## 9th Grade
In addition to continued work with bees in the school garden and the honey harvest, students can also sow flowering plants. Planting flowering trees inside and outside the school grounds is a fine opportunity to do something good for bees. It could be fun to prepare “Guerilla gardens” on fallow sites, building ruins, or other unused areas to support bees. Schools that provide a ninth grade farming practicum could encourage that work in beekeeping.

### 10th Grade
If main lesson themes include using microscopes, then the anatomy of bees can be researched, examining compound eyes or the mechanism for transporting pollen on their legs. As a part of cytology in biology class, the subject of genetic engineering can be discussed. With respect to bees, their pollination performance is a decisive factor, which makes it impossible for genetically changed and unchanged plants to coexist. Related topics such as organic honey and honey without genetic engineering can follow. Ecological research projects can be chosen and independently pursued throughout the year.

## 11th Grade
What part of a bee’s behavior is inherited and thus attributable to instinct? What do bees actually learn – and how? Such topics can be central questions in the twelfth grade. An interesting research topic with possibly significant import is whether the bee, that is the entirety of a bee colony, is more than just the sum of its parts. A sociologically interesting question is how does a bee colony come to a decision, and what does this have to do with humans? Can we perhaps learn something from this?

## 12th Grade
Despite the dominance of the honeybee, lesson plans should also include wild bees, bumblebees, and other pollinating insects, as well as robbers like wasps and hornets. Building nesting site aids and then observing wild bees or establishing a bumblebee colony would fit in horticulture or natural history lessons in various different grades, and offer valuable information for the holistic experience of the world and nature.

### Wild Bees
- [Wild Bees](https://www.waldorf-school-shop.de)

### Reference Works
- [Bees, Trees, and Life: What does the world need from man?](https://www.exetercollege.org.uk)
- [The Book of Bees: The Apiculture of the Prehistoric World](https://www.gaiabees.com)
- [Wisdom of the Bees: Principles for Biodynamic Beekeeping](https://mellifera.de/en/about/)
- [Beecoming Sophie](https://hapicultuur.be/en/)
- [The Melissa Garden](https://themelissagarden.com)
- [Honeybeesuite.com](https://honeybeesuite.com/what-is-biodynamic-beekeeping/)
- [RudolfSteinerCollege.edu](https://rudolfsteinercollege.edu/beekeeping)
- [NewsReview.com](https://newsreview.com/chico/smitten-with-bees/content?oid=2978078)
- [NaturalBeekeepingTrust.org](https://naturalbeekeepingtrust.org/)
- [WaldorfResources.org](https://waldorf-resources.org)
- [The international internet portal of the Pedagogical Section at the Goetheanum offers Waldorf teachers a rich selection of ideas and material. Further teaching material about bees will be continually added to the Lessons area until 2019.](https://spikenardfarm.org)

Excerpt: “Our mission is to promote sustainable and biodynamic beekeeping through education, experience-based research and a honeybee sanctuary and to help restore the health and vitality of the honeybee worldwide.”
Bees know how to make honey, but they also know a great deal more. Without bees, most of our food crops wouldn’t bear fruit. Bees also reveal what’s going on with the human race. As a result of human activities, these wonderful creatures of the sun are dying off in massive numbers. We want to do something about this. Waldorf schools and kindergartens all over the world could give bees a safe homeland. Let’s care for them and encourage these flying workers to help make the world a bit more humane. Will you join us? Look below for ideas and suggestions of how this might work.

### 1st Grade
Fables and legends, the story of Francis of Assisi for example, correspond beautifully with the emotional development of second graders. Appropriate stories and the continuation of time spent outdoors and observations made in nature form a natural framework for considering bees. Verses with bee motifs can accompany the children throughout the entire year. Practical activity: Students could create a bee meadow, draw pictures of bees and blossoms.

### 2nd Grade
It’s never too early! Even in kindergarten it’s possible to observe bees with the children – bees working among the blossoms or bee colonies going about their business. Under the supervision of a beekeeper, children can take a look at the hive’s storage chamber or the bees’ nursery room. They can see, hear, smell, and even stroke the bees.

### 3rd Grade
Practical activity: Given the right conditions, honey can be harvested before the summer holidays. The honey supply, sealed by the bees, is now collected, centrifuged and (very important!) tasted. These are unforgettable experiences.

### 4th Grade
In the first year of school, children can learn a great deal about bees through fairy tales and stories. “The Queen Bee” by the Brothers Grimm or Jakob Streit’s “Little Bee Sunbeam” are two excellent examples, since they stimulate fantasy and imagination by letting bees tell their own stories. Observing nature, children can find the inner images they have created.

### 5th Grade
The first year of horticulture includes the contact to bees. Experiencing the annual cycle of nature gains a new dimension by observing the bees. Around the time of the summer solstice, the bees have already passed the peak in their development.

### 6th Grade
It makes good sense to consider bees as a part of seventh grade main lessons. For example, students can more closely examine various substances such as honey, hive dross, or bee poison as a component of chemistry lessons.

### 7th Grade
The topic of insects can be the focus of zoology as a main lesson theme. The honeybee is probably the best-known colony-building insect, and deserves intensive attention and study due to its enormous importance for nature and humankind.

### 8th Grade
Nothing is more like a soul than a bee. It goes from flower to flower as a soul goes from star to star, and brings back honey as a soul brings back light.

Victor Hugo (1802 – 1885)