FAST FACTS

NAME: Monarch butterfly
SCIENTIFIC NAME: *Danaus plexippus*

AVERAGE WEIGHT: Caterpillars are 1.5 g, Butterflies are 0.41 g
AVERAGE WINGSPAN: 93 to 105 mm
AVERAGE LIFESPAN: 6 to 8 weeks for summer generations
6 to 8 months for winter generations

DID YOU KNOW? Monarchs have the longest and largest insect migration in North America, traveling up to 8,000 km per year!

PHYSIOLOGY

Monarch butterflies are probably the most well-known butterfly in North America. But monarchs aren't born butterflies. The monarch only becomes a butterfly in adulthood, after it makes its way through four different stages of its lifecycle – egg, larva (caterpillar), pupa (chrysalis) and finally adult butterfly. This transformation is called metamorphosis and takes about 30 days to complete.

The monarch starts out as an egg. After three to 12 days, the egg hatches and the monarch becomes a caterpillar. Unlike most caterpillars, monarchs don't blend in with their surroundings. Instead, they have bold yellow, black and white stripes to warn predators to stay away. After spending about three weeks as a caterpillar, the monarch attaches itself to a twig and forms a protective casing or cocoon. When the caterpillar builds a cocoon it becomes a pupa and enters the third stage of metamorphosis. The pupa looks like a miniature, shiny jade-green vase that's speckled with gold dots. After two weeks, the pupa loses its colour and an adult butterfly emerges, showing off brilliant orange wings that are marked with a thick black border and two rows of white spots. Males and females have different wings. Male monarchs have two black spots on their hind wings and female monarchs have a slightly thicker black border. Like other insects, the monarch has antennae or feelers that it uses for its sense of smell.

HABITAT/BEHAVIOUR

For survival, the monarch needs to live in a warm climate. This means butterflies living in Canada migrate south for the winter. Monarchs have the longest and largest insect migration in North America and some butterflies will travel thousands of kilometres during their short lifespan. The reason monarchs are able to fly such great distances is because they know how to save their energy. During migration, monarchs conserve their energy by riding columns of rising warm air and taking advantage of strong winds to help speed up their flight.

In addition to being warm, the monarch's habitat must also grow milkweed because it's the only food monarch larvae will eat.

RANGE

Monarchs are true migrants and can be found in many areas of the world. In Canada, their natural habitat includes southern Alberta, Saskatchewan, Manitoba, Ontario, Quebec and the Maritimes. The monarch has also been known to explore other areas of the country and has been spotted as far north as James Bay.

Every fall, millions of monarchs travel from southern Canada to California and northern and central Mexico. Once springtime hits, many monarchs will take the 8,000 km journey back to Canada. This is called two-way migration.