Monarchs and Dry Weather

We were wondering how the monarchs would fare with the drought that covered the whole state of Texas and beyond. It seems from the article below that it was a tough year for monarch migration. We observed hundreds in Sloan Community along the waterways at the end of September. They weren't "dripping" from the trees so much as in years past, but would instead fly up out of the newly irrigated coastal by the hundreds. I wished for a camera when my filly started walking towards me, a stream of monarchs like the parting of the Red Sea flying up backlit by the setting sun. It was breathtaking. I didn't capture that on film as it showered the next day and they dispersed or moved on. It's something I will have to save to the hard drive of my mind's eye and hope it doesn't get deleted.

BROWNSVILLE — Nourished by the most available nectars, bolstered by the most favorable genetics, the first butterflies of the annual monarch migration are filling the skies of their Mexican wintering grounds with flutters of orange and black.

But it's not these that experts who study the monarchs' mysterious migration patterns are worried about — it's the less robust monarchs, most of them female, to follow.

Every stage of the multigenerational life cycle has been off this year, and drought and atypical weather patterns are pushing the weakest through some of the harshest conditions on record.

Central Texas, usually chief fattening grounds for the monarchs, has been bone-dry, so the flowering plants they need are hard to come by. Many monarchs have shifted west. Many are expected to die.

"This might be the smallest overwintering population yet," predicted director Chip Taylor of Monarch Watch, an organization dedicated to preserving the insects.

The monarch butterfly has long fascinated researchers and enthusiasts, who wonder how a fourth-generation insect finds its way back to the distinct patch of Mexican mountaintops that has for eons been the butterflies' wintering grounds. There, the monarchs go into a sort of cold storage, their wings blanketing the lower branches of their favored oyamel trees.

"It's fantastic to see them coming in on a warm, sunny day," said Lincoln Brower, a biologist at Virginia's Sweet Briar College who has been traveling to the oyamel forest for decades. "You look up at the sky and it's sparkling with beautiful orange monarchs with the sun coming through their wings. ... A gorgeous site."

Severe drought in the spring meant the breeding population returning from Mexico had a tough time finding nectar and milkweed, the only plant on which monarchs lay their eggs.

Bred in the South, the new generation worked its way up the Great Lakes region, where a cold summer slowed subsequent breeding cycles. The monarchs that migrate south are the "great-grandchildren" of the last wintering population.

The wintering populations have been declining, with the population two years ago the lowest in 16 years.

That's partly because of arctic cold fronts reaching Central Mexico — a front in 2002 killed 75 percent of the wintering butterflies.

But there are two other big factors working against them: illegal logging in the oyamel forest and the growing popularity of pesticide-resistant corn and soybeans in the Midwest. The crops are genetically engineered to resist pesticides that kill everything else in the fields, including the all-important milkweed.

"The monarchs are resistant creatures," Brower said, "but just how resistant and when the straw will break the camel's back is a question that nobody really knows the answer to."

Monarch Watch's Taylor said it's still early in the migration, with the tail end of the group not arriving until next month.

There likely will be stragglers, he said.

Aerodynamics favors the largest and heaviest monarchs, he said, and the latecomers not only are weakened by generations of hard times but also by making the journey when there is less and less nectar.

The main migration appears to have shifted west, he said.

“We don't know how those negotiated the twists and turns through the mountains to stay on course,” he said, “but it looked like they were moving into hazardous territory.”

Michael Warriner of the Texas Parks & Wildlife Department said he was saddened to see how Texas' historic drought had diverted the usual path of monarchs through the Hill Country.

“If they don't find anything to eat, they're going to try to keep moving,” he said. “Hopefully they'll find something.”