

# Budworm Tracker: A Citizen Science Program



Start-up Package  
2016



# Table of Contents

*Start-up Instructions* ..... 3

*Kit Checklist*..... 5

*Trap Assembly*..... 6

*Record of Samples*..... 8

*Contact Information*..... 12

We thank you for your time and for choosing to be a part of the program. Welcome to the 2016 Budworm Tracker team and happy tracking!



# Start-up Instructions

## PART 1 - GETTING YOUR TRAP READY

1. **Program duration:** June 12<sup>th</sup> to August 31<sup>st</sup>, 2016. Please set up your trap on or before June 12.
2. **Equipment:** Ensure all items are in your Budworm Tracker Kit (see checklist pg. 5).
3. **Participant information:** Fill out the 'Contact Information' sheet (pg. 12).
4. **Assembly:** Prepare your trap (see assembly instructions pg. 6 & 7).
5. **Hanging your trap:** Choose a location that is convenient for you to visit. Ideally, this would be near your home, yard, or woodlot and on an accessible lower branch of a spruce or fir tree (see assembly instructions for more details).
6. **Registering your trap (optional):** You may register on our website or download the Budworm Tracker App on your Android or Apple device. If you would like to check in as you visit your trap, the QR code on your trap will take you directly to your account on the website.
  - *Note:* If you participated last year and were registered online, you can use your same login information. If you are new to the program you will be prompted to enter your trap information (name, location of trap, trap ID). After the initial set-up, you will only need your username and password to login.

## PART 2 - CHECKING YOUR TRAP

1. **Checking traps:** To get the most value from your trap, please do your best to adhere to your chosen trap-checking schedule and keep it consistent. At least once per week is the minimum; however, the more frequently you check, the more interesting your data will be!
2. **Collections:** If there are moths in your trap, please clearly fill in the label on one of the paper bags provided and place all the trap contents inside. Place the bag into a freezer as soon as you can to preserve them (their DNA breaks down if they are left in warm conditions).
3. **Reporting:** Once you finish checking your trap, fill in the data sheets provided (pg. 9-12). If you feel so inclined, we encourage you to count your moths, or you can just put a check mark to confirm you checked the trap on a given day. It's important that we know when you checked and whether or not you found moths. Zeros count!
4. Remember, ZEROS COUNT and are extremely valuable data! For us, knowing when there are no moths in your trap is just as important as knowing when they are there.



*Note:* If you are reporting via Website and Smartphone App, please still write your information on the provided data sheets, just to be sure the information doesn't get lost.

### **PART 3 - SENDING YOUR SAMPLES BACK TO US**

1. In the pre-labelled mailing envelope add
  - a. Your 'Contact Information'
  - b. Your 'Record of Samples' data sheets
  - c. The sealed zipper bag with all of your collected samples

### **PART 4 – STORING YOUR TRAP**

1. If you are participating again next year:
  - a. Throw your pheromone lure and insecticidal strip in the garbage.
  - b. Wash your trap with warm soapy water and store in a cool and dry place until next year (we will send new lures, data sheets, etc.).

#### **If you decide that you will not participate again:**

We will cover the return mailing costs for your kit. All you have to do is put everything (including trap, data sheets, and samples) into the original box and put the return address sticker on the outside. Drop this off at the nearest Canada Post and use a Cash On Delivery (COD) method which will be refunded to you by Canada Post once we receive the samples.

#### **Important Notes:**

**\*\*\*Every trap counts, whether it is full of moths or completely empty throughout the season!**

- We will never provide your Contact Information to any outside agency. It will be used only to help us pinpoint where your trap was placed and to contact you about the project.
- If, for any reason, you cannot put your trap up this season but have received it, please let us know as soon as possible.
- If for any reason, you cannot check your trap during a particular week, see if a neighbour, family member or friend can check it for you. The data is important!
- If you caught zero moths all season, we still want your paperwork (especially when and how often you sampled).
- We will post on our website's blog and Facebook throughout the season to update you on what's happening throughout the tracking season and to give you lots of valuable information.
- Your trap ID number is unique and is found on the inside lid of your kit and below the QR code on the trap itself (see image below). This number identifies your trap's data, so always make sure to completely fill in your information on the paper bags with the correct trap number.



# Kit Checklist

## FULL KIT

- |                          |                               |
|--------------------------|-------------------------------|
| <input type="checkbox"/> | Start-up Package              |
| <input type="checkbox"/> | Contact Information Sheet     |
| <input type="checkbox"/> | Record of Samples             |
| <input type="checkbox"/> | Freezer bag                   |
| <input type="checkbox"/> | Paper bags (40)               |
| <input type="checkbox"/> | Vinyl Gloves                  |
| <input type="checkbox"/> | Pheromone Lure                |
| <input type="checkbox"/> | Insecticidal Strip            |
| <input type="checkbox"/> | Wooden Stick for moth removal |
| <input type="checkbox"/> | Trap (pre-assembled)          |
| <input type="checkbox"/> | Return envelope               |
| <input type="checkbox"/> | Pencil                        |

## REFILL KIT

- |                          |                               |
|--------------------------|-------------------------------|
| <input type="checkbox"/> | Start-up Package              |
| <input type="checkbox"/> | Contact Information Sheet     |
| <input type="checkbox"/> | Record of Samples             |
| <input type="checkbox"/> | Freezer bag                   |
| <input type="checkbox"/> | Paper bags (40)               |
| <input type="checkbox"/> | Vinyl Gloves                  |
| <input type="checkbox"/> | Pheromone Lure                |
| <input type="checkbox"/> | Insecticidal Strip            |
| <input type="checkbox"/> | Wooden stick for moth removal |
| <input type="checkbox"/> | Return envelope               |

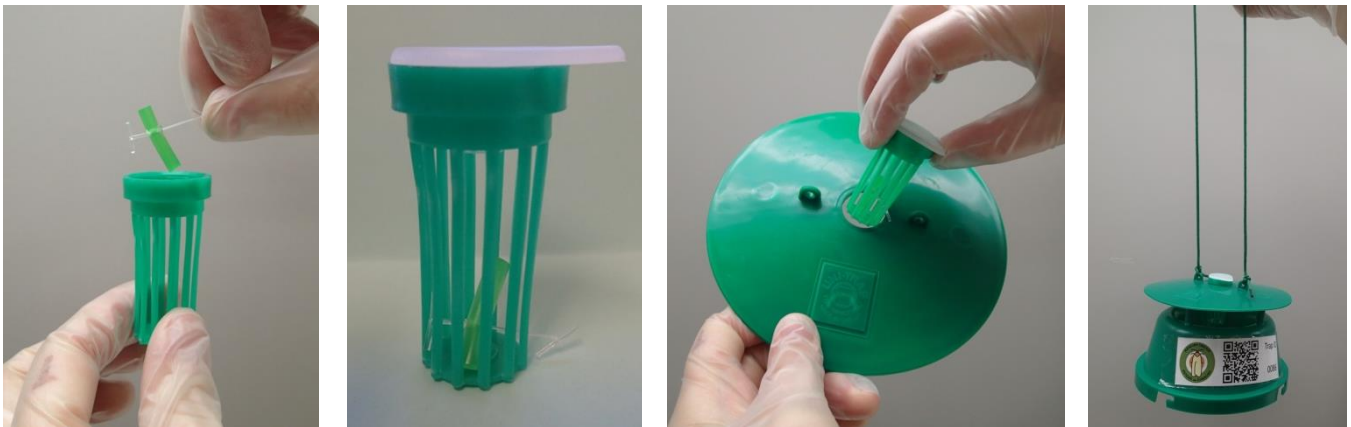


# Trap Assembly

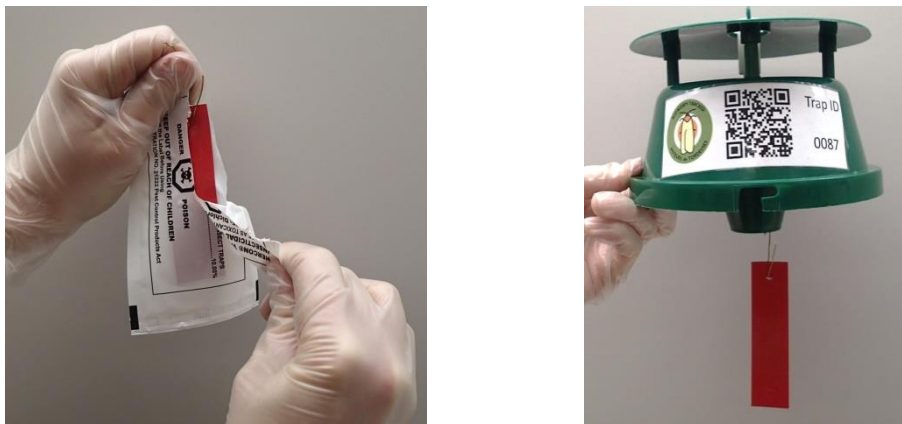
## Trap Components

- Pre-assembled trap
- Pheromone lure
- Pre-installed wire
- Insecticidal strip

1. With vinyl gloves, place the pheromone lure in the lure basket. Carefully put the cap on, the basket is very fragile. Snap the lure basket onto the lid of the trap. Do not touch the pheromone with bare hands as it can decrease the lure's effectiveness.



2. Open the insecticidal strip and place the insecticidal strip in the wire at the base of the funnel.

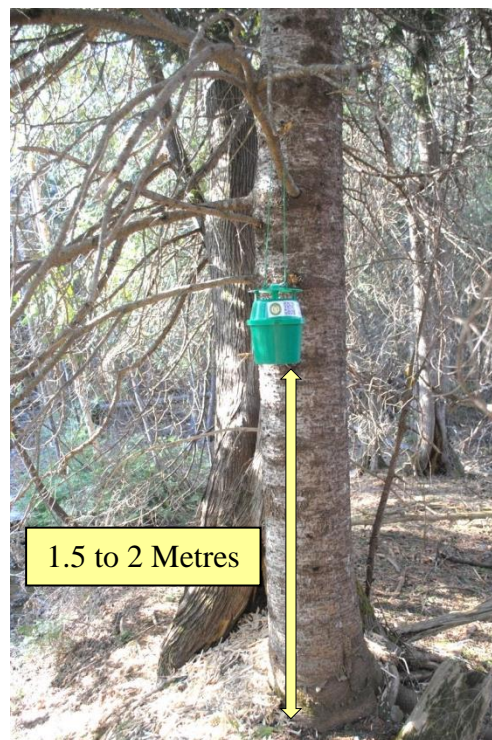


3. Connect the funnel and the bucket together with a twist.



4. Trap set-up

- a. The trap needs to be in a wooded area
- b. It needs to be hung on a tree at eye level
- c. It should be placed somewhere you are willing to access for the tracking season
- d. It needs to be at least 5 meters into the tree line and,
- e. It needs to be away from any lights that are left on overnight.



## Record of Samples

Please print clearly and return this sheet at the end of the season.

**Remember, zeros are important!**

You do not have to count all the moths, but you do need to keep a record of every visit to your trap, whether they catch moths or not. Please bag everything you find inside the trap, including other insects.

Name: \_\_\_\_\_

Trap Number: \_\_\_\_\_

Date (DD/MM/YY)	Moth Count	Comments
Ex: 05-07-16	0	No moths, rainy day
Ex: 12-07-16	5	First moths of the season
Ex: 19-07-16	1	One moth and other insect





Include in return shipping envelope

<b>Record of Samples</b>		
<b>Date (DD/MM/YY)</b>	<b>Moth Count</b>	<b>Comments</b>



## Record of Samples

Date (DD/MM/YY)	Moth Count	Comments



Include in return shipping envelope

## Record of Samples

Date (DD/MM/YY)	Moth Count	Comments



<b>Contact Information</b>	
Name	
Trap ID	
Telephone Number	
Email	
Mailing Address	
Trap Address (if different from above)	
Trap Collection Frequency	
Set-up Date	
Tear-down Date	
Do you wish to participate next year?	Yes      No      (Circle Answer)

