

says. “We need an alternative so that hummingbirds can be conserved in the cities we live in.”

It was Arizmendi who first encouraged Meneses—at the time her master’s student—to turn a flower-growing hobby into a business. When the urban gardening effort was getting going, about 90% of plants sold in Mexico City were non-native.

Since launching Paraíso Colibrí in 2016, Meneses has populated the capital and cities in five other states with about 145 plant species, including Buchanan’s sage, blue passionflowers, and yellow oleander. Almost 500 wildflower gardens for hummingbirds have been registered across the country on Arizmendi’s website, and Meneses works with 29 corporate clients, including L’Oréal SA, plus seven schools. The business has 10 employees, and Meneses has helped six other nurseries start growing native plants. Beyond helping hummingbirds, they sell plants that attract such pollinators as bees, butterflies, and bats.

She and her domestic partner, Sergio Ramírez Martínez, used their savings to start the business and have had no outside investment. Meneses chooses to use only the most basic equipment and to work without

electricity at the nursery to grow her wildflowers.

Reproducing the plants has been a giant undertaking—around 90 of the species Meneses sells weren’t commercially available before Paraíso Colibrí got started, she says. Scientists knew little more than the names of many of them, so Meneses and her team had to seek them out in the wild, visiting half a dozen states.

In one trip to Durango in the northwest, they found a previously unknown hybrid of two types of salvia that scientists at UNAM are studying and may endow with its own name, Meneses says. Locating the flowers is just the first step. It takes a year of observation to work out how to make them reproduce and thrive, she says.



The azure-crowned hummingbird

Personal danger hasn’t stopped her visiting states such as Guerrero, where four environmental activists were killed last year. It’s worth the risk to help protect the short-crested coquette, Meneses says. That species of hummingbird has a distinctive fluffy orange crown and green head and exists only in a 50-square-kilometer (19 sq mi) region of Guerrero. “Hummingbirds are important, and if we don’t conserve them, it’s very likely they could disappear in the next 20 to 30 years,” she says.

It’s not just the future of the birds that’s at stake. Meneses says hummingbirds are the key pollinators for about 1,000 Mexican plant species, dipping their long, delicate beaks far into flowers as they lap up nectar and then pass their pollen onto other plants, enabling them to reproduce. Lavenders and salvias “won’t survive if we take away hummingbirds,” Arizmendi says.

There’s little good data on Mexican hummingbird populations. Scientists only recently started monitoring them, and their legs are too spindly to hold transmitter tracking devices. That makes it difficult to put hard numbers on the progress of efforts to bolster their populations.

But there are victories to celebrate. With the help of bird sightings recorded by enthused customers, Paraíso Colibrí has already made scientific discoveries about hummingbird migration patterns, Meneses says. And Mexico City had particular success using Mexican bush sage to restore a park around the National Canal in the Churubusco neighborhood, Arizmendi says. “There are mountains of hummingbirds there now,” she says. “Mountains!” —*Max de Haldevang*



Meneses turned her hobby into a business that’s repopulating Mexico City and other cities with about 145 native plant species

**THE BOTTOM LINE** Hummingbirds in Mexico are threatened by urbanization, climate change, and illegal trade. There’s a growing effort to help the birds by creating city gardens filled with plants they like.