# Farm Lesson 3: Bee a Hero



After hearing farmers' and beekeepers' stories in the Farm World, students embark on their own bee advocacy projects.

## **Guiding Ideas**

This project was developed with the American Beekeeping Federation's Kids and Bees program. Explore a new Minecraft world, created by Lifeboat, and use new lessons to introduce students to bees' dynamic and fascinating roles in their own hives and in broader ecosystems. Bee a Hero is Lesson 3 of 3 for the Farm.

Learning Objectives
NGSS Crosscutting Concepts: Cause and Effect
NGSS Science and Engineering Practices: Defining Problems; Designing Solutions;
Engaging in Argument from Evidence
NGSS Disciplinary Core Ideas: ESS3.C: Human Impacts on Earth Systems; ETS1.A:
Defining and Delimiting an Engineering Problem
<ul> <li>Recognize the role of individual and group advocacy in saving bees</li> </ul>

## **Performance Expectations**

This lesson will enable students to:

- Define advocacy
- Make and hear arguments for and against different advocacy ideas
- Show enthusiasm for bee species conservation and community building
- O Display empathy for charismatic minifauna

#### Skills

Citizenship, Collaboration, Communication

#### Total time needed

45-85 minutes

# Materials needed for classroom activities

none

#### **Introductory questions**

- Reflecting back on all you have learned about bees, what do you think is the coolest, silliest, or most interesting thing they do?
- What is the most important thing that you think they do?
- Why is it important that people take action to help protect bees?

#### **Student Activities**

# Introduction (whole class) 10-20 minutes

As a class, watch <u>Imagine a world without bees...</u>, and/or take turns reading aloud the article <u>Bee-ing grateful to our pollinators</u> to refresh students' memories about the importance of bees to human and natural systems, and the challenges bees face today. Using the questions above, guide a discussion to generate enthusiasm for taking care of bees. Ask students if they have heard the word "advocacy", and if so, what they think it means. Advocacy can carry negative connotations, especially when politicized, so clarify that advocacy means "communicating clearly about, and taking actions for, a topic that's important to you, so that others might change how they think, feel, or act about that topic". Or: advocacy is "compassion in action". Ask the group if everyone feels ready to become bee advocates, and let them know that they'll be learning about many different ways to do so, because advocacy is different for everyone!

#### Minecraft Farm (explore as individuals) 15 minutes

Direct students to travel to the Farm. There, they will walk around the farm and listen to Bee Advocate Harriet, Teacher Laurie, Farmer Hal, Farmer Maya, Bee Researcher Serena, Beekeeper Zac to hear about these individuals' advocacy efforts on behalf of bees.

Please note that other bee NPCs exist in the Farm; students will interact with them in other lessons. Also note that many of the NPCs have videos to share, so make sure students have headphones.

#### In-Class Discussion 20-40 minutes

Reiterate that advocacy can look many, many different ways. It depends on an individual's or a group's passions, skills, interests, resources, audience, and more. There's no right or wrong way to be an advocate, as long as you're putting compassion into action!

Let the class know that now, you'll be working together to identify an advocacy project that you can complete as a group. Explain that you'll read a list of 10 different bee advocacy ideas, and that after each idea, you'll ask for a vote about whether or not that idea might be a good option for the class. Explain that this isn't a final decision-making process, but rather a way to slim down a long list into just a few choices; students can vote for as many ideas as they want. Reiterate that a "yes" vote means that they think the class could do the activity at school, using materials from the classroom. A "no" vote means that the activity takes more equipment than you have in the classroom, or would have to happen somewhere other than at school; a "no" vote doesn't mean you don't like the idea of the activity. The list of advocacy ideas can be found at <a href="kidsandbees.org/advocacy">kidsandbees.org/advocacy</a>, and it includes:

- Plant flowers
- Write a bee-themed song or skit for your school's talent show or for social media
- Organize a bee-themed art and poetry contest/show
- Buy local honey
- Eat sustainably and regeneratively grown food
- Keep bees
- Have a table at a state or county fair or other community gathering
- Start a youth program with a local beekeeping club
- Participate in a local 4-H or Department of Agriculture "ag day"
- Participate in citizen/community science

Write on the board each idea that the students think can be implemented in their classroom. Ask students to work in pairs to come up with one argument for and one argument against each idea, and have them write down their arguments. Gather the group together and have one pair share their arguments for the first activity on the board, and ask the rest of the class to raise their hands if they wrote down the same (or a similar) argument. Continue this process until all of the arguments both for and against have been heard. Repeat the process for each of the ideas listed on the board, then ask students to come to a final consensus based on the arguments they all just made.

After the students have chosen an advocacy activity, work together to decide on a first "action step" that will kick off the project. Let students know that they will return to this action step soon, and be sure to set aside time for the class to follow through on their idea.

Note: The most classroom-accessible ideas are writing songs or skits, organizing art shows, and participating in community science, but be open to creative implementation of other ideas if the students are enthusiastic!

#### **External Resources**

Minecraft Farm File - Download Farm and open with Minecraft: Education Edition. You'll find this resource in your Templates, under Create New.

<u>Imagine a world without bees...</u> - This one-minute video from the UN's Food and Agriculture Organization highlights the critical roles bees play in the world, and it offers some simple bee advocacy ideas.

<u>Bee-ing grateful to our pollinators</u> - This article describes 6 reasons to be grateful for pollinators, and offers 6 tips for engaging in bee advocacy.

<u>kidsandbees.org/advocate</u> - This list includes 10 bee advocacy ideas, along with additional links and resources for implementing those ideas.

<u>Bumble Bee Watch</u> - This community science effort invites all bee lovers to observe, photograph, and document the diversity of bumble bees in the US.

<u>The Great Sunflower Project</u> - Over 100,000 participants have joined this community science effort to document and support pollinators in home gardens.

<u>Bee Germs</u> - This community science initiative invites students to find and collect native bees, and then send them to scientists who are studying bee pathogens and diseases.

Celebrating Beekeeping: More Than a Job - This 2 ½ minute video shows that beekeeping is more than just a job: the art and craft of beekeeping is a true labor of love.