



Bugbix for Breakfast

by Bronwen Wall

What did you eat for breakfast this morning? Did you have some cereal or toast? Maybe you had eggs? Well, how about crickets or ants?

Over a quarter of the world's population are already entomophagists (*en-toe-mof-fa-jists*) – people who eat insects regularly as part of their meals. Every day, they munch on beetles, crickets, and other insects for breakfast, lunch, and dinner.

Four Great Reasons to Eat Insects

1. Insects are an excellent health food. They are full of the things we need to help us grow and stay healthy, including protein, fibre, good fats, vitamins, and minerals.

Comparing Insects with Other Foods

100 grams of:	Energy (kJ)*	Protein (grams)	Iron (milligrams)
termite	2,565	14	0.75
caterpillar	1,550	28	35.5
fish	915	27	3.5
cow	710	28	1.0

*1 kJ = 1,000 joules

2. It's cheap and easy to farm insects. They take up a lot less space than cattle, pigs, or even chickens. Many insects also get most of the liquid they need from their food, so they don't need lots of extra water to drink. They really are easy-care farm animals.
3. Eating insects helps to protect our environment because insect farmers don't need to use as much land or water as other farmers. We can also help protect our crops by eating pest insects, such as locusts.

4. There are loads of insects all over the world. Insects make up over 80 percent of all the known kinds of animals on Earth. This means there are lots of different insects to choose from for dinner. Of course, some insects are poisonous, so if you're going to eat them, you'll need to know your good bugs from your bad bugs. But there are almost two thousand kinds of insects that are safe to eat.

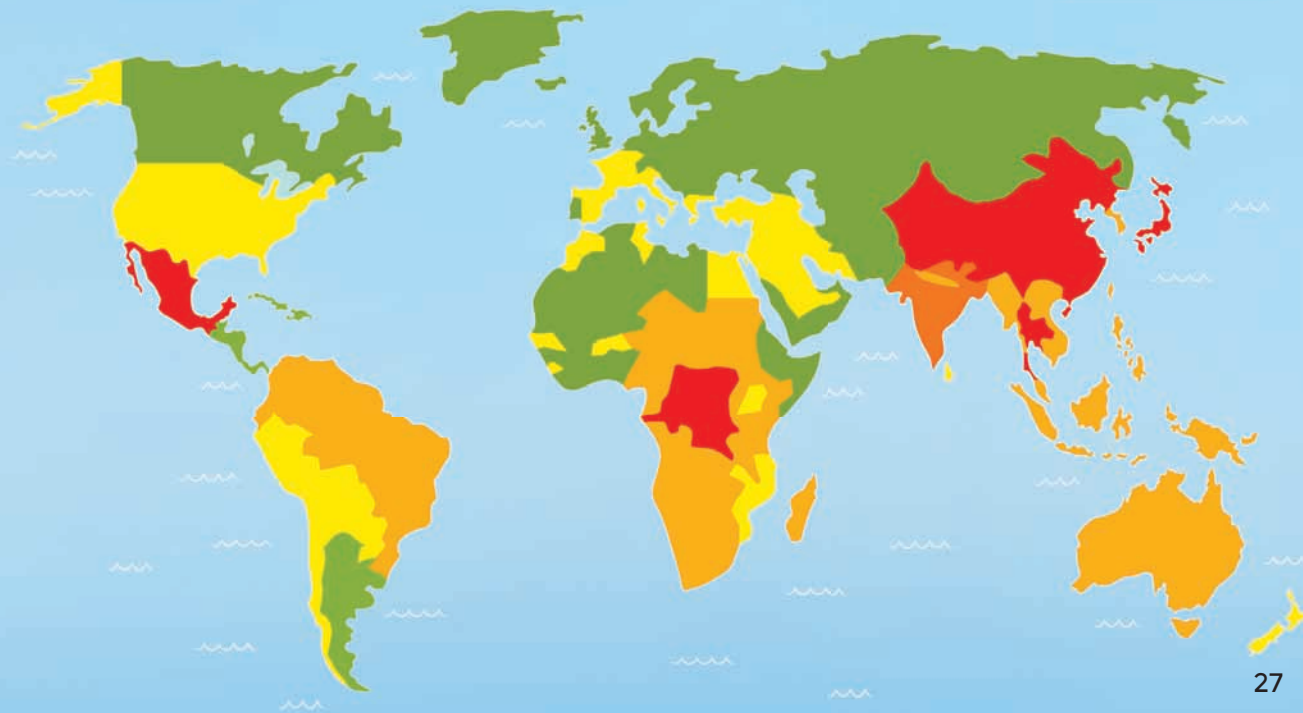
Edible Insects around the World

Insects are eaten in almost 80 percent of the world's countries. Some are eaten as special treats, and others are a part of the daily diet.

KEY

Edible insect species per country

- none
- under 10
- 10-100
- 100-300
- above 300



Why Are Some People Scared of Eating Insects?

Since there are so many insects around, why don't we *all* choose to eat insects every day? Why do some of us hate the thought of eating bugs?

Some people think of insects as creepy-crawly things with lots of legs and large bug eyes. They look too ugly to eat! Other people say that insects are dirty. They carry diseases, and they live in rotting food and other unhealthy places.

But scientists think there's another reason people won't eat insects – habit. Thousands of years ago, some areas of the world had lots of big animals that people could eat. In other areas, there weren't as many, but there were lots of insects. People got used to eating what they could find in their own environment.

Wild Food

Every March, people from all over the country go to the small town of Hokitika, on the West Coast of the South Island. They go there to try out the weird and wonderful food at a big wild food festival. These festivals are becoming more and more popular around New Zealand. At wild food festivals, people can nibble barbecued huhu grubs and crunch through pan-fried grasshoppers. **Yum!**

Vanilla ice cream
with wasp larvae ▼



We All Eat Insects

Even if you don't like the idea of eating insects, you might have eaten some today. Most people eat about 450 grams of insects each year without meaning to – that's about as much as a can of baked beans or a packet of butter.



This happens because insects hang around food that smells good to them. Some insects are so small it's impossible to keep them all away – especially when food is being prepared in large factories. Governments around the world know this. They allow very small amounts of insects in factory food because the food is well-cooked and it's very unlikely that cooked insects will hurt us. The heat used in cooking kills anything harmful.

In the United States, the law says it's OK to have up to thirty very tiny pieces of insect in every 100 grams of peanut butter. In chocolate, that number is even higher – up to sixty pieces!

The God of Ugly Things

The wētā is an insect that lives in many parts of New Zealand. Māori in the Hauraki Gulf call giant wētā “wētā punga” after Punga, who has been called “the god of ugly things”. Many Māori in the South Island call them “taipo”, which means ghost or evil spirit. Early Māori used to eat wētā mashed with kūmara. They also ate huhu grubs. They knew a good source of protein when they saw it!



Bug Grub to the Rescue

So we’re all eating insects, even if we don’t know it. Maybe these little creatures can help us to solve a big problem. More than 7.4 billion people live on our planet. That number is increasing all the time. Scientists are starting to wonder how we’ll be able to find enough food to feed our growing population. Bugs might be the best way to solve food shortages in the future.

Some people are already farming insects for food. A company in the South Island is selling ants and locusts that are gathered in Canterbury and Otago. You can order these insects in some restaurants. There are also shops that sell pizzas, muffins, and crackers made with cricket flour. And you can buy bags of chocolate-coated grasshoppers, fried bamboo worms, mixed bugs, or flying termites to munch on while you watch your favourite movie. That should keep you hopping!



How to Make Cricket Flour

1. Take a lot of crickets.



2. Dry them out in a hot oven.



3. Grind them up into a powder.



illustrations by
Scott Pearson



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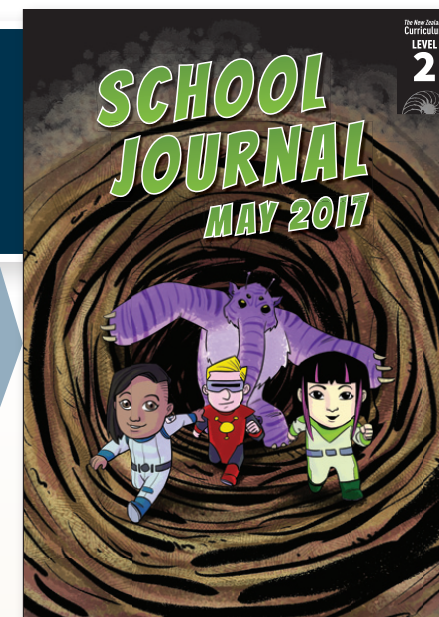
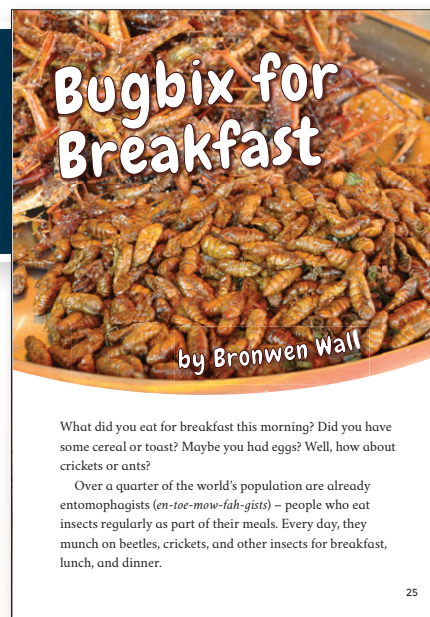
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