Resurrection

The idea of "de-extinction," of bringing back a long-gone species like, say, a woolly mammoth, might seem the stuff of science fiction. But it's almost real, explains author Carl Zimmer. The cool factor of such a **zoological restoration** is off the charts, but de-extinction also raises some interesting questions about human beings and our impact on the world. Many extinctions occur because of our thoughtlessness or carelessness. Maybe we want a better life, maybe we want to make the unhabitable habitable, or maybe we want to fill our stomachs. Sometimes what gets caught in the crossfire of our wants is a species. You could say an extinct species is the **collateral damage** of human existence. Just because we might be able to bring an extinct species back to life, though, doesn't mean we should. There's always the **law of unintended consequences** to contend with.

For example, what if an **errant** virus is harbored in one of these creatures, and it wipes out the population of a related species? On the other hand, bringing back a species might put an **ailing** ecosystem on a healthier footing. It could right an ecological wrong.

So what's the answer? Is the restoration of an extinct species a **moral obligation**, a payback for our thoughtless **obliteration** of species?

Resurrection

Resurrection

The idea of "de-extinction," of bringing back a long-gone species like, say, a woolly mammoth, might seem the stuff of science fiction. But it's almost real, explains author Carl Zimmer. The cool factor of such a **zoological restoration** is off the charts, but de-extinction also raises some interesting questions about human beings and our impact on the world. Many extinctions occur because of our thoughtlessness or carelessness. Maybe we want a better life, maybe we want to make the unhabitable habitable, or maybe we want to fill our stomachs. Sometimes what gets caught in the crossfire of our wants is a species. You could say an extinct species is the **collateral damage** of human existence. Just because we might be able to bring an extinct species back to life, though, doesn't mean we should. There's always the **law of unintended consequences** to contend with.

For example, what if an **errant** virus is harbored in one of these creatures, and it wipes out the population of a related species? On the other hand, bringing back a species might put an **ailing** ecosystem on a healthier footing. It could right an ecological wrong.

So what's the answer? Is the restoration of an extinct species a **moral obligation**, a payback for our thoughtless **obliteration** of species?

Lesson focus:
Students will learn to notice how their thinking evolves as they use comprehension strategies to construct meaning from text.

Text type:
Informational text
Literary nonfiction (argument)

Pages 37–38 of this book include the following vocabulary support for ELLs and struggling readers:

ailing, collateral damage, errant, law of unintended consequences, moral obligation, obliteration, restoration, zoological

Follow-up activity

Page **6**   **Student Cooperative Activity Book**

Lesson focus:

In this lesson, you will learn to notice how your thinking evolves as you use comprehension strategies to construct meaning from text.

Note:

Before you begin the lesson, mask the text so that only the title shows.

Prior to reading

Display the title and read it aloud. Explain the lesson focus, for example, "Today we're going to synthesize the information in the text, which often involves thinking about two things at once. We will find the facts in the text and at the same time think about how we find and react to the information. Synthesizing often results in a change in our thinking about a topic."

With your learning partner(s), discuss the title. Have you seen or heard the word "resurrection" before? What does it mean? What do the font and colors tell you about the kind of text it is?

Display the entire text.

Skim and scan the text to get a sense of its meaning and purpose, and to find key ideas and words.

Discuss your thoughts on "zoological restoration" and what impact it could have on the world.

Interacting with the text

Read the first column of the text aloud. Model, by thinking aloud, how to annotate the key ideas in a text as you read.

Read the first column closely. Then, find and discuss the key ideas. What ideas are new to you? What did you already know about? Discuss how you are processing this information. For example, do you have more questions? Are you making connections to what you already know about the impact of humans on the world? Make a list of your questions and connections. How do these help you to form your own thoughts and attitudes about the topic? Do you think bringing back extinct animals is a good or bad idea? Why or why not?

Read the rest of the text aloud.

Read the second column closely. Notice how you are thinking as you read. For example, what strategies do you use to understand the possible good and bad impacts of bringing back extinct animals? Have your thoughts and judgments changed? Share your thoughts and attitudes with your partner(s).

Compare this discussion of bringing back extinct animals with representations you have seen in sci-fi movies. How do different approaches help us to understand the human impact on the earth? Which approach has the most impact?

Reflecting on the text

Model how your thinking can change as you read. For example, "At first, I thought it was a good idea to bring back extinct species because humans played a part in making them extinct. But after reading the entire text, my thinking had changed – now I think that humans have to be careful when messing around with nature, and we all need to think carefully about the impact our lifestyles have on other living things."

Reflect on and discuss the strategies you used to understand the information in the text. Discuss how your thoughts about resurrecting extinct species changed as you read the text. What information in the text led to the changes?

Facilitate a whole-group discussion about how being aware of thinking processes as we read makes a difference to understanding. Ask: "How did your thoughts or attitudes change or expand as a result of reading this text?"

Writing activity

What is your opinion? Write a paragraph explaining why you think scientists should or should not bring back extinct species and the impact this could have on our world. Support your argument with clear reasons and evidence.

WAR IS NOT A GAME

BY PHILIPPA WERRY

For most of us, war is something that we see on TV or read about in the papers. For most children around the world, war is a playground game of soldiers, played with sticks or pretend guns. It might be a way of passing a few hours after school, shooting up the "baddies" in a video game.

But for other, less fortunate children, war is not a game that they can finish playing and go home. War is real; it is happening all around them – and they have been forced to join in the fighting.

Around the world, more than 300,000 children, both boys and girls, are involved in fighting in more than 30 different countries. Most are aged between 15 and 18, but some are as young as 10. Some are even younger than that.

The problem is most serious in Africa and Asia, but there are also child soldiers in many countries in the Americas, Europe, and the Middle East.

Many of these children have lost their parents or become separated from their families because of wars raging around them. They may be street children, members of minority groups, or **refugees**. Other children may be so poor that **enlisting** in the army seems to offer their only chance of getting food for themselves and earning money to help their families. These children may **volunteer** as soldiers, without being old enough to understand all the dangers involved.

Other children don't even volunteer. They are simply **kidnapped** and forced to join the army.

But why would anyone want children as soldiers?

Wouldn't they be too young to be any use? Unfortunately, there are a number of reasons why children are found to be useful.

If wars go on for a long time, the army leaders may start to run short of adult fighters. Children are better than nothing. Children are smaller and more **agile** than adults, and they can be forced to obey orders more easily out of fear.

Furthermore, new technology has made semi-automatic rifles so light that even a ten-year-old child can carry and use them easily, so simple that even a child who can't read can **strip** and **reassemble** one, and so cheap that they cost about the same as a goat or a bag of corn, and often less than books.

What do child soldiers do?

Children are used as spies, messengers, and **sentries**. They might have to stand watch at dangerous checkpoints, or even lay or clear landmines. They have to carry out chores and act as porters, carrying gear from camp to camp.

The children are also taught how to fight, and often they have to join in battles, shooting and even killing other people. They are often treated **harshly** and beaten or punished **severely** for making mistakes or trying to escape.

War, for these children, is a grim reality and no game.

A 12-year-old soldier with grenade launcher during the Vietnam War, 1968. National Archives and Records Administration

WAR IS NOT A GAME

Who is saying this?	
When did they say it?	
Where are they talking about?	
What are they saying?	
Why are they saying it?	

Our new ideas or understandings (our synthesis)

-

-