



Asian Hornet

INTRODUCTION





Introduction

Dear teacher,

In this package, your students will explore the Asian hornet (*Vespa velutina*) in an active, inquiry-based, and creative way. The Asian hornet is a current and growing threat in Belgium. This invasive wasp species poses a danger to our native pollinators, biodiversity, and agriculture. By informing students and actively involving them, they contribute themselves to protecting our biodiversity and food supply. No prior knowledge is required. The scientific information is clearly explained, and where necessary we refer to professional online resources.

This package consists of 7 ready-to-use lesson sheets based on the insect's life cycle (see Figure 1), nicely spread throughout the school year. Each sheet includes:

- Activities with instructions and required materials
- Clear learning objectives
- Sufficient background information
- References to useful additional resources

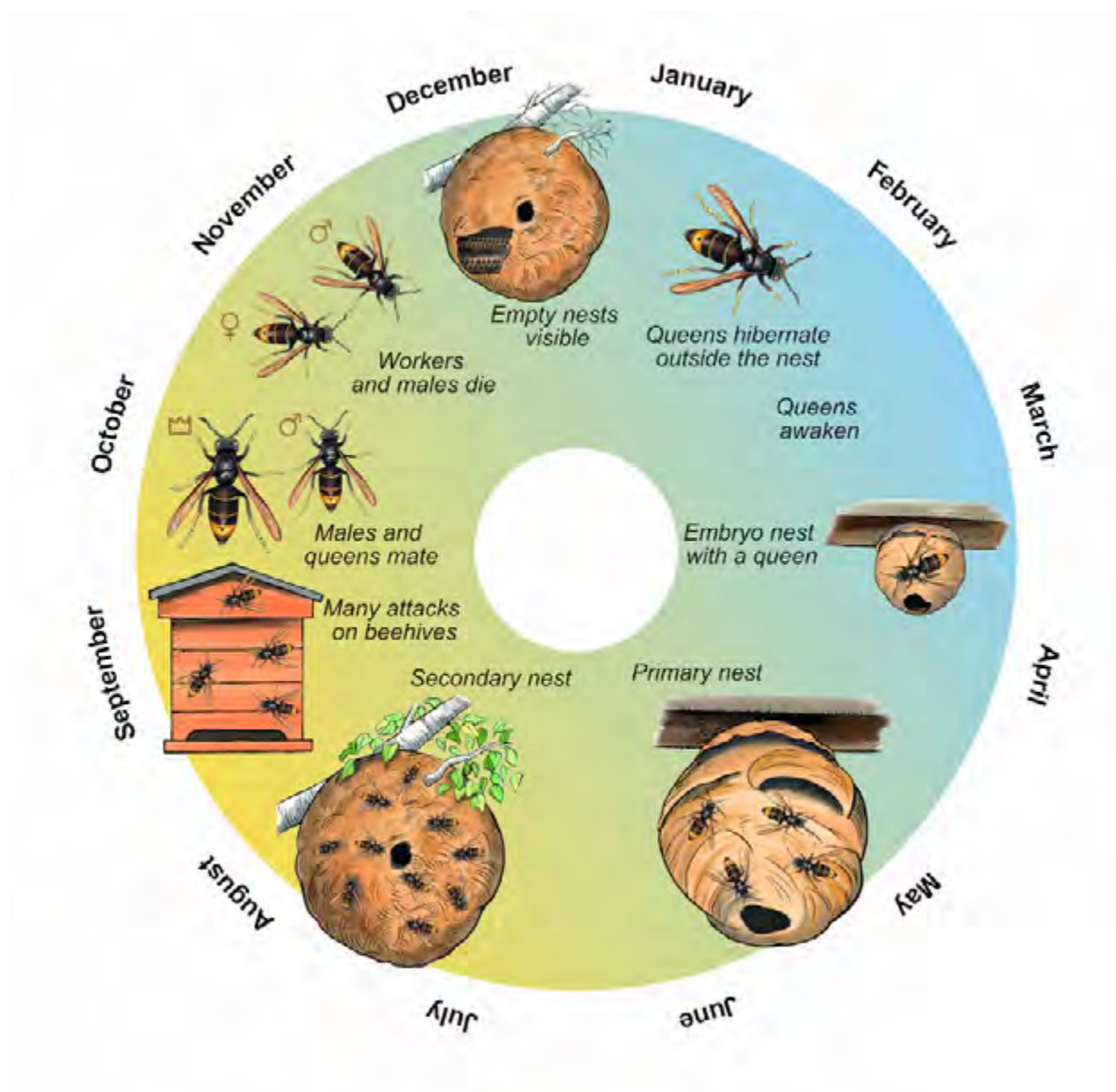
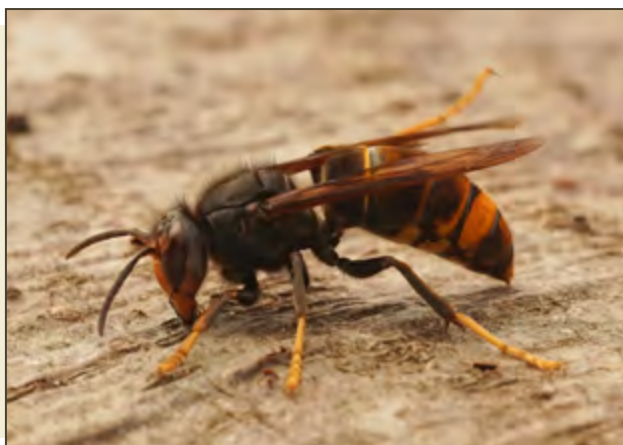


Figure 1: Life cycle of the Asian hornet. Source : [Le Frelon asiatique et son piégeage](#)



Overview

SHEET	TITLE	CONTENT	PERIOD
1	Introduction to the Asian hornet	What's going on? Students get to know the species and understand why it is a problem.	September
2	Impact on agriculture and nature	Why does it matter? Students discover how the Asian hornet affects bees, nature, and agriculture.	September - October
3	Nest detection in autumn: recognizing and reporting nests	What can we do? Students learn to identify nests and understand the importance of timely reporting.	October - November
4	Creating a flower meadow	How can we help nature? Students experience that they can take positive action for pollinators.	October - November
5	Build your own hornet trap	How do we tackle this? Students build a trap and learn about its construction and functioning.	January - February
6	Monitoring and data analysis	We observe what happens. Students collect data and learn how to analyze it.	March - April
7	Communication and reflection: show your impact!	Sharing what we learned. Students present their work and reflect on their learning process.	May - June



Safety and responsibility

This project is entirely educational and observational: students learn to observe, identify, and report, but never carry out dangerous actions.



DO'S

- **Observe and record:** enter observations via [Waarnemingen.be](https://www.waarnemingen.be)
- **Learn to identify:** focus on biology, ecology, and biodiversity
- **Know first aid:** teachers know what to do in case of a sting
- **Inform parents:** make arrangements for students with known allergies (e.g. keeping distance, carrying an epinephrine auto-injector)



DON'TS

- Students do not catch or handle hornets
- Nests are never approached or removed
- Only adults place and empty traps



What to do in case of a sting (Poison Control Center)

- Stay calm and move away from the nest or trap
- Remove the stinger only if it is visible (Asian hornets usually do not leave one behind)
- Cool the sting area with ice or cold water
- **In case of a severe allergic reaction: call emergency services (112)**
- In case of significant swelling: consult a doctor



Responsibility

- The school provides clear instructions and supervision
- Parents are informed in advance
- The prevention advisor carries out a risk assessment and determines any additional measures
- GoodPlanet and Rotary are not liable for stings or accidents when using traps; users are responsible for taking necessary precautions

Tip: Display this sheet prominently in classrooms and near first aid stations.



Asian hornet

INTRODUCTION TO THE ASIAN HORNET





1. Introduction to the Asian hornet

Information for the teacher

The Asian hornet (*Vespa velutina*) is an invasive species that has been present in our country since 2016. It is larger than a common wasp, but smaller than the European hornet (see Figure 2). The main identifying features at a glance:

- Dark body with one orange band on the abdomen
- Black head
- Black legs with yellow tips ("yellow socks") – which is why it is also called the yellow-legged hornet



Figure 1: distinguishing an Asian hornet from similar species (source: De Morgen)

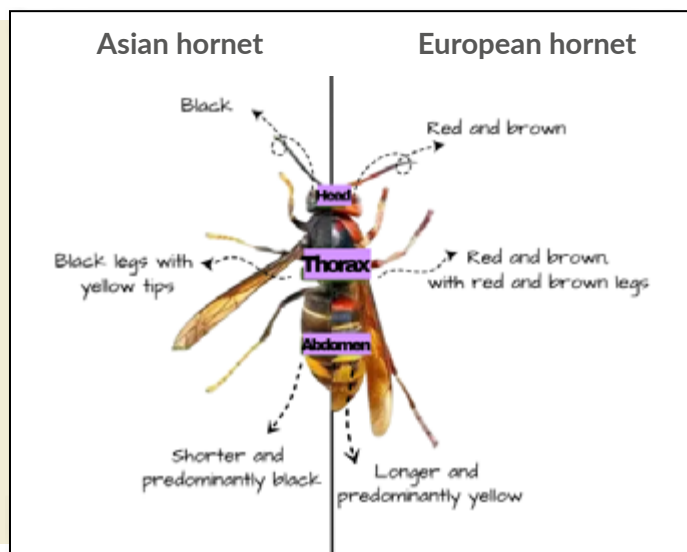


Figure 2: characteristics of the Asian and European hornet

Still having trouble telling them apart? Take a look at:

- [Learn to recognize the yellow-legged hornet | Vespawatch](#)
- [Aziatische hoornaar | Natuurpunt](#)
- [Europese hoornaar | Natuurpunt](#)

LEARNING OBJECTIVES

World orientation & ecology

- Recognize the main physical characteristics of the Asian hornet and distinguish it from similar species

Citizenship

- Understand that humans play a role in the spread and management of invasive species

Communication

- Be able to give a simple explanation of what the Asian hornet is and why it receives attention



Activity



50 min

In short

In this lesson, students learn what the Asian hornet is and how to distinguish it from other insects such as bees, wasps, and the European hornet.

Materials

- Worksheet 1
- Internet access

Lesson plan

1. Class discussion: What do we already know? (10 min)

- Start with an open question on the board:
 - “What do you know about the Asian hornet?”
Let students respond freely.
Write down all answers (even incorrect ideas are useful as a starting point).
- Ask follow-up questions:
 - Have they ever seen one? Where?
 - Did they think it was a wasp?
- Create a theme column on the board (bee – wasp – hornet – “not sure”) and collect observations or assumptions together.

2. Informative explanation (15 min)

- Show clear photos of a honeybee, wasp, European hornet, and Asian hornet. You can use vespawatch.be
- Ask: “What do you notice about this insect?”
Let students name characteristics (e.g. black legs with yellow tips).

3. Comparison: bee – wasp – hornet (25 min without extras)

- Give students Worksheet 1 (see below). In pairs, they:
 - Identify characteristics
 - Indicate which insect they think they see
 - Look up information about the Asian hornet

4. Fun extras :

- **Nature reporters**
Let each pair come to the front and share their discovery using a (toy) microphone, as if they were nature reporters. Other students can respond with “ooh”, “wow”, or a small round of applause.
- **Podcast moment**
Let pairs record their discovery and feelings using a tablet or smartphone as a mini podcast “Buzz FM”. You can share the recordings with parents to involve them in the topic.
- **Quiz**
 - Create quiz questions together (true/false or multiple choice).
Examples:
 - “The Asian hornet is bigger than a bee.” ✓
 - “It only lives in Asia.” ✗
 - “It hunts other insects.” ✓

You can do this on the board or digitally (e.g. Kahoot).

Tip: share the quiz with parents.



Worksheet 1: Who's buzzing there?

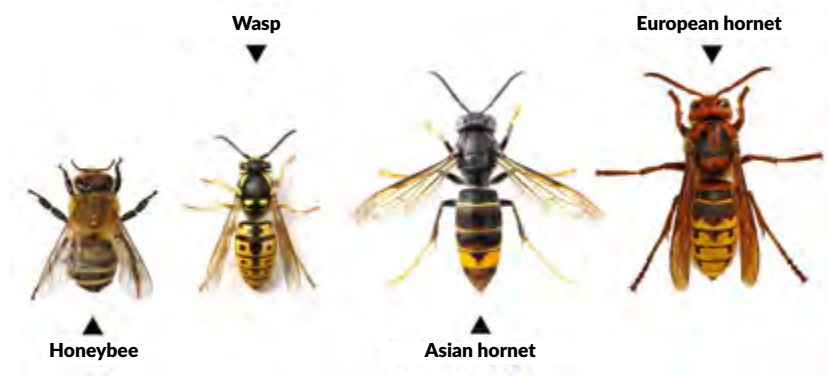
NAME:

CLASS:

DATE:

1. Insect detectives at work!

You will see four buzzing insects.



Look carefully at each insect and write down or tick what you observe!

INSECT	Head color	Leg color	Abdomen color	Size
Honeybee				☐ Small ☐ Medium ☐ Large
Wasp				☐ Small ☐ Medium ☐ Large
European hornet				☐ Small ☐ Medium ☐ Large
Asian hornet				☐ Small ☐ Medium ☐ Large



2. GUESS THE INSECT

Look carefully at the image.

Which species do you think it is?

We think it is a:

.....



3. What makes these animals special?

Use a tablet or computer and look up information about one of the following insects:

- Asian hornet
- European hornet
- Wasp
- Honeybee

Write down one striking fact and how it made you feel.

My cool fact is:

How it made me feel :

☐ Surprise

☐ Amazement

☐ Fear

☐ Curiosity

☐ Something else :

Why did you feel that way?

4. Share your discovery with the class!

What did you find most surprising, strange, or cool about your insect?

(Think of one sentence to read aloud)



Asian hornet

IMPACT





2. Impact on nature and agriculture

Information for the teacher

The Asian hornet actively hunts pollinators such as honeybees, bumblebees, solitary bees, flies and wasps. It is clever and efficient: it often targets insects that live in colonies, such as honeybees and bumblebees, as this makes it easier to catch large numbers of prey quickly. This makes beehives an attractive food source for it, where it 'hoovers' in the air until prey appears.

Although honeybees are often the most visibly affected, an Asian hornet colony can capture up to 10,000 pollinators per season. This can weaken local bee populations or even cause them to disappear. This is problematic, as pollinators are essential for the fertilisation of plants, flowers, vegetables and fruit trees. Fewer pollinators mean fewer fruits, lower agricultural yields and a disrupted ecosystem. Continuous attacks can weaken or wipe out bee populations, and the survival of other pollinators may also be affected as a result. The Asian hornet is an exotic species and has no natural enemies in our region. Moreover, our native insects are not adapted to defend themselves (unlike the insects in Asia, its native habitat). The presence of the Asian hornet therefore poses a serious threat to both biodiversity and our food production, although honeybees are often the most visibly affected.

Further informations here: [What is the issue?, Vespa-Watch](#).

LEARNING OBJECTIVES

- **World Orientation & Ecology**
 - To make connections between biodiversity and agriculture.
 - To gain an understanding of ecological relationships such as predation, defence and cooperation.
 - To understand that cooperation contributes to survival, both in insects and in humans.
- **Citizenship**
 - Gain an understanding of human impact on nature and agriculture.
 - Recognising that humans can be both the cause of problems and part of the solution.
- **Mathematics & STEM**
 - Practising calculating differences, percentages and averages.
 - Learning to collect, interpret and compare data.
- **Communication**
 - Explaining findings and conclusions clearly and comprehensibly to others.





Activity 1 – Who is threatening our fruit harvest?



variable

In short

In this task, pupils learn about an expert's experiences or watch a short video. This allows them to discover first-hand the role pollinators play and the impact of the Asian hornet. By listening actively and reflecting together afterwards, they learn to make connections and apply their knowledge in real-life situations.

Necessities

- Guest speaker (bv. beekeeper, fruit famer, natureguide) or a video

Lesson structure

- Invite a beekeeper, fruit grower or nature guide, or show a video about the role of pollinators and the threat posed by the Asian hornet (e.g. the e-learning clip 'The impact of the Asian hornet on a bee colony').

Tip: Ask the speaker to show examples (e.g. a beehive, fruit with/without pollination). You can contact potential speakers yourself, for example:

- Beekeepers: [Verenigingen - Vlaams Bijeninstituut vzw](#)
- Fruit farmers: [pcfruit | Proefcentrum Fruitteelt VZW](#)
- Nature guides: [Natuuracademie | Natuurpunt](#)
- Ask the pupils to complete a listening task: 'Write down three things you learn during the conversation or video.'
- Afterwards, discuss what they have learnt so far:
 - What did they already know?
 - Was it surprising?
 - What will happen when there are less bees?
- Use a Venn diagram on the board (e.g. – hornet – beekeeper/fruit grower) to highlight the connections.
- **Optional:** Ask the pupils to conduct a newspaper interview or podcast interview for Buzz FM with the guest speaker.





Activity 2 – The impact on our agriculture



30 MIN

In short

In this activity, pupils explore the impact of the Asian hornet on agriculture, the natural world and our daily lives. By linking causes and effects, they see how a single insect can influence an entire ecosystem. In this way, they learn to think in terms of connections and understand the importance of cooperation in a fun and engaging way.

Necessities

- Worksheet 2A (cause-and-effect circle)
- Pencil or marker
- Optional: a ball of wool or thread (for the 'living' spider's web)
- Space to stand in a circle (for the interactive version)

Lesson structure

- La présence du frelon asiatique a de lourdes conséquences pour l'agriculture, et pas seulement pour la production de miel. Pour comprendre cela, les élèves peuvent utiliser la fiche 2A (voir annexe), où ils réfléchissent (collectivement ou individuellement) aux conséquences de la présence du frelon asiatique dans nos régions. Le cercle présente 12 courtes affirmations sur les causes et les effets. En reliant par des lignes tout ce qui est lié, les élèves construisent eux-mêmes une toile d'araignée de liens. Ils voient ainsi comment un petit insecte peut mettre tout un système en mouvement. Cette méthode est idéale pour :
 - Stimuler la pensée systémique
 - Visualiser des liens complexes
 - Lancer des discussions sur la nature, l'agriculture et notre rôle dans tout cela
- **Variante :** Vous souhaitez rendre l'activité un peu plus dynamique ? Vous pouvez alors transformer cet exercice en une activité de groupe en mouvement : la toile d'araignée vivante. Voici comment cela fonctionne :
 - Distribuez à chaque enfant une carte issue du cercle (cause ou conséquence).
 - Faites former aux élèves un grand cercle, en veillant à ce que chaque carte soit bien visible.
 - Un élève lit sa carte à haute voix.
 - Ceux qui pensent que leur carte est une conséquence de cette affirmation lèvent la main et expliquent le lien.
 - Si le lien est correct, lancez une pelote de laine ou un fil à cet élève, et ainsi commence la toile d'araignée.
- **Questions de réflexion :**
 - Qu'as-tu ressenti en construisant la toile d'araignée ? As-tu trouvé ça excitant, amusant, difficile... ou autre chose ? As-tu eu l'impression que tout était lié les uns aux autres ?
 - Penses-tu que les gens comprennent suffisamment l'importance des abeilles, des arbres et des fleurs ? Pourquoi, à ton avis, certaines personnes en ont-elles conscience alors que d'autres non ?
 - Connais-tu d'autres exemples montrant comment les humains et la nature sont connectés ? Que se passe-t-il pour les humains quand la nature va mal ? As-tu déjà ressenti cela toi-même ?
 - Penses-tu que nous pouvons faire plus ensemble que chacun seul ? Pourquoi la coopération est-elle importante pour résoudre des problèmes comme celui du frelon asiatique ?





Activity 3 – Bee outdoor game



50 MIN

In short

Pupils take part in an active outdoor game in which honeybees pollinate flowers and bring nectar back to the hive, whilst Asian hornets try to catch the bees.

The game demonstrates how vulnerable bees are and how cooperation increases their chances of survival. In round 2, the concept of defence is introduced via the Japanese honeybee, so that pupils learn about adaptation and cooperation in nature.

Supplies

- Worksheet 2B (game rules for teacher)
- Space to play (playground, sportfeeld) or inside (gym)
- Flowers or hula hoops spread all over the site
- Beehive (startpoint) and fruitbasket
- Fruit or alternative material (cards, pictograms) to “pollinate” flowers.
- Any markings or ribbons to set out the playzones
- Pencil/marker for scoreboard and reflection questions

Lesson structure

You can read the full rules of the game in Worksheet 2 (see appendix).

This game is designed to be played outdoors, where children not only get some exercise but also benefit from fresh air, natural light and the positive effects of nature on their well-being.

No outdoor space available? No problem. The game can also be played indoors, for example in a gym. This way, fun and exercise are guaranteed.

Tip: If you'd like to find out more about biodiversity and biodiversity webs, take a look at the GoodPlanet 'Heart for Bees' educational pack.





Activity 4 – What do I tell at home?



30 MIN

In short

Pupils write a short piece of text of 4–6 sentences in which they explain at home what they have learnt about the Asian hornet, its impact on pollinators and why this is important. The aim is to consolidate their knowledge, express it in their own words and practise their communication skills.

Supplies

- Worksheet or empty paper for the students
- Board and markers (for schedule and structure)
- If necessary, recording equipment for podcasts/small groups
- **Optional:** list with difficult words or cards with vocabulary

Lesson structure

- Start by asking the pupils: *'Imagine you come home and your parents ask, 'What did you learn today?' What would you say about the Asian hornet?'*
Let a few pupils answer spontaneously. This helps everyone get started.
- Draw a simple scheme on the board to give some structure (if necessary)
 - What is the Asian hornet?
 - What is the impact for our pollinators?
 - Why is this important?
- Let the pupils write a text of 4-6 sentences.
Help them remember:
 - Write in the first person
 - Make it sound as if you're really telling a story at home
 - Say that if they've forgotten a difficult word, to describe it in their own words
- Ask a few pupils to volunteer to read aloud in small groups or in the playground, or contribute to the podcast.
- Focus on positive feedback: *"What did you like about your classmate's text?"*





Activity 5 – Honey party



variable

In short

Pupils invite their parents to prepare a dish using honey, perhaps with a personal or cultural twist. In this way, children learn about the theme of the Asian hornet and pollinators together with their families, whilst the class discovers a variety of flavours and stories.

Supplies

- Honey and ingredients for the chosen recipes
- Optionally family recipe or a short description of the dish
- Board or wall for world map (optionally)
- Materials for pictures (for optional recipe booklet)
- Spoons, plates, napkins, table space for taste moment

Lesson structure

- Organise a honey party: invite parents to make a dish with their child where there is honey incorporated.
 - It can be as simple or extended as they want.
 - A cultural or personal touch is an advantage: a family recipe, something from their country or origin, or a vacation dish.
 - They bring the dish to their school, together with the recipe and a short story about the origin.
- Why do we do this?
 - It gives parents an active, but approachable role in this theme.
 - It makes space for cultural diversity: every family can share their own tastes and stories.
 - The tasting moment in the classroom enhances the bond between school and home.
- **Tips:**
 - Combine the tasting moment with a world map and let children prick where “their” honey recipe comes from.
 - Make a class recipe booklet with pictures of the tasting moment.





WORKSHEET 2A – The consequences for agriculture

NAME:

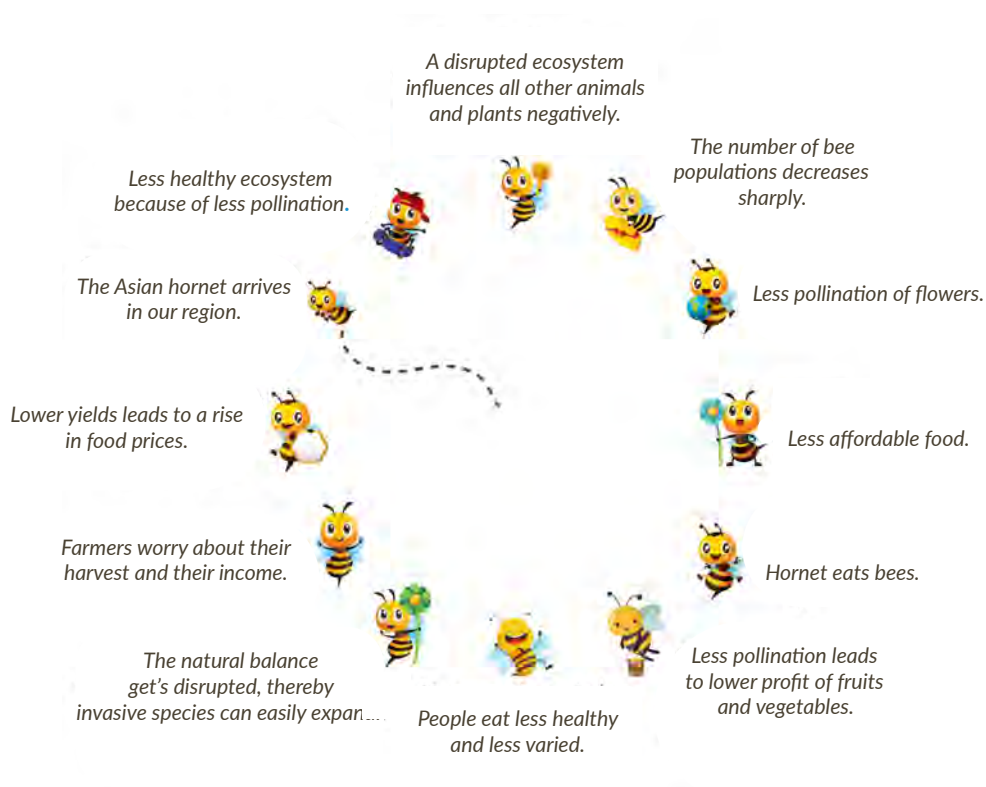
CLASS:

DATE:

The Asian hornet may seem like just a tiny creature, yet it sets off a chain of consequences. A single attack on a beehive could ultimately even have an impact on the food on your plate!

Your task: Take a close look at the 12 statements in the circle. They are all causes or consequences of one another. Draw lines between everything that is connected. Try to make as many logical connections as possible. The bigger your spider's web, the better you show the connections!

Tip: Keep asking yourself: "If this happens... what would come of it?"





WORKSHEET 2B – Game rules for ‘Bee outdoor game’ for teachers

1. Goal of the game

Honeybees try to pollinate flowers and bring their nectar back to the hive. Hornets are predators and try to catch the bees before they return. Together, we discover just how vulnerable pollinators are within the ecosystem.

2. Play space

- Draw or arrange flowers or hoops around the grounds or playground.
- A beehive (starting point) and a fruit basket are positioned to the side.
- The aim of the game is to match each flower with a piece of fruit. This fruit can be real fruit, but it can also be cards, drawings, etc.
- The game ends when all but one of the flowers have produced a fruit OR when all the honeybees have been eliminated.

3. Game rules

ROUND 1 – European honeybees

Rôles : European honeybees (~80% of the pupils) vs. Asian hornets (~20% of the pupils)

1. Bees run fast and pollinate flowers

- After touching two flowers, they may deposit a piece of fruit on the second flower and return to the hive to collect another piece of fruit.
- If the bees get tagged → return the fruit, then wait to the side.

2. Hornets can only tag bees, not each other.

3. Educational insight: Our Belgian honeybees have no effective defense strategies against the Asian hornet.

Explain how vulnerable our own honeybees are to the Asian hornet, as they lack natural defence strategies. Show how Asian hornets have adapted evolutionarily. In reality, they form a ‘bee ball’ and heat the hornet to death ([link to video](#) – in English). Our bees do not (yet) exhibit this behaviour, which makes them very vulnerable.

ROUND 2 – Asian honeybees

In this round, we introduce the **Vespa mandarinia japonica**, or the **Japanese hornet**. It really does exist and is terrifying. Measuring 5 centimetres in length, it is one of the world’s largest hornet species and is the natural enemy of the Asian hornet. Being stung by a Japanese giant hornet is no fun. The stinger is over half a centimetre long and the venom attacks your nervous system. Don’t panic, though: the Japanese hornet cannot survive in Belgium or the rest of Europe due to the dry and cold climate. In Japan, hornets live in a tropical climate.

New rules: coöperation and defence!

1. Bees:

- They can defend themselves when there are two of them → together, they can tap the hornet and take it out. Note that working in pairs is slower, as they can only take one piece of fruit per pair.
- Alone = vulnerable, but faster.

2. New player: Japanese hornet (1 pupil):

- Can eliminate all bees and Asian hornets by tagging them.
- Can not be tagged.

Educational insight: Some Asian bee species, such as the Asian honeybee, have developed defence mechanisms (e.g. forming a ball around the hornet until the temperature rises and oxygen levels become so low it kills the hornet). Asian honeybees are better able to withstand high temperatures and survive.



4. Scoreboard

CATEGORY	Round 1	Round 2	Optional questions
Fruit arranged on a bed of flowers			How many more or less flowers got successfully pollinated in round 2?
Number of captured bees			How many percent of the bees got captured in each round?
Time until the game stopped			Which round lasted the longest? How many minutes difference is there between both rounds?
Number of hornets eliminated			In which round most of the hornets got eliminated? Why?
Efficiency			In which round did the bees work more efficient? Calculate $\text{fruit} \div \text{time}$.

5. Réflexion

- In which team did you feel the strongest?
- What was more honest or harder?
- What would happen if our bees could work together, just like the Asian honeybees do?
- Is it bad if there is a lower production of food (such as fruit) ?





Asian hornet

NESTS





3. Recognizing and reporting nests of the Asian hornet

Information for the teacher

The Asian hornet is an exotic species of wasp that has been present in Belgium since 2017. Its population has grown rapidly in recent years due to a combination of factors. First, they have few natural predators in Belgium, which allows their nests to develop undisturbed. In addition, the hornets find abundant food sources near human activities, such as beehives and fruit trees, enabling them to reproduce rapidly. Their adaptability also allows them to settle in various environments, from garden sheds to large trees, and even sewer manholes.

Several factors have contributed to the rapid spread of this species. It arrived in France from Asia via maritime traffic and then quickly spread northward through Flanders. It was subsequently able to expand locally thanks to favorable climatic conditions and a wide range of potential nesting sites. The combination of efficient reproduction, a judicious choice of nesting sites, and the absence of natural predators has led to the current sharp increase in its population.

Nests can be submitted via the [Vespa-Watch](#) platform, where experts assess whether it is a genuine hornet's nest and, if necessary, call in a pest control operator. Furthermore, monitoring helps researchers to map out distribution patterns, so that preventive measures can be implemented in a targeted and effective manner. Pupils can investigate this trend themselves using real data from Vespa-Watch, the nest reporting platform.

HOW TO RECOGNIZE A NEST?

An Asian hornet nest is constructed from wood pulp. They build two types of nests. In the spring, queens build a small starter nest (primary nest), often under a roof or in a bush. In the summer, the workers build a large main nest (secondary nest), usually high up in trees.

1. Primary nest (startnest)

- **Period:** Spring (april–june) = Best time to stop the expansion early
- **Location:** sheds, birdhouses, gutters, stables, under small shelters; sheltered and dry spots close to the ground
- **Characteristics:** small (the size of a tennisball), spherical, often a few centimeters in size; a single queen builds the nest
- **Why it is important:** still small and relatively easy for exterminators to remove

2. Secondary nest (main nest)

- **Period:** Summer to Autumn (july–october)
- **Location:** high in trees, sometimes attached to building; less often under the ground or in bushes
- **Characteristics:** large (about the size of a football), spherical or pear-shaped, with a side entrance; home to thousands of hornets; dangerous to approach directly
- **Why it is important:** The colony is fully grown and strategically located; reports ensure a professional response

It can be difficult to tell the difference between a wasp nest and a hornet nest when the nest is just starting to form. You can often recognize a wasp nest because it is smaller and hidden in the ground, a wall, or under a roof, whereas a hornet nest is usually much larger, hangs high in a tree, and always has a clearly visible side entrance.



Figure 1: Left: a young primary nest attached to the ceiling.
Source: Vespawatch



Right: Secondary nest with clear sideways flight opening.



LEARNING OBJECTIVES

- World orientation – Observation and research
- Digital skills – Using an online reporting platform Online
- Citizenship – Take action in a safe and responsible way
- Expression and technology – Handicraft and creativity
- Language and presenting – Communicative skills

Activity 1 – Recognizing nests



20-30 MIN

In short

A classroom activity in which students examine photos of primary and secondary hornet nests and compare their characteristics, such as shape, location, color, material, and entrance. In this way, they learn to distinguish between hornet, wasp, and bee nests.

Supplies

- Beamer/tablet or print of pictures
- Worksheet or overviewtable
- Board for classroom discussion

Lesson structure

- Look together at pictures of nests via [Identification - Vespa-Watch](#) and go through the following questions:
 - What stands out about the nests?
 - What stands out to you about the shape, color, or texture of this nest?
 - Where is the entrance to the nest (on the side, typical of the Asian hornet)?
 - Where is the nest located? What does that tell us about the hornet's choice of location?
 - What does the nest seem to be made of?
 - What could be dangerous about having a nest like that in your neighborhood?
- Overview:

Characteristic	Primary nest	Secondary nest
Shape	Mostly round	Round or pear-shaped
Location	Sheltered spot: shed, eaves, hedge, birdhouse	High in trees, sometimes in buildings
Entrance	At the bottom	On the side
Colour	Grey/Brown, paper colour	Grey/Brown, paper colour
Size	Small (size of a tennisball)	Big (size of a football)
Material	Fine wood fibres chewed into paper	Fine wood fibres chewed into paper
Period of usage	Spring (april–june)	Summer–Autumn (july–october)



Activity 2 - Search for nests



50-100 MIN

In short

Pupils go on an exploration of the school grounds to observe real or fictional hornet nests, using binoculars and following safety instructions. Back in the classroom, they practise reporting their observations using a worksheet or an online platform.

Supplies

- Binoculars (optional)
- Observation/report form
- Tablets or computers for online observations

Lesson structure

- **Take the class for a walk around the school grounds (woodland, gardens, edge of the playground)**
 - **Tip** : Check Vespa-Watch to find out where hornets have been spotted
 - Ask the pupils to use binoculars (if possible)
 - Look towards the treetops, the edges of roofs or bushes
 - Stress the importance of safety: don't get too close, just observe.
- **Back in class – Making a test report**
 - Based on a sighting (real or made-up): fill in a report together
 - Ask pupils to consider a real or fictional situation: *"You see a nest high up in a tree in the school playground. What do you do?"*
 - Link this to an online platform if tablets are available:
Enter a sighting for [the Asian hornet - Waarnemingen.be](https://www.waarnemingen.be)

Activity 3 – Make your own nest!



80-100 MIN

In short

Pupils build a model of an Asian hornet's nest, learning about nest types, building materials, structure and the importance of identification. They link practical experience to biology and gain an understanding of the ecology of this invasive species.

Supplies

- Worksheet 3A
- Balloon
- Papier-mâché
- (News)paper
- Scissors
- Glue
- Paint (grey, brown, beige)
- Brushes
- Rope to hang the nest
- Exhibition space



Lesson structure

1. Preparation

- Make papier-mâché glue: DIY zelf papier mache lijm maken - paper mache paste
- Lay out all the materials on tables for each group.
- Briefly discuss the differences between primary and secondary nests: size, location, shape and entrance.

2. Make the basis

- Inflate a balloon to form the base of the nest (small for the primary nest, large for the secondary nest).
- Tie the end securely.

3. Applying papier-mâché: Papier-mâché balloon

- Dip the strips of newspaper into the papier-mâché paste.
- Cover the balloon completely with a first layer.
- Leave the layer to dry for a few minutes.
- Apply 2–3 extra layers for strength.

4. Creating the entrance

- Make an opening on the side of the nest (typical for the Asian hornet).
- If necessary, use a small roll of paper or cardboard as a template for the entrance.

5. Finishing and colour

- Let the nest dry completely (bij voorkeur a whole day).
- Paint the nest in natural colors: grey, brown or beige.
- If desired, details can be added, such as revealing the wood fibre texture or paper layers.

6. Display or hanging

- Discuss with pupils where and how the nest can be displayed.
- If necessary, hang the nest using string or wire, or place it in a safe spot in the classroom.
- Discuss with pupils where and how the nest can be displayed.
- Discuss once again the differences between wasp nests and bee nests.

Activity 4 - How does the Asian hornet spread?



40-50 MIN

In short

Pupils explore the spread of the Asian hornet from Asia to Europe. They mark the route on a world map and analyse real-world observation data from Vespa-Watch. A class discussion examines the factors behind the rapid spread and the importance of monitoring.

Supplies

- Worksheet 3B
- Worldmap or atlas
- Computer/Tablet for Vespa-Watch
- Writing materials

Lesson structure

• Introduction

- Briefly explain that the Asian hornet is native to Asia and was brought to Europe via transport (such as ships).
- Explain that the first infestations began in France and gradually spread to our region.

• Worksheet 3B

- Ask the pupils to indicate on the world map where the Asian hornet came from in Europe.
- Pupils interpret the actual sighting data from Vespa-Watch.

• Collective reflection

- Why have the numbers risen so quickly?
- What factors have contributed to the rapid spread?
- How can monitoring help with control or early warning?



Worksheet 3A – Build your own Asian hornet nest



Did you know that asian hornets turn wood into paper?

The queen scrapes bits of wood from fences, trees or cardboard, mixes them with saliva and turns them into a kind of paper-like building pulp. This is how she builds a nest with thousands of hexagonal chambers, in which her larvae grow up.

Did you know that an asian hornet queen builds two nests a year?

In spring, she starts with a primary nest: a small, spherical nest in a sheltered spot, such as a garden shed, eaves or a nesting box. This is where the first workers grow up. Once there are enough helpers, the colony moves to a secondary nest: a much larger nest, usually high up in a tree. This can grow into a nest as big as a football, containing thousands of hornets! Old nests are never reused. Every spring, the story begins anew...

TASK

Today, as a budding biologist and artist, you will recreate the nest of an Asian hornet. You will learn how this invasive wasp builds its nest, where it does so, and why it is so important to spot these nests in good time.

SUPPLIES

- Worksheet 3A
- Ballon
- Papler-mâché
- (News)paper
- Scissors
- Glue
- Paint(grey, brown, beige)
- Brushes
- Rope to hang the nest
- Exhibition space



STEP-BY-STEP INSTRUCTIONS

- 1. Make the basic shape:** Inflate a balloon or use a ball as a template → this will form the shape of the nest. You can make a primary nest (a rounder shape, about 15 to 20 cm in diameter) or a secondary nest (pear-shaped and easily larger than 30 cm up to 1 metre)
- 2. Covering:** Cover the balloon with strips of grey paper or newspaper (using glue or papier-mâché).
Tip: Use different shades of grey to mimic the 'layers' and create wavy patterns.
- 3. Making the entrance:** Leave a round opening: this is the nest entrance for the hornets.
- 4. Decorating:** Use a pencil or felt-tip pen to emphasise the typical wavy patterns. You can also draw or make a few 'hornets' and hang them in the nest.
- 5. Leave the nest to dry.**
- 6. Done?** Show your nest to the school and explain what you've made.
Tip: Hang the nests in your school's corridor. Make little information signs to go with them, just like in a museum!

CHECKLIST (COMPLETE AFTER THE CRAFT ACTIVITY)

- 1. What does an Asian hornet's nest look like?**

.....

- 2. Where does it usually build its primary nest (spring)?**

☐ In the ground ☐ In a tree ☐ Under an eave

- 3. Where does it usually build its primary nest (summer)?**

☐ In the ground ☐ In a tree ☐ Under an eave

- 4. What makes this hornet's nest so distinctive?**

.....

- 5. What did you enjoy or find difficult about this craft activity?**

.....



Worksheet 3B- How does the Asian hornet spread?

NAME:
CLASS:
DATE:

PART 1 : NUMBERS AND CALCULATION

Look at the table below. Answer the questions afterwards.

Year	Antwerp	Limburg	East-Vlaanderen	Flemish-Brabant	West-Flanders	Total
2017	0	0	0	0	3	3
2018	2	2	7	2	28	41
2019	2	0	8	3	19	32
2020	3	7	44	23	43	120
2021	17	5	74	63	83	242
2022	79	27	477	382	428	1393
2023	611	161	2449	1092	1713	6026
2024	1724	494	2484	1306	1672	7680

Last data update: 7 july 2025. Look at the website of VespaWatch for more recent trends ([Trends - Vespa-Watch](#)).

1. In which province were the first nests found?

.....

2. Which province had the highest number of nests in 2023?

.....

3. In which province did the number of nests increase the most between 2023 and 2024?

.....

4. Why is it important to keep track of this data every year?

.....

PART 2: MAKE A GRAPH

Draw a line graph showing the total number of nests per year (2017–2024). Use a separate sheet of paper or graph paper.

Don't forget to include a title, the x-axis (years) and the y-axis (number of nests).



PART 3: COLOUR THE BELGIAN PROVINCES

Here is a map of all the Belgian provinces.



Assign a colour to each province for which you have data, based on the number of nests. **Choose data from one of the years 2022, 2023 or 2024.** Make sure you choose a different year from your neighbour.

- < de 500 nests : Green
- 500 – 1000 nests : Orange
- > 1000 nests : Red

Compare the coloured maps from different years with your neighbours'
What do you notice? From which direction did the Asian hornets enter our country?



Did you know that each asian hornet nest can contain thousands of hornets?

A single nest can produce as many as **10,000 insects** in the summer! That's why it's **absolutely vital to report any suspicious nests quickly**, so they can be safely removed. In this way, you can help out as a **true citizen scientist** and protect our bees and biodiversity!



Asian hornet

CREATING A FLOWER MEADOW





4. Creating a flower meadow

Information for the teacher

The Asian hornet poses a threat to our pollinators, such as honeybees, bumblebees and hoverflies. As well as detecting and controlling Asian hornets, we can also help our pollinators by improving their habitat. A flower meadow provides food and shelter for a wide variety of pollinating insects. By creating a flower meadow with the class, pupils actively contribute to enhancing biodiversity at school and learn what plants need to grow.

Ideally, the meadow should be created in October or November. During this activity, pupils explore the site and learn about location, sunlight and teamwork. The shape and size of the flower meadow can be adapted to the site.

LEARNING OBJECTIVES

- World Orientation – Understanding plants, soil and biodiversity
- STEM – Inquisitive attitude: determining soil type
- Citizenship – Actively contributing to nature restoration





Activity



variable

In short

In this activity, pupils work together to create a small wildflower meadow to support biodiversity and pollinators in the school grounds. They learn how to prepare the soil, mark out the area, sow seeds and monitor the growth of the plants. In this way, they discover which factors are important for healthy flowers and pollinators.

Supplies

- 8 poles and 11 meters of rope
- Spade, shovel, rake
- Flower seeds
- **Optional:** bowl and spoon

Lesson structure

1. Preparation (1 to 2 weeks in advance)

- Buy biological flower seeds (for example via [Ecoflora - bloemenweiden](#))
- Choose a suitable spot together: sunny, quiet, not heavily used
- Remove the top 5 cm of turf with a spade or shovel
- Rake the soil flat and remove stones or roots
- Leave the soil to rest for a few weeks and then remove any weeds that appear (false seedbed)

2. Step 1: Marking out the flower bed

- Mark out the plot with poles and rope (approximately 8 m)
- Discuss with the pupils: what do flowers need? Why a sunny spot?
- Let the pupils measure: how big is 8 m²? What is the perimeter of our plot?

3. Step 2: Investigating soil texture (optional)

- Take three soil samples from different parts of your plot, mix them in a bowl and moisten slightly if very dry.
- Assess using the appendix: is it sand, loam or clay? What does that mean for plants?

4. Step 3: Sowing

- Mix flower seeds with some fine sand and sow evenly across your field
- Rake lightly or press down gently (seeds must remain on the surface)
- Do not add fertiliser; a flower meadow grows best in poor soil

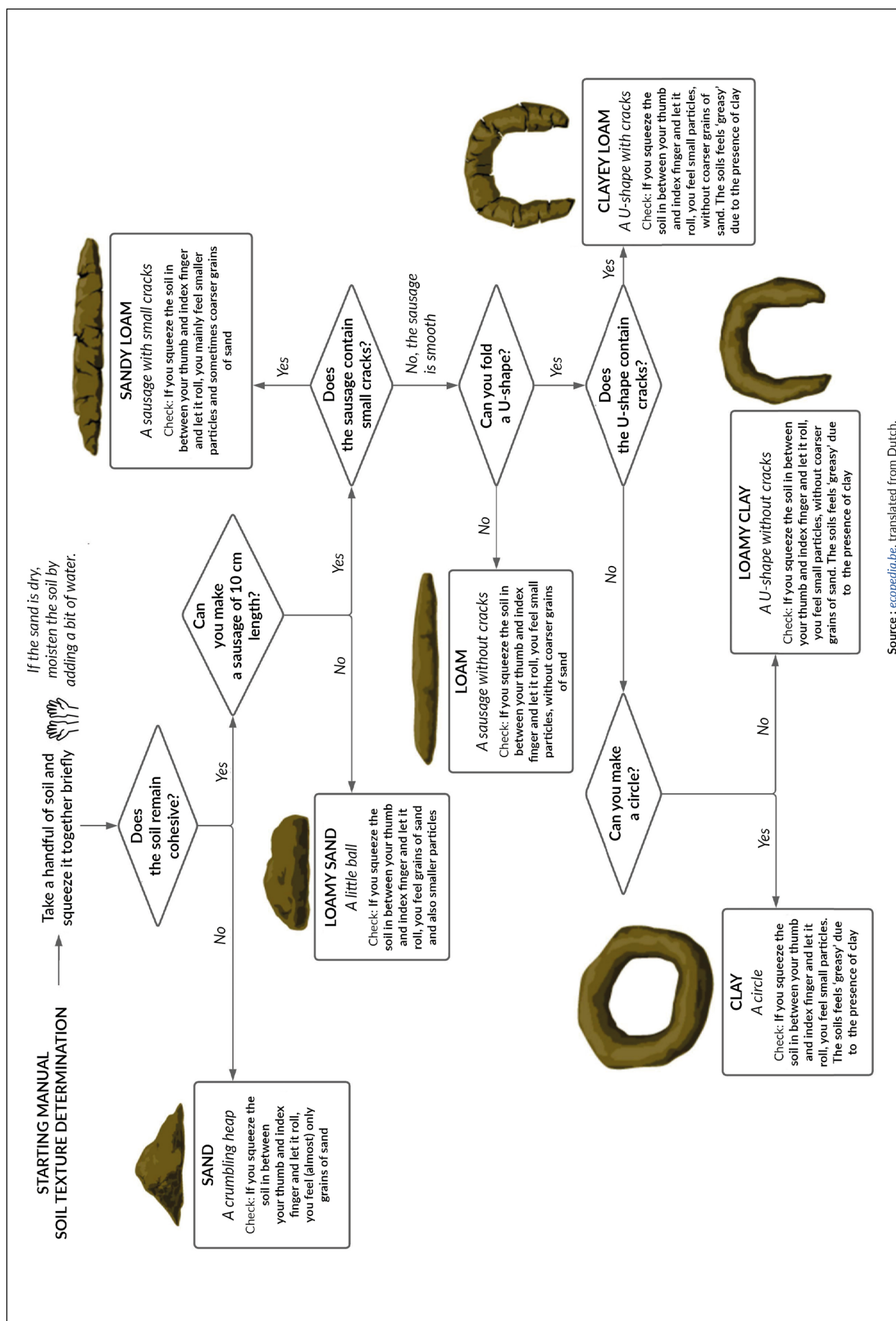
5. Step 4: Finishing and monitoring

- Place a marker or flag next to the sown area
- Take a photo so you can compare the progress later

TIP : Would you like to know more about wildflower meadows and the best tips for sowing and how to look after your wildflower meadow ? Then download our free educational pack and guides (planting and management) '[A Heart for Bees](#)' '[Een hart voor bijen](#)' (Not yet available in English)



Attachment- Which structure has your soil?





Asian hornet

BUILD A HORNET TRAP





5. Build a hornet trap

Information for the teacher

A hornet trap is a simple tool to catch the Asian hornet. The aim is to reduce the pressure on local pollinators such as honeybees, bumblebees and hoverflies. These traps are not a solution to eradicate the species, but they can make a difference locally if they are used correctly and selectively. In the spring you can encounter queens in your trap and in the summer and autumn it is the workers who fly around.

An effective trap usually consists of a sturdy container (glass jar, bottle or box) with one or more attachments (selective insertion cones) (see figure): funnel-shaped openings with a diameter large enough for a hornet ($\pm 7-8$ mm). Hornets are attracted to a sweet, slightly alcoholic attractant such as syrup or fermented fruit juice. They can easily go in, but find it difficult to find their way out. By using the right attractant and a selective opening, bycatch (such as bees or beetles) is avoided as much as possible.

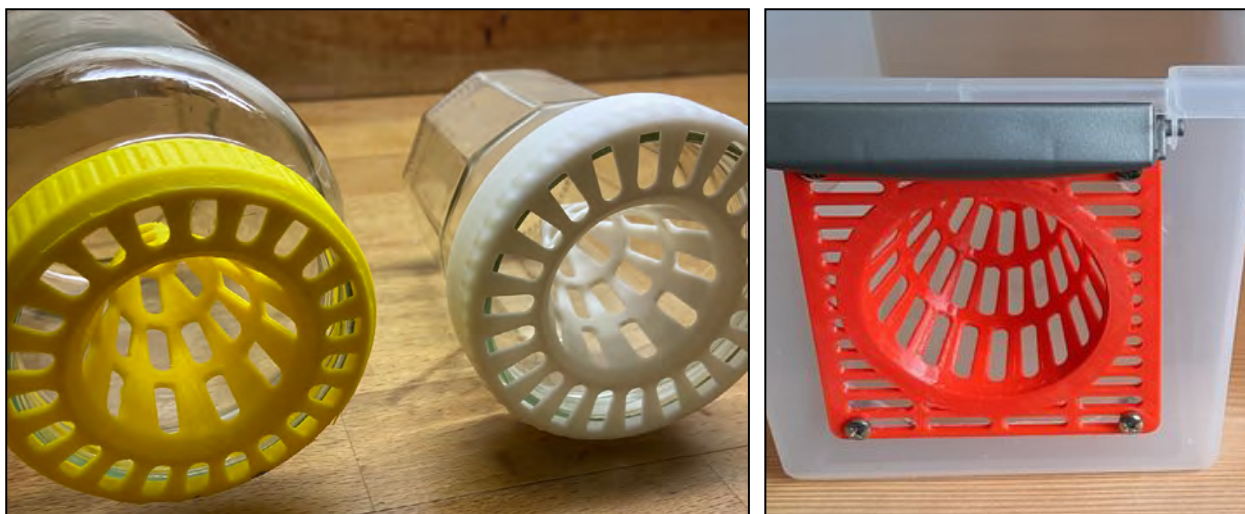


Figure 1: left – glass jar with attachment (screw lid) and right – box with insertion cone

**Are you a school from Limburg? Then, thanks to the support of the Rotary and Rotary Foundation, you have received a selective insertion cone to build your own hornet trap. Simply screw this attachment onto an empty jam or honey jar and put in the attractant as described in the attached worksheet. Do you want to build multiple traps? Then follow the instructions on the worktop to get started with the plug-in cones.*

CITIZEN SCIENCE IN ACTION

Through [MyGardenLab](#), ordinary citizens can participate in scientific research. A good example is the project on spring traps for the Asian hornet. Researchers want to know if catching queens in the spring really helps to have fewer nests later in the year. In addition, they look at whether the traps are selective enough: do they mainly catch hornets, or also beneficial insects such as bees and butterflies?

By allowing many people to participate, scientists receive a large amount of data from all over Flanders. This will help us better understand whether this method is a useful and responsible tool in the fight against the Asian hornet. Why is this important for the classroom?

- Students discover that everyone can contribute to science, not just researchers.
- They see how observations and data collection can make a difference in nature management.
- It makes it clear that solutions for the hornet are not simple, and that research is needed to make the right choices.

LEARNING OBJECTIVES

- STEM – Design, Test, Improve
- Safety – Thoughtful and responsible use of materials



Activity



60 MIN

In short

Pupils design and build a trap against the Asian hornet. They learn how the trap works, why the shape is important, and how to make it so that it is selective. We build the traps in the classroom during the winter months so that they are ready for use in time as soon as the Asian hornets appear. This way pupils can still test their trap, improve it and have everything prepared for the start of the catching season. This assignment also fits perfectly within a STEM afternoon in the cold months, when working outside is less obvious.

Supplies

- 1 plastic box with lid
- Specific funnel-shaped cone to catch hornets: e.g. [Selective hornet cone](#)
- Sharp blade
- Sponge or clay pellets
- Instructions with photos: [Craft idea - The selective trap](#)
- Instructional video: [Making a trap for the Asian hornet](#)

Lesson structure

1. Explanation: how does a trap work? (15 min)

- Show a sample trap or photos of existing models.
- Discuss together:
 - What attracts the hornets? (smell, color, sweet attractant)
 - Why don't they get out of the trap anymore? (opening of $\pm 7-8$ mm)
 - What about rain and wind? Is the trap firm enough?
 - How do we avoid bycatch? (selective opening and correct attractant)
- Have pupils note: What should a good fall definitely have?

2. Design and build phase: Make your own trap (30 min)

- Divide the class into small groups.
- Give each pair a kit (plastic box, rope, cardboard, scissors...).
- Hang the poster (see worksheet 5.1 in attachment).
- Pupils build their own hornet trap based on the poster.
- For making the holes in the trap (cutting or drilling):
 - You know your pupils best. Assess for yourself whether they can do this independently and safely under supervision.
 - If not, have this work done by an adult.
 - Provide clear instructions when using tools.
 - Use protective equipment (gloves, safety glasses) and always work in a stable workplace.
 - Stimulate creativity within the technical requirements.

3. Test phase: Does the design work? (15 min)

- Test the traps outside with water (instead of attractant) to simulate:
 - Is the trap leak-proof?
 - Does it stay stable upright?
 - Is the opening well aimed?
- Check the traps together: What works well? What not?
- Important points of attention:
 - The trap must be sturdy, rainproof, and safe to use outdoors.
 - Hang the trap so that rain does not enter directly. If water does get in, replace the attractant immediately.
 - The opening must be selective: large enough for a hornet, small enough to repel bees and bumblebees. Buy a yellow or red hornet funnel (the Asian hornets are attracted to these colors).
 - Pour bait over clay granules, sponge or bait pot so that insects do not drown.
 - If an Asian hornet is caught: place the trap in the freezer (30 min → stunned, 24 h → dead).



Worksheet 5.1 – Build a hornet trap

DIY ASIAN HORNET TRAP

A trap to capture hornets in a responsible way while reducing the number of bycatch.

Supplies

- A plastic box with a lid
- Specific funnel-shaped cone to catch hornets: e.g. Selective hornet cone
 - Mostly hard plastic
 - Diameter entrance around 8 mm
 - Allows Asian hornets to enter easily while preventing the bigger European hornet from entering
 - The shape of the cone makes it difficult for Asian hornets to leave the trap
- Sharp knife
- Sponge or clay pellets
- Attractant



Attractant

- 1/3 grenadine syrup
- 1/3 white wine
- 1/3 light beer (alcohol deters bees and bumblebees)

Making the trap

- Make an opening in the plastic box where the cone fits into
- Place the cone in the trap with the narrow end facing inwards
- Secure the cone firmly
- Spray a bit of the attractant on a sponge or clay pellets inside the trap

Caution: The insects must not drown inside the attractant

Safety



Place the trap outside the reach of children

Placing the trap and control:

- Choose a sunny, open spot out of rain. Preferably near a known flight route or nest location.
- Place the trap at least on a height of 2 meters and away from flowers (spare the bees)
- Spray the attractant inside the cones (preferably once in the morning and once during lunchtime)
- Check the capture each day
- The best capture period is in Spring (queens) and in Autumn (workers)



Caught!

- After capture of Asian hornet: **place in the freezer**
- **After 30 minutes:** hornet is numbed and can be exterminated by an adult.
- **After 24 hours (in case of a strong queen, it takes more time):** hornet is euthanized
- Report the capture on the platform **Vespa-Watch : Meld een individu**

GoodPlanet is not responsible for any hornet stings or other accidents during the crafting, placement, control or during the usage of the hornet trap.

Everyone working with a trap, does this at it's own risk and takes the necessary precautions.

What to do in case of a sting?

1. Stay calm and walk away until you are at a safe distance from the nest or trap.
2. Only remove the stinger if it is visible (Usually, Asian hornets don't leave behind a stinger)
3. Cool the stinged bodypart immediately with cold water or by adding ice to reduce the swelling.

Severe allergic reaction? Call 112 or let someone bring you to the hospital.

Severe swelling. Get in contact with your doctor for further treatment.



Asian hornet

MONITORING





6. Monitoring and data analysis

Information for the teacher

When you hang a hornet trap, you have actually started a scientific experiment. Through Vespa-Watch and other citizen science projects, the data from these traps are collected to understand where, when and to what extent Asian hornets occur. This is called **monitoring**.

Every week you collect the capture data: the number of hornets caught compared to other insects. By comparing this data over several weeks, you can see patterns, such as peaks in activity or seasonal changes. This is data analysis in action.

The goal is twofold:

1. Local: Students see their own impact, they observe whether their fall works and how effective it is.
2. Scientific: the data can be part of larger datasets, used by researchers and administrators to map trends and distribution.

The combination of own observations and shared data makes this activity a practical example of **citizen science**: learning how science works and contributing to real research.



DID YOU KNOW ...

in spring (March–May) only **queens** end up in your trap? They wake up from their hibernation site (e.g. in woodpiles, cavities or sheds) as soon as the temperature rises above $\pm 12^{\circ}\text{C}$. Their first task is to build a primary, small embryonic nest in sheltered places (such as garden sheds, under gutters or lean-tos). From this nest they raise the first workers. It's believed that each captured queen could potentially prevent the formation of an entire colony, since she might otherwise have founded a nest. A colony can catch thousands of pollinators in one season.

More information: [Detect nests - Vespa-Watch](#), [Catch queens - Vespa-Watch](#) and [Mijn Tuinlab](#)

LEARNING OBJECTIVES

- STEM – Collecting and analyzing data
- World Orientation – Learning about biodiversity





Activity



variable

In short

By monitoring their homemade trap, students collect data on the catches. They learn to recognize species, keep track of numbers and draw conclusions.

Supplies

- Worksheet 6.1
- Magnifying glass or magnifying glass (optional)
- Recognition cards (free download via [Natuurpunt](#) or [Webwinkel Ark](#)) or use the app [Obsidentify](#)
- Graph paper or tablet

Lesson flow

1. **Daily monitoring** (at a fixed time, ideally just before or just after a playtime)
 - Students will accurately count the number of Asian hornets and also note other insects caught on the observation sheet (see Worksheet 6.1). Take a picture of all the insects caught.
 - If available, use a magnifying glass to better view and recognize the insects using the recognition card. If there are animals that you don't recognize, enlist the help of the app obsidentify.
 - Briefly discuss what they see: what types are there? Are they mainly hornets or also other insects?



TIPS FOR SAFE MONITORING

- Children should never open a trap themselves. Only an adult is allowed to do this.
- Never touch the hornets with your hands: the Asian hornet can sting.
- Is there an Asian hornet trapped? Put the whole trap in the freezer:
 - **30 minutes** → insects stunned
 - **24 hours** → insects dead
 - Report your results [here](#).

WHAT ABOUT BYCATCH (BEES, BEETLES, ETC.)?

- Set the trap in a quiet place, away from the children.
- Open the trap carefully and let the insects fly away.
- Close the trap tightly before putting it back.



In this way we work safely and protect the beneficial insects that we do not want to catch.

2. Create chart

- Have each group make a bar graph with their collected data on graph paper or digitally on a tablet.
- The graph shows the number of Asian hornets and other insects caught per period, so that differences and trends become visual.
- Explain how a bar graph works and why it is useful to display data in this way.



3. Discussion of results

- Discuss in class what stands out in the graphs: are there peaks in the number of hornets caught? What about bycatch?
- Have your students think of possible explanations for the trends (e.g., season, weather, location of the fall).
- Explain that this data is also shared with researchers via citizen science platforms such as Vespa-Watch, so that their work contributes to greater scientific understanding.

4. No catch? Good news!

- Didn't you catch an Asian hornet? Fantastic! This means that your school is still hornet-free and that is also important news for researchers. Scientists not only need information about where the hornet is, but also about where it does not occur.
- What now? Watch the catch and observations of other insects together. They deserve at least as much attention! Organize an insect election:
 1. Place photos of the observed insects on the ground or display them on the board.
 2. Have students stand next to it and choose their favorite.
 3. Vote for categories such as:
 - "Coolest wings"
 - "Creepiest buzzer"
 - "Best disguise"
 4. **Tip:** have students give short pitches about why their insect should win.
 5. End the activity with a festive result: "*The most impressive buzzer is...*" And don't forget: you can be proud of your result. "*We are a hornet-free school and we are proud of that!*".





Worksheet 6.1 – Monitoring the Asian hornet

NAME:	
CLASS:	DATE:
TRAP LOCATION:	TRAP NO.:

TIPS FOR SAFE MONITORING OF ASIAN HORNETS

- Never open the trap that contains a hornet without the help of an adult.
- Never touch the hornets with your hands. The hornet can sting.
- Put the trap back as you found it.
- Report your results via the hotline.

WHAT IF ANOTHER CRITTER IS TRAPPED?

Sometimes there is another insect in the trap in addition to the Asian hornet, such as a bee or beetle. Take a picture and try to find out the name of the animal. What you do: Do not open the trap yourself, but ask for help from the teacher or an adult who knows how to handle the trap safely. The adult releases the insects freely in a quiet place. In this way, we not only protect ourselves, but also the insects we don't want to catch!

1. Recognition and control

How do you know it's an Asian hornet?

- ☐ Black breast
- ☐ Yellow legs
- ☐ Orange/yellow band on abdomen



Take a picture of a captured specimen (for confirmation by an expert).

2. Weather conditions

(To be supplemented with each observation because weather affects the catch)



Sunny



Cloudy



Rainy



Wind direction

3. Observation table – day by day

(Check-up 1x per school day at a fixed time, e.g. just after afternoon playtime)

Date	Weather	Number of Asians hornets	Other insects	Comments (e.g., behavior, damage, new nests nearby)



4. Analyse after one month

A. On which days did you catch the most Asian hornets?

.....

B. On which days did you catch the least?

.....

C. Do you see a connection between the weather and the catch?

☐ Yes, explain :

.....

☐ No / not sure

.....

D. Are there more or fewer catches as the month progresses?

.....

E. Did you find anything striking in the trap?

.....

5. Create chart

Use your data to create a bar graph . This way you can quickly see at which times they were most active

- X-axis = days of the month
- Y-axis = number of Asian hornets captured.





Asian hornet

COMMUNICATION





7. Communication and reflection

Information for the teacher

When students delve into a socially relevant theme such as the Asian hornet, it is valuable not only to let them gain knowledge, but also to give them space to share and process that knowledge. In this final phase of the project, communication, collaboration and self-reflection are central.

By presenting their results, for example about what they discovered, how they built a trap or why pollinators are important, students learn to convey complex information to others in a simple way. This strengthens their self-confidence and stimulates their commitment.

Reflection helps to reflect on the learning process:

- What have I learned?
- What did I like or find difficult?
- What would I do differently next time?

This step also fits within the attainment targets on citizenship, environmental education and communication skills, and is an opportunity to involve school, parents or local partners. A closing moment makes it clear that their efforts really matter.

LEARNING OBJECTIVES

- Communication – Presenting information to the public
- Reflection – Learning about your own learning process





Activity



variable

Synopsis

This lesson is a completion of the project. Students show what they have learned to others and look back. They present their work, analyze their role and receive recognition.

Supplies

- Poster / presentation / info stand
- Results graphs / observations
- Certificate "Junior Hornet Specialist"

Lesson flow

1. Reflection

- Give each student a chance to briefly share what they learned during the project.
- Use guiding questions to structure the conversation:
 - *What did you like?*
 - *What did you find difficult?*
 - *What would you do differently next time?*
- Open up the conversation to values and attitude:
 - *Did you think it was important to take care of nature? Why or why not?*
 - *Why do you find it (not) interesting/useful/nice to study nature?*
 - *Now that you've learned all this about the Asian hornet, what do you think you'll do if you come across one in your garden or in a park?*
 - *What would you like to share with others (other classes, parents, ...) now that you have learned and done so much about the Asian hornet?*

2. Preparation of a presentation

- As a class, discuss what the students want to show: their observations, traps, graphs, or other discoveries about the Asian hornet.
- Divide the roles: who tells what? For example: groups can each present a part or prepare a short presentation together.
- Have them think about how they can present their information clearly and understandably, for example with the help of posters, photos or a PowerPoint.

3. Giving a presentation

- Organize a presentation moment: this can be for parents, other classes, city councilors, beekeepers or farmers.
- Encourage students to engage with the audience.
- Provide a safe, positive atmosphere where they gain confidence.
- Let the audience ask questions to encourage interaction.

4. Presentation of the certificate

- Conclude by issuing a "Junior hornet observer" certificate to all participants.
- Explain that this is a recognition of their commitment and contribution to the project and scientific research.





Annex

**JUNIOR
HORNET SPECIALIST**

_____ pupil _____

*has participated in the training on the Asian hornet
and has learned how to recognize this invasive species,
report it and protect pollinators.*

_____ date _____ _____ teacher _____

**JUNIOR
HORNET SPECIALIST**

_____ pupil _____

*has participated in the training on the Asian hornet
and has learned how to recognize this invasive species,
report it and protect pollinators.*

_____ date _____ _____ teacher _____