







t's a mild California morning in November, and I am sitting with my husband and our two-year-old son on a wooden viewing platform in the middle of a peaceful eucalyptus tree grove. Our faces are tilted upwards, observing fleeting flashes of vibrant orange as large monarch butterflies flutter among the trees. Further above us, suspended spectacularly like hanging floral displays, are large clusters of yet more butterflies – thousands, in fact – clinging to the thin leaves of the red gum eucalyptus trees that take centre stage in the grove. This magical spectacle is part of the annual monarch migration.

Each year monarchs, a tropical insect species properly named *Danaus plexippus*, travel up to 5,000km, from the north of America to Mexico, and then back again for their annual migration. Although their migration is comparable to birds or whales, multiple generations of butterflies complete the journey. The butterflies we see today won't survive to return next year, but their great-great-grandchildren will.

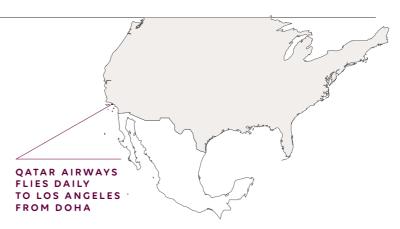
Natural Bridges State Park, near Santa Cruz, on the Northern California coast, is one of the migrating monarchs' preferred "overwintering" spots as temperatures drop. From October to March, thousands of butterflies make a pit stop at the park to rest, feed and recharge before continuing the epic journey to Mexico in spring.

Unable to move when temperatures drop below 7°C, the visiting butterflies form hanging "roosts" on tree branches at the park, huddling together to keep warm. When sunlight trickles through the trees, and the air warms above 10°C, the butterflies can make short flights, feeding on nectar from multiple sources such as red gum and blue gum eucalyptus, and the twisting English ivy that coils around the trees. Other wildlife, such as great horned owls, redshouldered hawks, deer, and bobcats, can also be spotted amid the greenery.

Previous pages: Thousands of butterflies clustered on a branch

Left: Monarch butterflies overwinter in California on their way to Mexico





"There is a lot of symbolism about this beautiful thing, flying away free"

Like many people who get up close to monarchs, Martha Nitzberg, lead interpreter at Natural Bridges, has a special affection for the remarkable insects. "I came to Natural Bridges for the marine life in the tide pools at the neighbouring beach, but the monarchs work their way into your heart," says Nitzberg, who has worked at the state park for 15 years. "It's amazing how they can affect you. Many people learned about butterflies at school, so seeing the monarchs is like returning to their childhood. For others, the butterflies are a symbol of change and transformation, fragile yet strong. A lot of people can relate to butterflies and the journey they make. There is a lot of symbolism about this beautiful thing, flying away free."

During our visit to the monarch grove, we are joined by around a dozen people, who also sit quietly, talking in whispers, as they marvel at the monarchs with their beautiful orange, black and white patterned markings and impressive wingspans of up to 10.2cm. As we watch, monarchs flutter through fragrant eucalyptus trees in the soft, hazy tint of the morning sunlight. "We really encourage people to be quiet," says Nitzberg. "We want visitors to sit or lie down, to be still and watch the butterflies or enjoy nature. We as humans need that connection."

In 2017, park staff estimated that 6,000 to 7,000 monarch butterflies made the grove their winter home. While this may seem like an impressive number, it is a far cry from the numbers of the late

1980s, when the park had peak concentrations of around 200,000 butterflies overwintering.

Sadly, during the past 25 years, monarch numbers have declined dramatically from one billion to 30 million, primarily because of habitat destruction. Monarch caterpillars feed and lay their eggs exclusively on milkweed, but the colourful flower is rapidly disappearing from the countryside due to overuse of herbicides and loss of native habitat.

Natural Bridges has faced additional challenges due to pitch canker, a tree-killing disease that, 15 years ago, destroyed pine trees around the perimeter of the monarch grove. Without this windbreak, the eucalyptus trees were much more vulnerable to being felled by the weather. Hardy cypress trees have since been planted to counter this problem, and the park's staff are doing everything they can to aid the conservation of the monarchs. They educate visitors about where to plant milkweed and the effect pesticides can have on butterflies, and encourage locals to plant pollinator insect-friendly gardens with plentiful nectar sources for butterflies.

"Some people get very overwhelmed when they learn how much monarch populations have declined, but I believe there is hope," says Nitzberg. "The monarchs are still coming, and people want to protect them. When we put energy into something, it gets better. It used to be that we threw out all our recyclables but now it is standard to recycle. We can also learn new habits to help the monarchs."

parks.ca.gov, visitsantacruz.org