to visitors. But no longer! In 2019 the prison shut down, and rumours of plans for tourism started to circulate... Finally, after having been closed to the world for over 100 years, in December 2022 the Tres Marías Islands—which lie a minimum of 85 km from Nayarit on the Mexican mainland (Fig. 2)—were opened to general tourism, and birders can now visit for a two-night package tour operated by the Mexican navy (see Howell *et al.* 2024 for information on visiting).

Consequently, Howell, Vargas and Seitz visited Isla María Madre from 19–21 April 2024, and Howell and Vargas returned there from 12–14 July 2024. On both visits we had research permission from CONANP (Mexico’s National Commission of Natural Protected Areas) and conducted fieldwork with Gómez Rosas, a CONANP biologist who has been working on the island since 2022. Here we would like to reveal to the world the archipelago’s unique avifauna—with up to 25 described endemic taxa—and explore the challenges of trying to establish species limits for island endemics.

1 Yellow-headed Amazon *Amazona oratrix* (Steve N. G. Howell). The Tres Marías are undoubtedly the easiest place (in the world!) to see this species in the wild. The large, island-endemic taxon *tresmariae* has a more extensively yellow head than any mainland population.

Unless noted otherwise, all photos were taken in April or July 2024, and were taken on Isla María Madre, Mexico.



The Islands

Lying between 21–22°N and 106–107°W, some 85–120 km from the Mexican mainland at the mouth of the Gulf of California, the Tres Mariás archipelago comprises four islands: in decreasing order of size, María Madre, María Magdalena, María Cleofas and San Juanito. The largest island, María Madre, rises to 650 m elevation and is about 21 km long by 11 km wide. Terrestrial habitat is dominated by low tropical deciduous forest, with disturbed habitats around town and some greener areas with semideciduous trees in shadier canyons at higher elevation. Fresh water is scarce and the climate is notably hot and dry, with annual rainfall less than half of that experienced on the nearby mainland; the rainy season is mainly during July–November.

First sighted by Europeans in the 1530s, the Tres Mariás were spared permanent human settlement until the 1800s, when cutting of timber and capture of parrots for trade started to impact the ecological integrity of what must have been an almost pristine ecosystem. As other small human settlements developed, more land was

cleared for farming, and various animals were introduced, including goats, rats and cats. Then, in 1905, a federal prison was established at the main settlement of Puerto Balleto on María Madre—and public access to the islands effectively shut down.

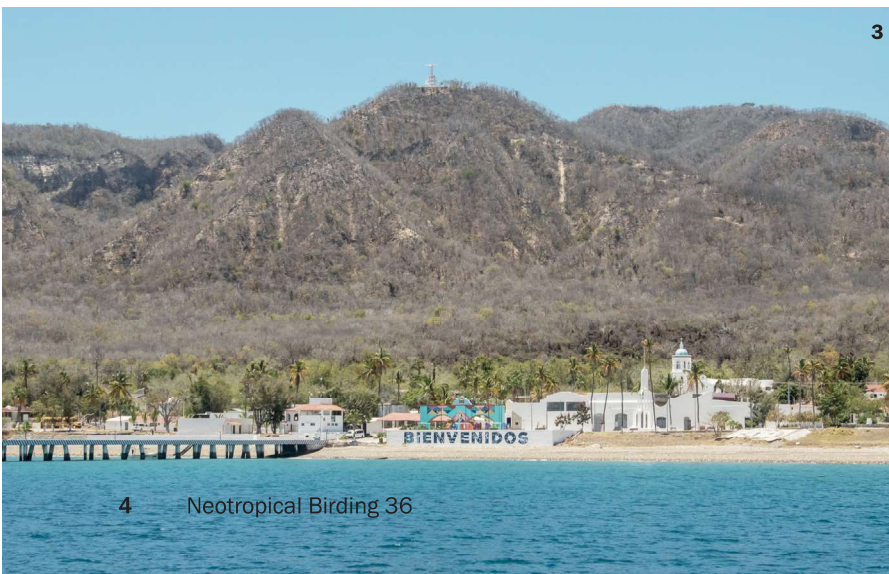
In 2000, Mexico decreed the islands as an Área Natural Protegida, and in 2010, UNESCO designated them the Islas Mariás Biosphere Reserve, now considered a Patrimonio Natural de la Humanidad as part of the islands in the Gulf of California. Following closure of the prison, CONANP has maintained a permanent presence on island, in conjunction with the navy, who are responsible for island security.

In December 2022, the Tres Mariás Islands were opened to the general public, whereby visitors can tour the old prison facilities, do some hiking and swim in crystal-clear waters. Modern air-conditioned ferries run on weekends from Mazatlán and San Blas on the Mexican mainland to the main island settlement of Puerto Balleto, where it is possible to see most of the island endemic bird taxa simply by walking around town. In 1871, Grayson noted that: “With but one or two exceptions the birds on these Islands are



2 Location of the Tres Mariás Islands, Mexico. Base map from <https://freevectormaps.com/mexico/MX-EPS-02-0002>.

3 Welcome (*Bienvenidos*) to Puerto Balleto on Isla María Madre, where in April the greener vegetation in town contrasted with the grey aspect of late dry-season forest on the hills inland; things looked much the same in mid-July, reflecting a later and much more limited rainfall than occurs on the nearby Mexican mainland (Steve N. G. Howell).



>> BIRDING AT THE CUTTING EDGE TRES MARÍAS, MEXICO

20 Comparison of mainland Yellow-green Vireo *Vireo flavoviridis* (top row; Nayarit, 14 & 15 July 2024; inset shows dullest face pattern) and 'Tres Mariás Vireo' *Vireo [flavoviridis] forreri* (middle and bottom rows; 12 & 13 July 2024; top left bird shows strongest face pattern, accentuated by dark shadowing from raised crown feathers). (All photographs Steve N. G. Howell.) **21** Comparison of mainland Yellow-green Vireo *Vireo flavoviridis* (top; Nayarit, 11 July 2024) and 'Tres Mariás Vireo' *Vireo [flavoviridis] forreri* (bottom; 12 July 2024) song phrases. Note the generally more complex—if less varied—phrases of island birds, plus average lower pitch and overall more even pitch of successive phrases (spanning 2–5 KHz vs. 2–6 KHz), which produces a less musical effect. Mainland songs are thus sweeter, more reminiscent of Red-eyed Vireo *V. olivaceus*; island songs are chirpier, more monotonous, reminiscent of House Sparrow *Passer domesticus*. Rate of song is variable in both taxa, although no island birds recorded in July sang as quickly as this mainland example. (Recordings and sonograms by Steve N. G. Howell.)

