

Terrestrial Wasps—Wasps that Live Underground



Senahu, Alta Verapaz, Guatemala

Photos by Javier Archila and Norma Chu Cu, March 19, 2025

Text by Nicholas Hellmuth, Panal 14

What a coincidence, while on a one week field trip to find wasps, that the hotel you are staying in, has friendly wasps in the lobby.

There are terrestrial wasps all across Guatemala, and terrestrial bee nests as well. But usually we are looking for wasp nests that are pegged to trees or house walls and especially wasp nests hanging from twigs or vines. No realistic way to photograph a wasp “nest” underground unless there is outside funding to allow for the time to accomplish carefully digging alongside the underground “nest”.

There are several entry-exit tunnels but we do not yet know if they all connect to a single nest with multiple wasps, or whether each wasp has their own area.



This wasp has bristles under its chin and on all its legs and also on thorax.

If you look closely, you also see a few rows of bristles on the abdomen.





Although this wasp looks “black all over” when it raises it’s wings you can see a few bands of light yellow color (in the photograph on the following page).

This wasp has the most “rigid-looking” wide diameter, long antennae that I have ever seen.

Now you can see the three to four circles of light yellow around the shiny black abdomen.

These antennae are long, thick, and seem to be “rigid”? But then how does this wasp crawl in and out of an entrance-exit tunnel to his underground nest if it can’t move his antennae? So obviously he can.



Now the antennae are not completely straight, especially at their lower part.

As we see in the following photos, the “snout” area of this wasp is amazing.

Also notice the thick shiny black frame around both sides of his head. Or are these giant eyes?



In this photo you can see the "fur" (bristles) on especially the front four legs.

You can also see the grabby "pincer" (mandibles) hanging below the mouth.

This wasp would be a great model for a giant monster invading a city in a Hollywood movie.

The FOUR wings and SIX legs, plus the furry mouth and giant antennae would look great at the size of a dinosaur monster that is in the usual Hollywood monster attack movies.



This wasp has the identical antennae as the others, and same “furry” mouth area and legs. But this wasp has an unexpected triangular brown area on the top of his thorax. Is this the result of the black color somehow being scraped off?

Or is this another sex or caste of the same wasp species?

And what are the three “shiny brown bubbles” in a geometric pattern on the top of this wasp’s head???



Now the “fur in the mouth area” is more visible, as is the are the thick rows of bristles on the legs.

This is the same wasp as in the previous photo, with the triangular light brown area on its thorax.



Helpful photo from above by Javier Archila allows you to see the “veins” that strengthen the upper wings.

You can also see the two giant antennae pointed straight out diagonally (so not curved whatsoever).



Here the wings are also nicely focused.

Google Images does not provide an adequate match whatsoever. None have the “straight, thick” antennae as does this terrestrial wasp from Senahu, Alta Verapaz, Guatemala.



There are several entry-exit holes in the dirt, and each has one wasp peeling out (in earlier photos). Here are two of the same wasp species on a leaf of the plant that grows out of the dirt.

Does each wasp have their own underground lair, or are there multiple wasps together underground? This we will only know once a wasp entomologist can identify the Genus and species.



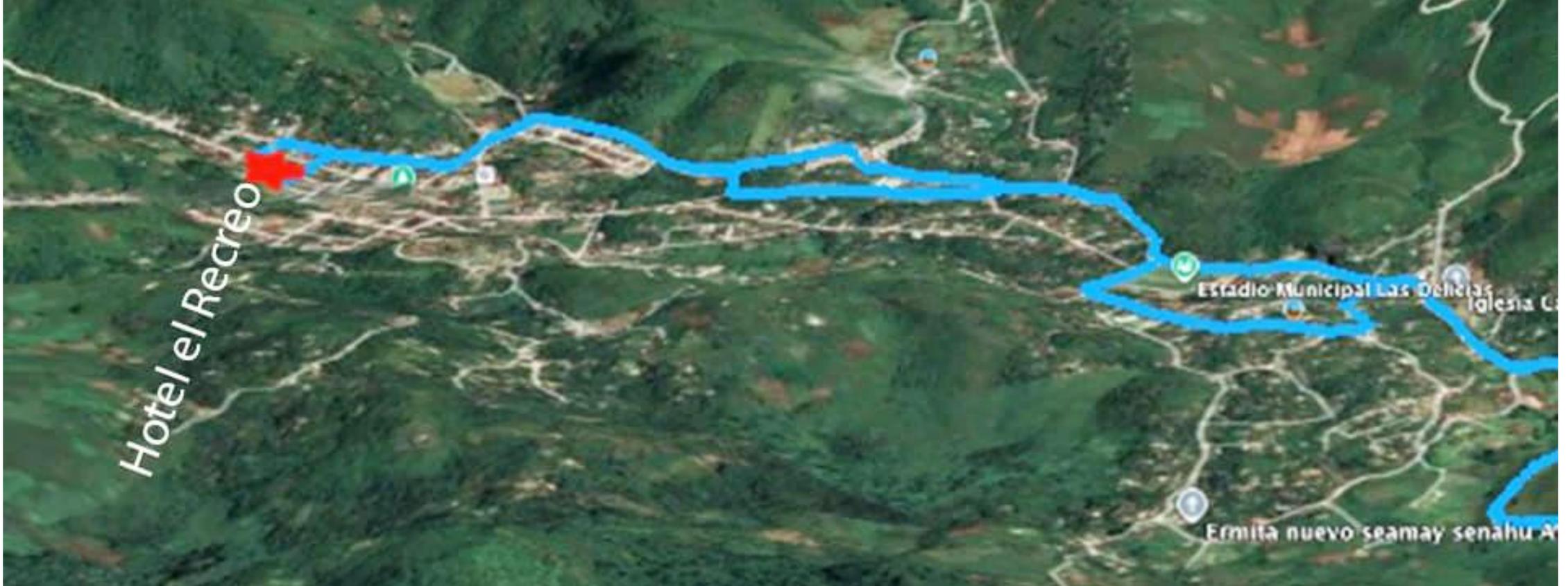
Javier Archila is using a tripod to hold his Sony camera. We prefer to have tripods used for cameras.

Norma Cho is assisting him.

These plants (several of which had wasps underground) are in the lobby of the annex of Hotel Recreo, in the town of Senahu, Alta Verapaz.

So if you are studying wasps, this is a good hotel to select, although we do not know whether these wasps are permanent or not. I estimate they are.





The annex is several blocks away from the main Hotel El Recreo. There is parking on the annex property, with a locked gate. Since this is the annex, all the hotel staff (for check-in and check-out and other aspects) are at the main hotel. We have breakfast and dinner at the restaurant at the main hotel, overlooking the village plaza.

The research team consisted of Byron Pacay, experienced driver and also co-pilot when Hellmuth drives. He also prepares the maps. Norma Cho does all the basic preparation and prepares all the camera equipment, lighting equipment, tripods to load onto the double-cabin pickup truck. During the trip she also helps as a photography assistant. Since Senaida Ba comes from Senahu she helps preparing the itinerary and contacts with local people. Franklin Xol is also from Senahu and he also participated in both the field trips to Senahu areas. He also assists the photographer. The lead photographer is Javier Archila. Nicholas Hellmuth plans the focus of the trips and does the library research (on-line) for the reports. Vivian Hurtado is manager of all field trips but since she is also manager of lots of other activities of FLAAR Mesoamerica, she usually does the organization from her home office. Flora and fauna specialist Sergio Jerez helps from his home office.