## Amazing Facts about the Monarch Butterfly

For the plant world, butterflies pollinate or carry pollen from plant to plant, helping fruits, vegetables, and flowers to produce new seeds. From the animal point of view, butterflies are near the bottom of the food chain and provide food (especially in their caterpillar stage) for birds, mammals, and other insects.

## Why We Grow Milkweed

Milkweed is found throughout Eastern and Central North America. The showy carmine-rose flowers have a vanilla scent. It adapts well to gardens, and can grow in the heavy clay soil of Richmond Hill.

The monarch will always return to areas rich in milkweed to lay their eggs upon the plant. The milkweed they feed on as a caterpillar is actually a poisonous toxin and is stored in their bodies. The orange of a monarch butterfly's wings is a warning color, identifying itself to predators that the butterfly will taste bad or may be toxic.

Each fall, tens of millions of monarch butterflies migrate up to 3000 miles from the Northeastern US and Canada down to their wintering grounds in Central Mexico. Tagged monarch butterflies have been found to travel over 250 miles in one day. The migration is due to the fact that monarchs can't survive the cold northern winters, unlike other butterflies that can survive as larvae, pupae, or even as adults in some cases. The monarch is the only butterfly known to make a two-way migration, similar to birds.

One of the enigmas around this phenomenon is how millions of infant butterflies who have never been to their ancestral breeding grounds return to the very trees that their parents roosted in before they were born.

A monarch butterfly can flap its wings up to 120 times in a minute when trying to escape a predator. Their flight speed has been measured between 4 and 12 miles per hour but can be much faster if a monarch uses available wind currents that will speed it up considerably.

Monarchs know when it is time to migrate south for the winter based on the environmental cues associated with seasonal changes. They then get naturally high using air currents and thermals to travel such incredible distances. In fact, the highest monarch was recorded at 11,000 ft. by a glider pilot – that's over two miles up in the air! Just to put this into perspective, most birds fly below 500 ft., hot air balloons only go up about 200 ft., and even songbird migrations occur in the 2000-4000 ft. high range. There's not really much else going on above 11,000 feet other than Mt. Everest (29,028 ft.) and passenger jets (36,000 ft.).

## Information provided by The Richmond Hill Garden & Horticultural Society