Ants on the March

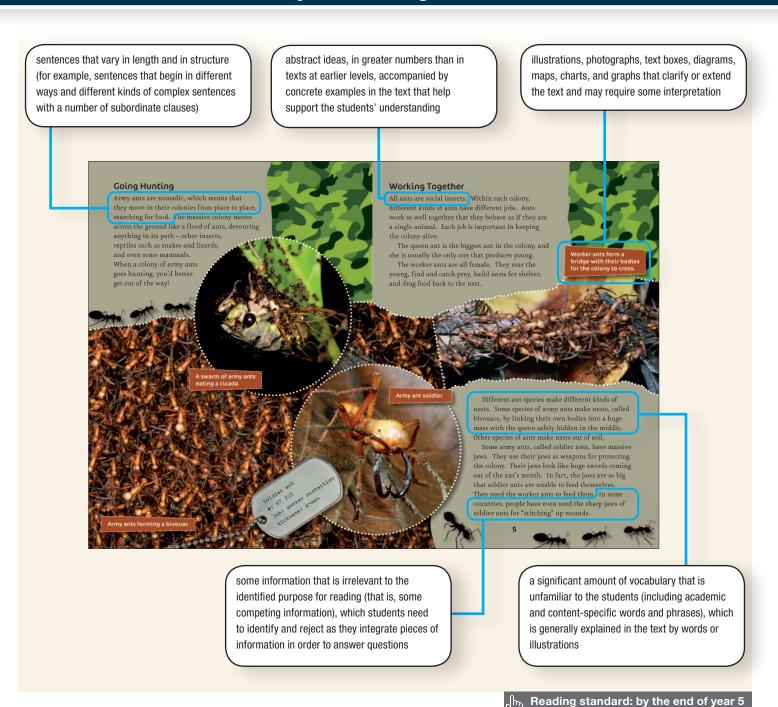
by Fiona Cross

Overview

This report about ants starts with the revelation that ants are ferocious predators. Using interesting facts, close-up photographs with captions, and headings to signal each subtopic, "Ants on the March" provides opportunities for students to evaluate the ways in which some ants survive by causing massive destruction and to integrate this with what they know about the behaviours of other animals. Text and language features include the use of labels and captions, specialised vocabulary that is explained within the text, complex sentences and punctuation, and the summary.

Texts related by theme "Killer Plants" SJ 2.1.10 | "On Frog Pond" Connected 1 2002

Text characteristics from the year 5 reading standard



School Journal Part 2 Number 4 2010 Noun frequency level: 10–12 Year 5



SCIENCE (Living World)

LEVELS 1 AND 2 – Life processes: Recognise that all living things have certain requirements so they can stay alive.

ENGLISH (Reading)

LEVEL 2 – Structure: Show some understanding of text structures.

ENGLISH (Writing)

LEVEL 2 – Structure: Organise texts, using a range of structures.

Possible reading purposes

- · To find out about the characteristics and behaviours of army ants
- To identify how army ants survive
- To compare army ants with other predators.

Possible writing purposes

- To describe the life of a predatory animal or insect
- To compare the army ant with another predator
- To explain the survival responses of an insect.

See Instructional focus – <u>Reading</u> for illustrations of some of these reading purposes.

See <u>Instructional focus –</u> <u>Writing for illustrations</u> of some of these writing purposes.

The New Zealand Curriculum

Text and language challenges

VOCABULARY:

- Possible unfamiliar words and phrases, including "ferocious", "destruction", "common", "nomadic", "devouring", "istitching' up", "surroundings", "detect", "iforeign", "identified", "invade", "worryingly", "overrun"
- Topic-specific words and phrases, including "predators", "army ants", "species", "larva", "driver ants", "swarm", "produces young", "rear", "bivouac", "soldier ants", "compound eyes", "lenses", "antennae", "scent trails", "accidentally introduced", "habitats"
- Word families: "intruded/intruders", "control/controlling"
- Colloquial expressions, including "you'd better get out of the way!"
- Figurative language, including "like a flood of ants", "as if they are a single animal", "like huge swords", "invade your house, march into your kitchen cupboards, and help themselves ...".

SPECIFIC KNOWLEDGE REQUIRED:

- Experience of ants and other insects
- Concept of insects as pests (for example, flies, borer, mosquitoes, termites) and as helpers
- Knowledge of the basic features, needs, and behaviours common to all living things.

TEXT FEATURES AND STRUCTURE:

- Simple report structure with headings that organise the content
- Labelled photographs that support the text
- Visual features, such as lines of ants and humorous name tags
- Introduction and final summary sentence
- Words that are explained within the text, for example, "nomadic", "nests, called bivouacs", "compound eyes"
- Use of passive verb forms.

Possible supporting strategies

Identify the vocabulary your students will need support with. Have students brainstorm vocabulary associated with ants.

Discuss the vocabulary associated with predation and hunting and finding food, including the use of senses. During the discussion, tell the students that some of this vocabulary will be in the text they are going to read. Start a vocabulary list. Help the students make notes about the vocabulary, for example, definitions, translations (if appropriate), example sentences, word families, and words that go together (collocations). Identify which words are general scientific words and which are specific to ants. Ensure the students have multiple opportunities to encounter and practise the vocabulary.

If students need support to use word families to work out words, select some examples from the article and list words that form the family. Discuss the meanings of each word in a range of contexts. Use those that have more than one form in the article, as well as others that offer word study opportunities such as *intrude: intrusion, intruder.*

The English Language Learning Progressions: Introduction, pages 39–46, has some useful information about learning vocabulary.

Possible supporting strategies

Pairs of students can share what they already know about ants and then report back to the group. If some students have no experience of ants, show them pictures or clips from the Internet and encourage them to find similarities with other insects they have seen.

Possible supporting strategies

Pairs or groups of students can discuss what they expect to find in a report about a living thing and share this with the rest of the class. You can prompt them to think about scientific vocabulary and add words to your vocabulary list. Review the structure of reports, focusing on the purpose and some of the features of a report.

Sounds and Words

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Instructional focus – Reading

Science (Living World, levels 1 and 2, life processes: Recognise that all living things have certain requirements so they can stay alive.)

Text excerpts from "Ants on the March"

Students (what they might do)

A single colony can contain hundreds of thousands sometimes even millions - of ants, and together they cause more destruction than any other predator on Earth.

Students make connections

between what they know about predators, the introduction, and this sentence to ask questions of the text that will help them to search for answers as they read.

Teacher

(possible deliberate acts of teaching)

EXPLAIN that a useful reading strategy is to ask questions in your head as you read. The questions help you to find information.

MODEL some possible questions:

- As I read this. I wondered. "How could tiny ants possibly compare with other predators, such as lions, sharks, or crocodiles? What do they do that's so destructive?"
- How does the writer know they cause more destruction than any other predator?
- As I read on, I'll be looking for information to answer my questions. What questions do you have?
- Were your questions answered? If they weren't, how could you find more information?

ASK QUESTIONS to support students as they locate, evaluate, and integrate information to identify the main idea.

- What is meant by "social" in this context? How can you check that? •
- What other animals do you know of that are social? How can you tell?
- From what you've already read, what questions do you have about how being social would help ants to survive?
- How could this lead to army ants being so destructive?
- How did the heading help you find the main idea?

PROMPT students to locate the main ideas in the report.

- Look back over the article, skimming for the most important ideas.
- What have you learned about the methods ants have developed to survive?
- How are these methods the same as other animals you've read about? How are they different?
- Discuss this with a partner: What could we learn about survival from ants?

Use the headings to support students to find the main ideas. Model finding key words and phrases that are connected to the headings. Some students may need more support to understand the main ideas in the text. You could use a jigsaw reading approach before reading the text together. ESOL Online has examples of strategies and approaches for focusing on vocabulary, under Pedagogy.

Ask pairs or groups to look for one type of information (for example, types of ants, where they live, how they hunt, and so on) and make notes. Then have them share this information before working through the text section by section.

GIVE FEEDBACK

· I noticed you asked yourself questions then used your own knowledge along with several pieces of information from this text and from other texts to understand what social means in this context. You've integrated a lot of information - that will help you to understand more about these ants.

METACOGNITION

ASK QUESTIONS AND PROMPT to make the students' strategies explicit for them.

- How does your knowledge of this kind of text structure help you to understand the text?
- Talk to your partner about how connecting to your prior knowledge about ants was helpful in understanding "Ants on the March".

 $\int_{\Gamma_{1}}$ Reading standard: by the end of year 5 The Literacy Learning Progressions

Assessment Resource Banks

With support, the students integrate this information with what they have read so far to evaluate the survival requirements of the ants. They add their own thinking to infer that intruders would weaken the colony.

With support, students evaluate what they already know about social animals and integrate this with information from the text to infer that by working together,

ants survive and become

powerful (the main idea).

Working together

All ants are social insects. Within each colony, different kinds of ants have different jobs. Ants work so well together that they behave as if they are a single animal. Each job is important in keeping the colony alive.

Ants can also recognise other members of their colony by their smell. They use their antennae to detect any "foreign" ants that have intruded into the colony. They will attack or even kill the intruders.

Instructional focus – Writing

English (Level 2 – Structure: Organise texts, using a range of structures.)

Text excerpts from "Ants on the March"

When you think about dangerous predators, you probably imagine large animals with huge teeth, such as lions, sharks, or crocodiles.

Army ants are nomadic, which means that they move in their colonies from place to place, searching for food.

Examples of text characteristics

INTRODUCING THE TOPIC

An engaging opening paragraph allows the reader to engage with the text. The use of "you" to speak directly to the reader is another way for the writer to connect with the audience.

USING SPECIALISED VOCABULARY

Informational texts use factual, often specialised vocabulary. The use of specialised vocabulary makes the writing more accurate and helps to extend the reader's knowledge. Writers can help readers work out unfamiliar words in several ways. One way is to give an explanation in the text.

Worker ants form a bridge with their bodies for their colony to cross.



Some ants may be annoying, and others are certainly scary, but many species of ants are helpful to the environment. The world would be a very different place without them.

LABELS AND CAPTIONS

Photos, diagrams, and maps usually have a label or a caption. A label simply states what is shown, using one or more words or a phrase. Captions use a sentence to explain or describe what is shown. Labels and captions (and the images they accompany) are linked to the main text and add detail or more information.

SUMMARY

Many reports start and end with a generalisation about the topic. The ending usually links back to the start and reminds the reader of the main ideas in the report. The summary can also draw together different views into a single statement.

METACOGNITION

ASK STUDENTS to share their writing with a partner from time to time as they write. Give them prompts for discussing their writing:

- How did you decide which words needed an explanation and which didn't? Tell your partner.
- Why did you choose this topic? How did you decide what to include and what to leave out?
- How well do you think you are meeting your writing purpose?

Teacher

(possible deliberate acts of teaching)

ASK QUESTIONS to help students form their writing intentions.

- What is your topic? Why are you writing about this?
- Who is your audience and how are you going to make them want to read your article?
- What kind of text structure will best suit your purpose and your audience?
- What knowledge can you assume your audience will already have about the topic?

PROMPT students to find and use appropriate specialised vocabulary.

- As you carry out research, make a note of the specialist words that relate to your topic.
- Which words will your readers need to know?
- How can you make sure you've used and spelt specialised words correctly?

MODEL the way writers support new vocabulary.

- As I reread this sentence I've written, I'm thinking that "nomadic" might not be clear to the reader, so I will add a phrase in the sentence to explain it.
- Look at your own writing and see if there are words that your audience may not know. It's great to use technical or specialised vocabulary, but you may need to think about how you give your readers support. Explaining the word in the same sentence is one way. What other ways can you think of?

EXPLAIN how labels and captions (and the images they accompany) can support a text by adding more detail or information.

- What kinds of images or visual features will enhance your writing? How will they help the audience to understand the topic?
- What label will support the image? Which will be best: a label or a caption?
- How does the image and the caption or label link to the text? Will this link be clear to your audience?

PROMPT students to think carefully about their summary.

- What is the main idea of your writing?
- How can you sum it up in just a few lines?
- Do you need to link back to the beginning?

GIVE FEEDBACK

- You've written a good explanation of how these animals are similar. It is clearly described for the reader. Are you going to discuss their differences too?
- The explanations for your specialised words make your paragraph easier to understand. Look for where you need to provide another explanation in the next paragraph.
- I noticed the way your last sentence linked back to the way you started the article. It's a great summary of the reasons why ...

hτ_η Writing standard: by the end of year 5 hτ_η The Literacy Learning Progressions