

Steps to Take in the Tagging Challenge

1. You can start collecting Monarch caterpillars any time. The process is really quite simple. First find a naturalized area where there is milkweed. Generally, a naturalized sunny place beside a road or trail is a good place to look for these black, yellow, and white banded caterpillars. Milkweed is a distinctive looking plant so when you know what to look for, you can't miss it. This is an image:
https://www.nativeplants.ca/020~Shop/010~Plants/?app.tbl.search=milkweed;item_id=67

The caterpillars are often found on the underside of the leaves and typically toward the top part of the milkweed plant. When newly hatched from an egg, caterpillars can be quite small so look carefully. There are many types of milkweed in Ontario but the most common type of milkweed growing wild in Richmond Hill is Common Milkweed. The following link has some good photos and tips for finding Milkweed <https://www.monarchparasites.org/milkweed-identification>

2. Remember that the Monarch Butterflies that Monarch Watch wants us to tag are the ones that emerge from their chrysalis after early to mid-August in Canada. It is this generation of Monarchs that will make the migration to Mexico, and it is these ones that the scientists at Monarch Watch are interested in tracking and studying. If you have a Monarch Butterfly that emerges before the tags are delivered don't worry – just release it and consider it a dry run.
3. I would suggest that you collect caterpillars on a few different occasions over the period between the end of July to the end of August to ensure that you have enough caterpillars that will emerge as Butterflies after the tags arrive and enough so that you can tag at least a few butterflies.
4. Once you collect the caterpillars you will need a large jar or container that you can cut ventilation holes in the top or attach a screen or mesh to. It is important that the caterpillars have fresh air to breathe. You can buy Butterfly cages from a store if you wish, but a jar, take-out food container or aquarium also works well. If you are going to use an aquarium, I suggest finding a piece of cardboard that you can lay over the top sealing the lid so they don't escape but leave small spaces for airflow that can be covered by a mesh or cloth. There needs to be a rigid space at the top of the enclosure to allow for a good place for the caterpillar to make a chrysalis (more on this below in step 6).
5. Caterpillars need milkweed to eat so you will need to supply fresh milkweed leaves every couple of days for them to eat.
6. Depending how large the caterpillar is when you collect it, they will remain as caterpillars for a period of time before they make their way to the top of the enclosure to make a chrysalis. During this time the caterpillar will attach its back end to the top of the top of the enclosure and make a "J" shape while it sheds its skin and becomes an emerald green chrysalis. It is important that the lid of the enclosure allows space for this to happen without disturbing the caterpillar and that the lid is ridged enough for this process to happen.
7. Once the caterpillar makes a chrysalis check on it every day. After about 2 weeks the chrysalis will turn black. This is sign that the butterfly will emerge very soon.
8. When the butterfly emerges, its wings are quite shriveled up. At this point you will need to let it pump up and dry its wings before disturbing it. At this stage the butterfly is very fragile. Once the wings are pumped up the tag can be attached to the lower outside part of the wing. A good video explaining how this is done can be found here <https://monarchwatch.org/tagging/>

9. At some point after attaching the tag I would suggest putting the butterfly in a sheltered spot outside where it can fly away once it is ready. Be sure to wave goodbye and say Adios (Spanish for goodbye) so it can learn to speak Spanish to its friends while in Mexico – I am not a scientist, and I can't vouch for the science regarding speaking Spanish to migrating Canadian Monarchs, but I assume it won't hurt).
10. At this point you have been successful in raising and tagging a Monarch Butterfly!

Congratulations and thank you!

Resources and links for videos, photos and tips:

About Monarchs, How you can Help, and How to Raise Monarchs

<https://monarchcrusader.com/>

<https://www.youtube.com/watch?v=OUiywRuNV4>

<https://monarchwatch.org/>

<https://davidssuzuki.org/take-action/act-locally/butterflyway/>

<https://www.nwf.org/MayorsMonarchPledge>

<https://urquhartbutterfly.com/about/frederick-urquhart-a-short-biography/>