

# ***Bugs and Bugsicles: Insects in the Winter***

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Illustrated by Robert C. Kray

## **Story Summary**

Every fall, bugs disappear. And every spring, they return. Where do they go? *Bugs and Bugsicles* answers the mystery.

*Amy S. Hansen* is an award winning children's writer who lives in Greenbelt with her husband, two kids, two cats, and a dog. Learn more about her at <http://amyshansen.com>

*Robert C. Kray* is a award-winning artist and illustrator. His work is used by the National Wildlife Federation and in magazines such as *Outdoor Life*. He lives in rural Pennsylvania with his wife and dog.

## **Pre-Reading**

(Young) Ask students to name the bugs they can think of.

(Older) Ask students where they think the bugs go. Make predictions.

(All) Show students cover. Ask what the word *bugsicles* might mean.

(All) Ask students difference between fiction and nonfiction. Talk about a nonfiction story and discuss the idea that a story does not always mean it is fictional. Discuss story arc with older kids.

## **Discussion Questions:**

What does the field cricket need to do? (*literal*)

Why can't she rest right now? (*inferential*)

Can you guess what would happen to the field cricket's eggs if she didn't bury them? (*inferential and evaluative*)

Who can tell me one thing that you learned from this story? (*personal response*)

Did the book make you interested in learning more about bugs or winter? (*personal response*)

Think about publishing:

Not much was written about this, but lots of books about bugs —why? (*inferential*)

Can you think of other topics like that? (*personal response*)

## **Writing Projects**

### **Bug Journal**

Materials: paper, pencils, outdoors spot to observe.  
Grades K-6

This would be best if it could be done in the beginning of school and then later in the winter. Go outside to where the bugs usually are in the summer. Observe, draw and describe (in writing) their habitat. Is anyone there? What does it look like? See if you can find any bugs other places.

Have children work in groups of two or three. Make sure they all get a chance to write and draw something to make an observation. There should be at least five observations on the page, preferably more. Go over what an observation is: I see five ants in the sand. (Young). Five ants are moving away from their home, two of them are carrying seeds. (older). Draw and describe the habitat. Compare the two sessions. Go out more often if possible.

### **Response to the Story: Creating Word Pictures**

Materials: writing paper, pencils  
Grades K-6

Directions:

Read one of the two-page stories again. Identify the descriptive language that helps create a word picture. The pieces of the language you are looking for are specific nouns, active verbs, figures of speech, adjectives and other descriptive words.

Write about an event in nature that has at least three distinct pieces. Paint a word picture using the descriptive language mentioned above.

### **Lift the flap Question and Answer**

Materials: Writing Paper, pencils, drawing materials, tape  
Grades Pre-K through 2

Work in groups to answer a question from the text. Then create a simple lift the flap page to show the question and answer.

For example: Where do the honey bees go for the winter. The answer may be given verbally. "To the hive." or in a complete sentence: "They stay in the hive." or a more complete answer: "They stay in the hive and shiver to keep warm."

When a group writes out the answer, tape the sheet of paper with the question on top of the sheet with the answer, leaving the bottom corners untaped, so the answer sheet can be seen.

Have the students draw pictures of their bug and tape those to the question and answer as well.

### **Drama**

Materials: Paper, pencils and performance space

Grades K through 6

Write a scene showing how one of the bugs spends the winter.

Act it out.

### **Letter**

Materials: Paper and pencils

Grades 3 through 6

Write a letter to one of the bugs explaining the plan for winter. If the bug does not live through the winter, explain why and how his/her eggs will.

### **Compare and contrast**

Materials: Paper and pencils

Grades 3 through 6

Use Venn diagrams to compare and contrast three different aspects of how four different bugs spend the winter.

### **Research paper**

Materials: Paper pencils, research books and/or internet

Grades 4 through 6

Research and write at least three paragraphs comparing how bugs live in places without winter to those that live in colder climates. Hint: dragonflies live in both places.

### **Retell the book from a different view point**

Materials: Paper, pencils

Grades 5 and 6

Think about this book's structure. The book takes the bug's Point of View. How would the book be different if it took the point of view of the kid exploring in the winter?

Rewrite one section from a kid's point of view. What would the kid see, touch, smell?

### **Create a bug — Notice that this is a FICTION project**

Materials: Paper, pencils and drawing materials

Grades K-6

Create a new bug and a plan for winter

Many insects successfully pass the winter as immature larvae. The protection of heavy covers of leaf litter or similar shelters protect the woolly bear caterpillar, while other insects replace the water in their bodies with glycerol, a type of antifreeze! Some grubs simply burrow deeper into the soil to escape the cold. Overwintering as Nymphs. Not many insects are active in the winter, but the nymphs of dragonflies, mayflies and stoneflies live in waters of ponds and streams, often beneath ice. They feed actively and grow all winter to emerge as adults in early spring. Overwintering as Eggs. Amy S. Hansen, Robert C. Kray. The secret world of insects revealed. Every autumn insects disappear. And every spring, they return. Where do they go? The dragonfly dies, leaving its young safe in the muddy bottom of a stream. The monarch butterfly sails the air to dry mountains in Mexico. And the Arctic woolly bear caterpillar becomes a 'bugsicle' - it freezes solid, then thaws out to live another day. The honeybee, praying mantis, field cricket, ladybug, and pavement ant also use awe-inspiring tricks to outwit the killing frosts of winter. [show more.](#)

Cold winter weather challenges animals. Using examples from eight species—praying mantis, field cricket, dragonfly, ladybug, honeybee, pavement ant, monarch butterfly, arctic woolly bear—Hansen explains different strategies insects use to survive. Some hide, others lay eggs; a few migrate and some can even freeze. Wildlife painter Kray's glorious double-page acrylic illustrations show the animals in context, including minute detail. Readers can see the tiny projections on the legs of field crickets, spines on the backs of ants and each hair where the insect has fuzz, even on honeybee legs