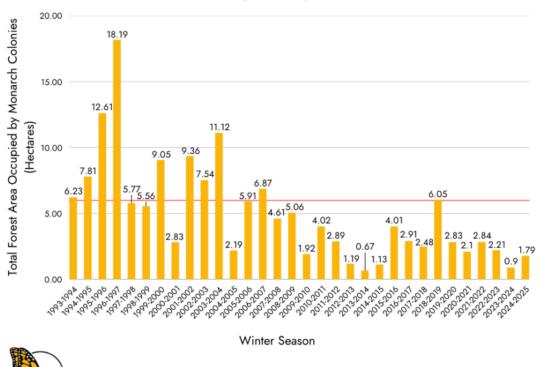
The eastern monarch butterfly population overwinters in Mexico's oyamel fir forests. It represents approximately 90% of the global monarch butterfly population. Each winter surveys are conducted by the World Wildlife Fund-Telmex Telcel Foundation Alliance (WWF) and the National Commission of Protected Natural Areas in Mexico (CONANP).

According to the latest survey, the population occupied **1.79 hectares** over this past winter – an area roughly the size of 3.5 football fields. This is an increase from the 0.9 hectares occupied in the 2023-2024 overwintering season.



Total Area Occupied by Monarchs at Overwintering Sites in Mexico 1993/1994 · 2024/2025

Scientists estimate a minimum of 6 hectares of overwintering monarchs is needed to sustain the eastern populations (Semmens et al., 2016)

Data from 1994-2003 were collected by personnel of the Monarch Butterfly Biosphere Reserve (MBBR) of the National Commission of Protected Natural Areas (CONANP) in Mexico. Data from 2004-2025 were collected by the WWF-Telcel Alliance, in coordination with the Directorate of the MBBR. 2000-2001 number as reported by Garcia-Serrano et al. in 2004

Are monarch populations at less risk?

While we are encouraged by the resiliency of the population, these numbers do not necessarily indicate a "rebound" of the population:

• The 2024-2025 population is still well below the six hectares threshold recommended by researchers to sustain an eastern migratory population.

• Population levels have only achieved the target threshold of six hectares once in the past 15 years. Populations over the past six years have consistently been less than half of this target.

• Like other insects, monarch butterflies are naturally subject to sometimes large population changes. As noted in in a 2024 study, these fluctuations (especially in smaller populations) may pose increased extinction risks to migratory monarchs as threats from