

Keep Texas Wild



MYSTERIOUS MONARCHS

Beautiful butterflies puzzle scientists around the world.

» WINGED WONDERS

WELCOME TO TEXAS, MONARCHS! Every fall, these delicate but tough little insects migrate across our state on their way from Canada to Central Mexico. Some fly as far as 3,000 miles! How do they survive? How do they know where to go? And how do they get back to Canada? Scientists have figured out some answers, but there are still monarch mysteries to be solved. In the meantime, pull out your detective gear and let's go investigate these winged wonders!

PHOTO © LARRY DITTO

Monarch

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The Mystery of Migration

MONARCHS – LIKE SOME BIRDS and mammals – travel south in the fall to reach warmer climates with abundant food. Most come from Canada and the northern U.S. Somehow, they find their way to fir forests that grow high in the mountains of Central Mexico. Over winter, they roost together in large numbers among the tree branches. In the spring, they return to Texas and the southern U.S., lay eggs on milkweeds and die. The young hatch and mature into adult butterflies, which continue northward. By September and October, great-grandchildren (and sometimes great-great-grandchildren) of the monarchs that migrated the previous fall arrive back in Canada and the northern U.S. Then the cycle begins again!



Monarch or not?

Difference between a monarch and a viceroy. Queen, too.



MONARCH

Round dots on the rear wings mean it's a male.



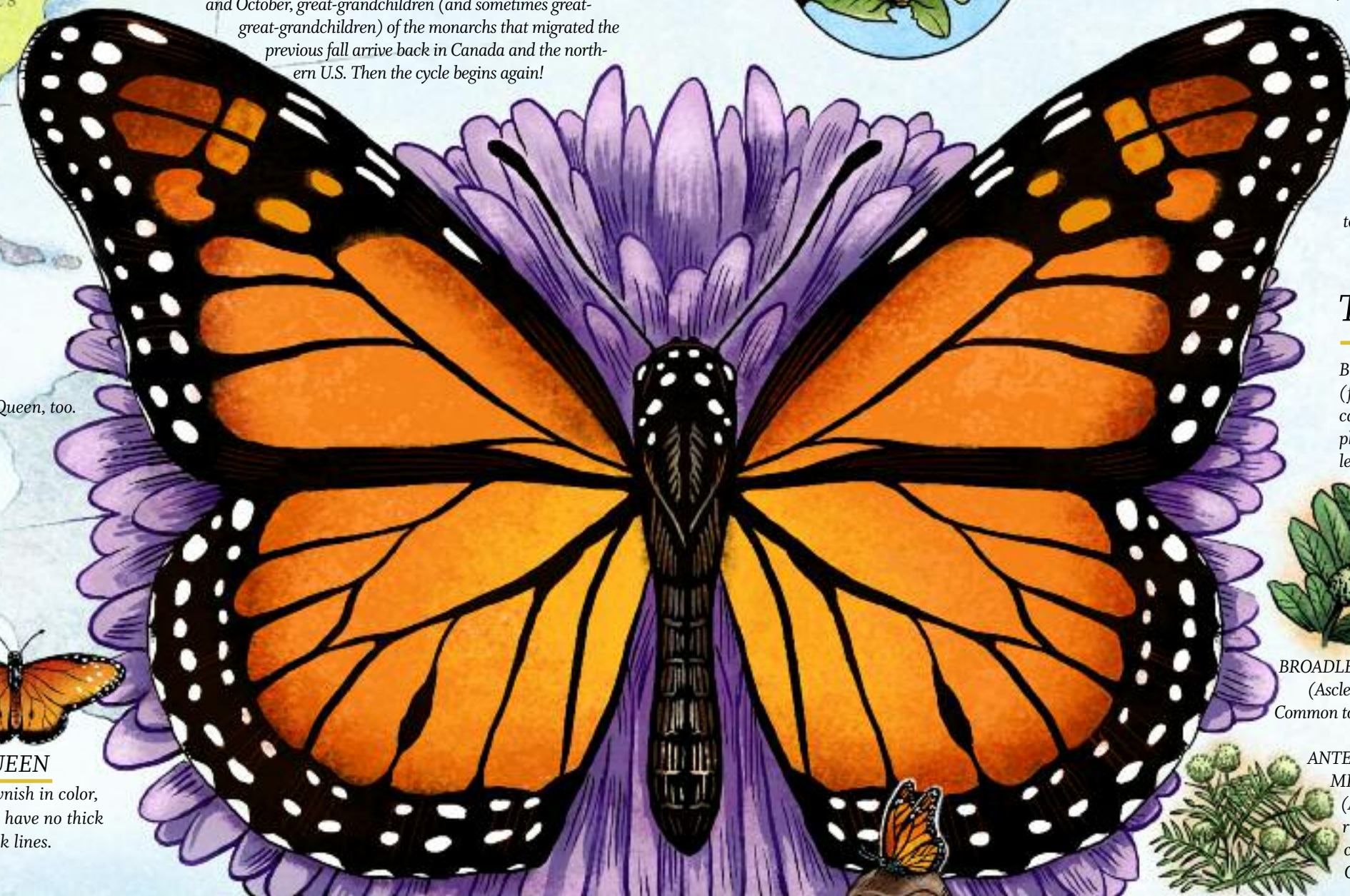
VICEROY

Thin line across rear wings is a distinguishing mark.



QUEEN

More brownish in color, open wings have no thick black lines.



The Mystery of Metamorphosis

IN THE SPRING AND FALL, monarchs deposit tiny eggs – one at a time – on the underside of a milkweed leaf. Three to six days later, the egg hatches into a larva. The larva eats milkweed leaves. Then, two to three weeks later, the caterpillar forms a green chrysalis. An adult monarch emerges seven to 10 days later.



The Mystery of Milkweed

BUTTERFLIES REQUIRE two kinds of plants: nectar (food for adult butterflies) and larval (food for caterpillars). Monarch caterpillars eat ONLY milkweed plants. So females must deposit their eggs on milkweed leaves or larvae will starve.



GREEN MILKWEED
(*Asclepias viridis*)
Most monarchs feed on this species.
Found in East Central and South Texas



BROADLEAF MILKWEED
(*Asclepias latifolia*)
Common to West Texas in fall



ANTELOPE HORN MILKWEED
(*Asclepias asperula*) – Most common in West-Central Texas



BUTTERFLY WEED
(*Asclepias tuberosa*)
Most common in the eastern half of Texas in the spring

Did you know?

The monarch is Texas' state insect!

Did you know?

Adult monarchs that hatch in the fall can live up to eight months. Adults that hatch in the spring and summer live only four to six weeks.

Did you know?

A butterfly drinks through its straw-like mouth (proboscis) but tastes with its feet!

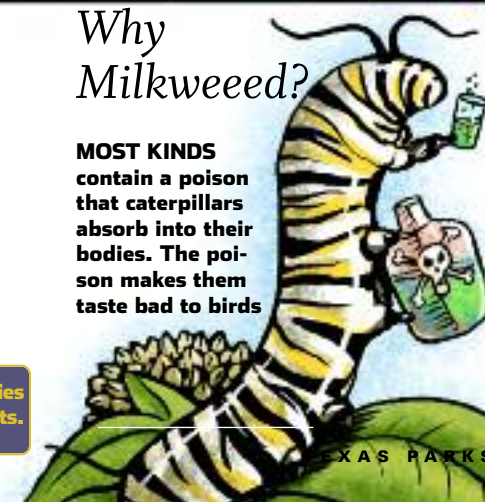
Did you know?

Scientists who study butterflies and moths are called lepidopterists.

Why Milkweed?

MOST KINDS contain a poison that caterpillars absorb into their bodies. The poison makes them taste bad to birds

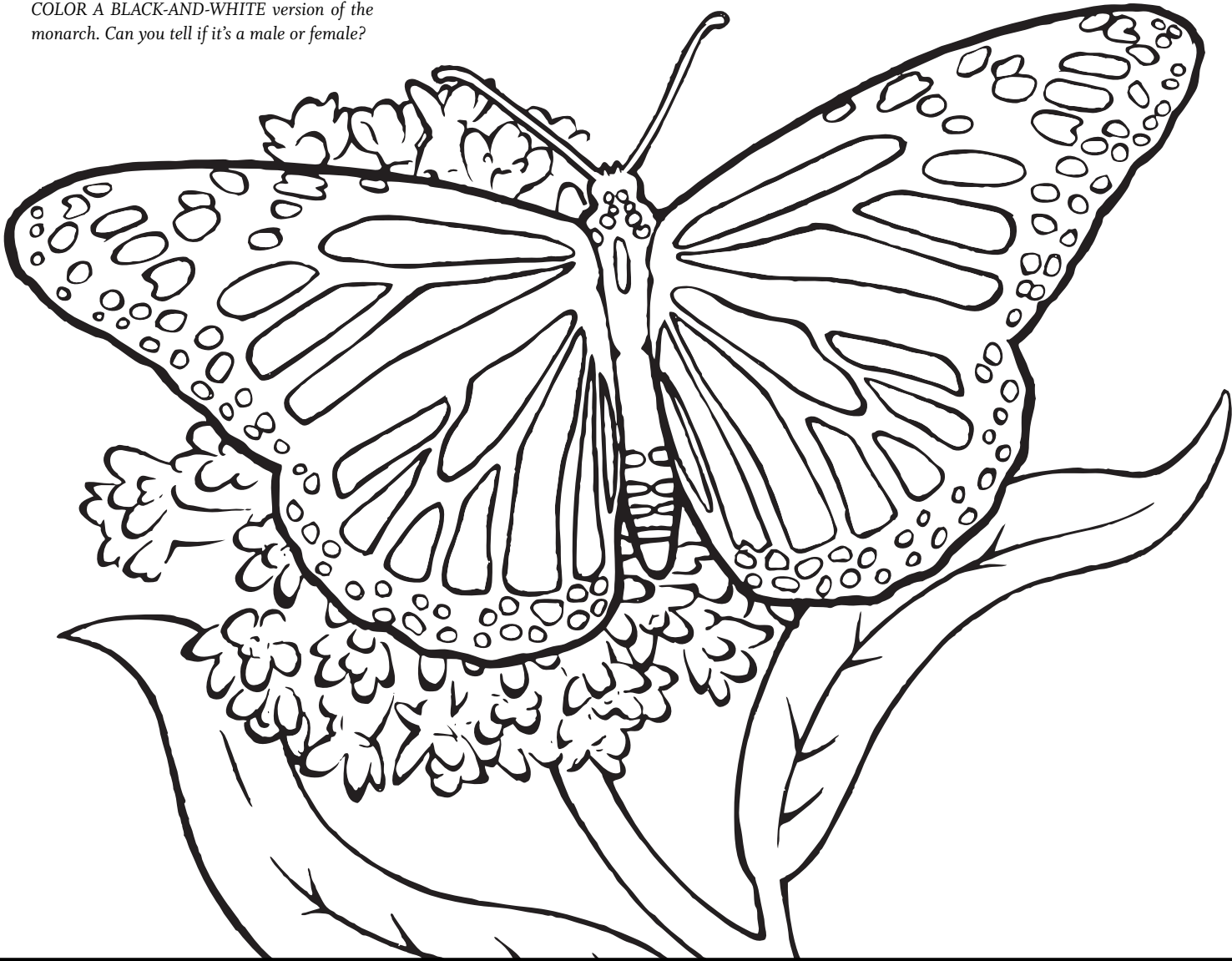
and other predators, which can also get sick. Like caterpillars, adult monarchs taste bad, too. Their bright orange color warns predators: Don't eat me or you'll get sick!





WILD ART

COLOR A BLACK-AND-WHITE version of the monarch. Can you tell if it's a male or female?



KEEPING IT WILD

MONARCHS NEED A LOT OF ENERGY (food) to migrate. You can help them stay strong by planting nectar sources in your yard. Monarchs especially love white mistflower, blue mistflower, fall asters, purple coneflowers, and zinnias. Plant some milkweeds, too — such as butterfly weed — so females can deposit eggs. It's fun to look for tiny caterpillars and watch them grow chubby and big. Challenge: ask friends to help you plant a butterfly garden at a local hospital, library or nursing home.



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NEXT MONTH: How To Eat With a Beak



TEACHER RESOURCE

Visit www.tpwmagazine.com to download a printable PDF, access lesson plans, find additional resources or order copies.

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