

DISCOVERING

A SECOND SPECIES OF OROPENDOLA

IN THE MOUNTAINS OF GUATEMALA

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INTRODUCTION TO THE SEARCH FOR OROPENDOLA BIRD NEST COLONIES

My original interest in learning about oropendola birds comes from

- The visual spectacle of their nests of impressive size (hanging down about a meter from a tree limb)
- The visual spectacle of the macho male doing an up-and-down “dance” while clucking (singing) a remarkable bird sound (audible for a long distance in the rain forests).

The remarkable singing-and-dance sound and movement is both zoologically amazing, and (when the singing macho male comes close to falling off during their song-and-dance) their act is quite funny.





Thousands of people every year experience oropendola nests at Tikal, often in the Great Plaza (between Temple I and Temple II). I have also experienced oropendola nests at Copan Ruinas, Honduras. We would need to identify which species is at Copan. Its altitude of 668 meters is higher than Tikal (circa 240 meters) but much lower than Senahu (970 meters, Alta Verapaz, Guatemala). All web sites that I looked at today said it was Montezuma Oropendola, but I would prefer to check, since it is natural for everyone to talk about Montezuma Oropendola. I myself lived in Guatemala over 54 years and never heard anyone mention the second species of oropendola.

If you spend more time doing research you find a birdwatcher list specifically for Coban. Surprise surprise: it lists both species, which for me is great (but also totally unexpected). You do not get both species at Tikal, nor at Senahu.



LEARNING THAT THERE ARE MORE SPECIES WHICH BUILD IMPRESSIVE HANGING NESTS

My interest multiplied when I saw an oropendola-like nest in publications about the early Maya murals of San Bartolo, Petén, Guatemala.

David Stuart was frankly very adept at documenting that the oropendola-sized nest in this Maya mural was of an oriole, not an oropendola. To accept this unexpected identification I began to do research on oropendolas and orioles. I made a list of every genus and species which made a hanging nest of impressive dimensions.

Then my curiosity advanced further when I learned that there was a second species of oropendola, which also lived in Guatemala and surrounding countries. When you have worked for decades in the Peten, you see and experience only the one species: Montezuma oropendola. Thus I was surprised to learn that a second species existed that also built amazing nests.

While driving back from visiting the Q'eqchi' Mayan-speaking area near Canguacha Pedro knocked on the top of the pickup truck and told us to stop. When I slowed down to stop he told me that he had just seen an oropendola nest. (Canguacha is near San Nicolas, which is not far from Senahu, Alta Verapaz).

After photographing the nests for an hour or so, we kept driving back towards Senahu. Then again Pedro made a sound on the top of the pickup cabin roof. I stopped again. This time he had found two different trees both with oropendola nests. But it was late in the afternoon and I felt the (sun)light would be better the following day. So we spent the night in Senahu. Senahu is where several of our Q'eqchi' Mayan speaking research and illustrators come from.

Next morning we drove about 20 minutes back down the highway (towards Telemán), stopped at the oropendola nests, and spent over 2 hours photographing the birds and the nests. One of the trees had plenty of birds flying in and out.



A tall, slender tree with a thick trunk and a dense canopy of green leaves. Numerous large, brown, teardrop-shaped bird nests hang from the branches, some clustered together and others hanging alone. The background is a clear blue sky with some light clouds. The tree is the central focus of the image, with other trees visible in the lower corners.

MORE NESTS ABOVE SENAHU

A few weeks later we received a phone call that more nests had been found about 20 minutes the other direction from the town of Senahu.

By the time we got to these nests, it was after the birds had finished raising their young. But two trees each still had a number of nests. With heavy rains and occasional winds, lots of the nests had already fallen down. I would estimate that always more than half the nests are blown down before the birds return the next season. I would not be surprised if on some trees more than 75% of the nests are blown down.

All these nests above and below Senahu were of the oropendola which is not the Tikal area Montezuma oropendola.

TWO DIFFERENT SPECIES OF OROPENDOLA IN GUATEMALA

CHESTNUT-HEADED OROPENDOLA,

Psarocolius wagleri is a species I had never heard of before we found the three trees south of Senahu, Alta Verapaz. These birds live at high altitudes, and often use acacia trees. If a *Ceiba pentandra* is available, they will use that also (so inside the town of Cahabon the *Ceiba* next to the football playing area a block from the main plaza has oropendola nests. But most Chestnut-headed oropendola are in trees other than *Ceibas* (in part because *Ceibas* are rare in the mountains).



MONTEZUMA OROPENDOLA,

Psarocolius montezuma, is the best known oropendola since its nests hang from a *Ceiba* tree in the Great Plaza of Tikal, Peten.



Both species live in colonies. Both species have long hanging nests. The nests look very similar but those of *Montezuma oropendola* tend to be a few centimeters taller.

But there are several species of orioles who also make tall nests (though not as spectacular as those of the oropendolas). Since *Montezuma oropendola* is common in the Tikal area of Peten and Izabal area, it is all the more surprise that the San Bartolo murals show orioles instead. I have never seen a tall oriole nest, maybe because I have not been in northern or northeastern Peten. I have only hiked back and forth to El Mirador, leading tour groups 20 years ago.

NESTS OF CHESTNUT-HEADED OROPENDOLA, *PSAROCOLIUS WAGLERI*

During late August it was possible to find four trees with oropendola bird nests in the mountains of Alta Verapaz, Guatemala.



Chestnut-headed Oropendola nests in a *Ceiba pentandra* tree in the middle of the Spanish colonial town of Cahabon.

I would have expected the altitude of Cahabon to be several hundred meters above sea level, but Google lists it as only 250 meters, which is only a few meters above Tikal's elevation. At Tikal you get only Montezuma oropendola species. It is our estimate that the oropendola here in Cahabon is the Chestnut headed species, *Psarocolius wagleri*.



We photographed this tree on September 1st, 2016. These photos are by David Santos, FLAAR.



Ceiba pentandra trees are very common in the Costa Sur and Peten. You can also find this species of Ceiba in Izabal. But in Alta Verapaz you find ceiba trees only occasionally. So the oropendola birds in Alta Verapaz have had to adapt to seeking other species of trees for their nests. However when they do find a ceiba (such as here in the middle of Cahabon) the birds like this option (even if it is in the middle of a large town). The downside of an urban location is that they have to fly much further to find food and have fewer close-by sources of fiber to harvest with which to build their nest.

Due to the white overcast sky brightly lit by the tropical sun in this mountain town, our photographs have a lot of sunlight damaging the digital capture of the image. We tried to do HDR (High Dynamic Range) but the wind was blowing the branches so the nests were moving. And the sky was too bright no matter how much we turned down the exposure.

We would need to be back at the tree at a different hour (when the sun was at a different angle). These photos were taken in the morning.

If we had moved to a different angle the tree would have not been visible since the tree is near a hill, and the only place to get a view is from the stairs leading off the main plaza (looking down to the village soccer field to the front right).



We found nests of the slightly smaller of the two oropendola species in several other places in Alta Verapaz. One nest site was in a giant *Ceiba pentandra* tree (Cahabon, in the middle of downtown Cahabon, near the soccer stadium). *Ceiba pentandra* is the favorite tree for the slightly larger nests of *Montezuma oropendola*. . *Ceiba* trees are normally associated with the *Montezuma oropendola*, found throughout the Peten forests, north of Alta Verapaz. I was surprised to find these birds making their colony in the middle of a town (making it a longer distance to fly to food sources). But there are not many *ceiba* trees in Alta Verapaz (there are many more in Peten or in Costa Sur).

These chestnut-headed oropendola are much more adept at adapting themselves to any size and shape and species of tree, even bull-horn acacia trees (Subin) near Senahu, Alta Verapaz. We found three nests in Subin trees.









NEW CHESTNUT-HEADED OROPENDOLA NEST SITES NORTH OF SENAHU

Our plant scouts Vilma and Heidy and their father Alberto found two more nest sites about 10 minutes north of Senahu. They took us to two more nest sites in early November. One was in a tree which looked to me like a pine tree but local people call this a cypress. About a hundred meters away was another nest in a different tree species.

The birds had of course abandoned these nests by November and about 75% of the nests had fallen down.













MOST ORIOLE NESTS ARE MUCH SMALLER

I estimate this nest is of an oriole and not an oropendola. We found it between Km. 150 and 160 on CA9 (Guatemala through Zacapa towards Izabal).






ADDITIONAL OROPENDOLA NESTS NEAR RIO CAHABON

We found a fifth tree, near a river about 30 minutes from Cahabon, which was neither Ceiba nor Acacia. Perhaps it was a laurel, but we were not able to identify it. We have no photographs since the local people said we should ask permission of the village council if we wished to photograph in their village. This would have taken several hours, so we politely declined to photograph this tree. We prefer to only photograph when we have local permission.

In the future we would like to study the construction sequence of the nests. Snag is that we would have to be in front of the tree for 30 days. That is tough to be in a remote area an entire month just for a single species. But a stop-motion sequence would be amazing. The following information is from standard references, such as Chapman 1928 (who was able to do all his observations out his window...). For us to get from our window to the bird nests is a two day round trip drive even to get to the nearest town, and then an hour back and forth to the tree.

- It takes about one month to build the nest
- 17 days for the eggs to hatch
- 4 weeks before the young birds fly away.



SENAIDA FOUND THREE OR MORE ADDITIONAL NEST SITES IN MID-NOVEMBER

While Senaida was taking her younger sister to the hospital in Telemán in mid-November, she said she noticed several more trees with oropendola nests. Since Telemán is not far above sea level, it will be interesting to see at what elevation the lowest nest of chestnut-headed oropendola nests are found. At Tikal, 242 meters above sea level, you find only Montezuma oropendola.

For the newly discovered oropendola, we will take notes on what species of trees are used as nest sites.



SADLY, LOCAL PEOPLE CHOP DOWN THE TREES WHICH SUPPORT OROPENDOLA COLONIES

Of the two acacia trees south of Senahu which were full of oropendola nests in late August, one had been chopped down by local milperos. They said it provided too much shade for their maize crop.

We would like to prepare booklets in Q'eqchi' Mayan language to explain that it might be helpful to preserve the trees which provide a host site for harmless birds.

Several months after Pedro first noticed the oropendola nests on the subin trees, we drove back to this area. We were sad to see that one of the subin trees had been chopped down. 75% of the nests were crushed by the fallen tree. Several nests were still hanging from the fallen branches.

Local people chop down subin trees since they have spines. And stinging or biting ants live inside the hollow spines of many acacia species. So subin trees are not very popular. We have not yet inspected the living tree to see if this is indeed one of the species with ant symbiosis, but even without ants, the spines alone often causes the tree to be destroyed by local farmers.

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Here are the Mayan-speaking members of the FLAAR team in Guatemala. They are all bi-lingual and of course speak Spanish and often other languages.