



Step-by-Step Guide to Monitoring Pollinators

1 Set Up Your Monitoring Paths ('Transects')

- Choose several **straight paths** (transects) of **50 meters long and 1.5 meters wide** in your fields.
- Set them up in different spots, for example:
 - Close to field edges (especially near flower strips, hedgerows, or any off-field intervention).
 - In the middle of your field.
- Use existing farm paths (like tramlines) to make walking easier, especially in dense crops.

2 Walk the Transects to Monitor Bees

- Walk each transect **slowly** for **7.5 minutes**, carefully looking for bees within the 1.5-meter width.
- If you can identify the bee (e.g., honey bees), **just record it**. If not, gently capture it with a **butterfly net** and store it in a vial.
- Label each vial with the location where the bee was caught, and take it for identification later.
- Make sure you don't double-count the same bee!

3

Monitor Other Pollinators Along the Same Transects

You can use the same transect walks to count other pollinators like **butterflies** and **hoverflies**. Here's how:

- **Butterflies:** As you walk the transect for bees, keep an eye out for butterflies. You can count them on your way back along the same transect.
 - Butterflies are easy to spot and can be identified to species level without needing to capture them.
- **Hoverflies:** These pollinators look like small bees or wasps but are harmless flies.
 - You can either count them in simple numbers or identify them to species if you're trained in hoverfly identification.
 - If you're new to hoverflies, it's fine to start with just counting them rather than trying to ID them to species.



4

Record the Weather Conditions

- Record the **temperature**, **cloud cover**, and **wind** before you start each transect walk. This helps explain any changes in pollinator activity.
 - Use a simple thermometer to measure the temperature about 1.5 meters above the ground, both in the shade and in the sun.
 - Note whether it's calm or windy. Pollinators are less active on windy days.

5

Monitor Flower Cover

- After counting pollinators, estimate how many flower units are in the transect area. This helps you understand how many flowers are available for bees and other pollinators.
- Count roughly how many flowers each species produces in your transect and record them.



Other Pollinators to Look for

Butterflies



- **Why they matter:** Butterflies are sensitive to changes in habitat quality and can indicate the health of your farm's ecosystem.
- **How to monitor:** As you walk the transect looking for bees, count the butterflies you see fluttering around flowers or flying through the air. You don't need to capture them—just note the species if you can recognize them.

Common species you might spot:

- **Peacock butterfly** (bright eyespots on wings).
- **Small white** (white wings with small black spots).
- **Red admiral** (black wings with red bands)

Hoverflies

- **Why they matter:** Hoverflies are excellent pollinators and often mistaken for bees or wasps because of their striped bodies. They also help control pests by feeding on aphids.
- **How to monitor:** Hoverflies can be counted either by simple numbers or by species if you're trained. They often hover around flowers and can be seen feeding on nectar.

Common species you might spot:

- **Marmalade hoverfly** (orange body with black bands).
- **Drone fly** (looks similar to a honeybee but is a fly).



Other Pollinators

- **Bumblebees:** Larger than honeybees, often with fuzzy bodies. Different species have different color patterns, like white-tailed or red-tailed bumblebees.
- **Solitary bees:** These include leafcutter bees and mason bees. They are usually smaller and less social but are very efficient pollinators

6 When and How Often to Monitor

- **Timing:** Aim to monitor between 10:00 AM and 5:00 PM on warm, sunny days when pollinators are most active.
 - Ideal conditions: **Above 13°C** with 60% clear sky, or **above 17°C** even if cloudy.
- **Frequency:** At least two rounds of monitoring are the minimum, but four rounds spread across the season are recommended to capture how pollinator activity changes over time.
 - If possible, alternate monitoring between morning and afternoon.



7 Monitor in Different Weather Conditions

- While it's best to monitor pollinators on sunny days, it can be helpful to also check during cloudy or hot days to see how pollinators respond to less-than-perfect weather.

Final Tips for Effective Monitoring

- **Try Not to Disturb:** Do your flower counting after you finish looking for pollinators so you don't scare them away.
- **Start Simple:** If identifying different species seems challenging, start by counting pollinators in general, then build up your identification skills over time.
- **Consistent Records:** Keep good notes on the weather, timing, and what you observe each time you monitor. This will make it easier to spot trends and patterns.

By following these steps, you can easily monitor bees, butterflies, hoverflies, and other pollinators on your farm. This helps you see how well your biodiversity efforts are working and understand the overall health of your farm's ecosystem.

Pollinators	Amount whitnessed	Distance (Transect Length)	Transect Width	Time per Transect (Minutes)
Bees (e.g. honey- bees, bumblebees, solitary bees)				
Butterflies				
Hoverflies				
Other Pollinators				

Observations

