

Harwoods Hole

by Marcus Thomas

In 1958, a group of people stood on the edge of a huge hole in the ground. The hole, on Takaka Hill near Nelson, was known as Harwoods Hole. It dropped straight down into darkness. What was at the bottom? The group wanted to find out.

Going down

The group were cavers – people who like exploring caves. One of them dropped a rock into the hole, and they listened until they heard it hit the ground. By counting how long the rock took to fall, the cavers worked out that the hole was about 200 metres deep. They decided to go down – but there were no ledges or any easy ways to climb into the hole. How could they get to the cave floor?

The best option was to use a **winch**. Each caver was tied to a wire cable and lowered slowly into the hole. It took an hour and a half for the first person to reach the bottom. When they got down there, they saw a world nobody had ever seen before.



The winch ▲



At the bottom of the hole, a large cave led deep into the mountain. It followed the path of an ancient underground river. As the group went through the cave, they saw beautiful **stalactites** and waterfalls.

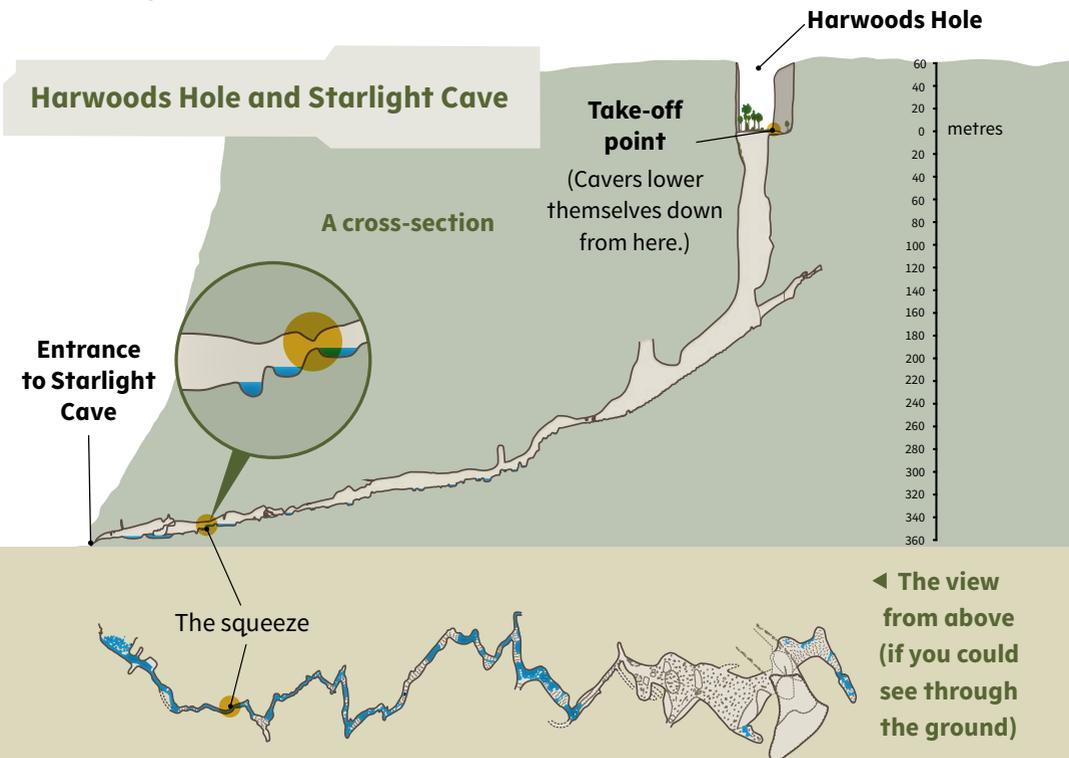


A recent photo of a caver in Harwoods Hole ▲

Starlight Cave

The following month, the cavers found another cave on Takaka Hill. When they first explored the cave, the light from their lamps reflected off the walls. It looked so beautiful one of the cavers named it Starlight Cave. People wondered if Harwoods Hole and Starlight Cave might join up. To find out, some cavers put a bright green dye into the stream in Harwoods Hole. A little while later, the green dye appeared in the stream in Starlight Cave. This proved that the two caves were connected.

After searching, the cavers eventually found a very small gap (called a “squeeze”) between the two caves. They dug away the rock and made the gap bigger. Now they were able to travel right through both caves.

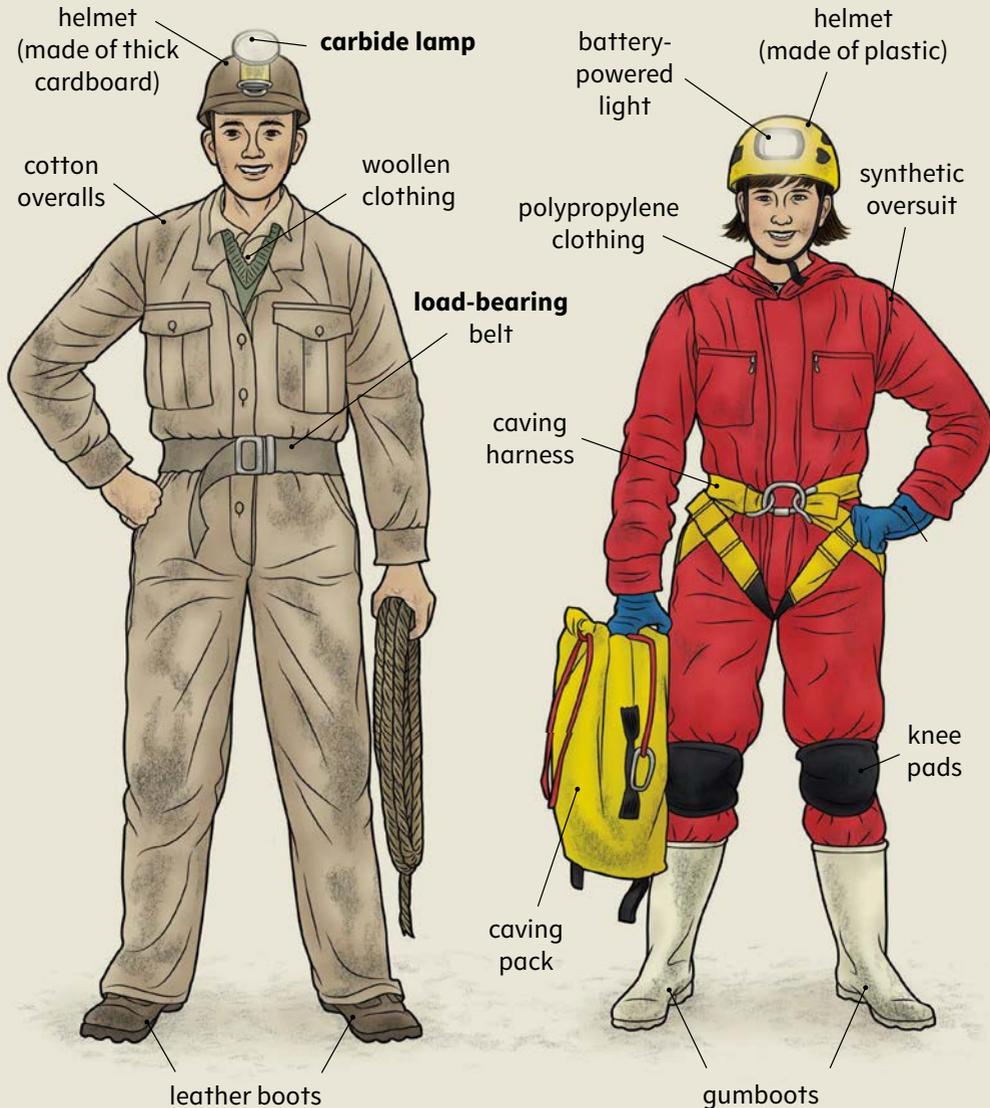


Caving gear then and now

Caving gear in 1958 was very different from the gear used today.

1958

Today



How was Harwoods Hole formed?

Harwoods Hole was made by an ancient river. Millions of years ago, the main **shaft** would have been a huge, roaring waterfall giving off spray and mist as it tumbled into the passages below. Today, the shaft is dry and silent. Only the deepest parts of the cave still have flowing water.

Solution caves

Caves made by water are known as “solution caves”. A solution is a mixture that is made when a substance dissolves in a liquid.

Solution caves can form in **marble** or **limestone**. All that’s needed is water – usually in the form of rain. The rainwater absorbs carbon dioxide from the air and soil. This makes the water a little bit acidic. Very slowly, the water dissolves the limestone and marble and makes holes. Over millions of years, these holes can become deep caves. Some can be kilometres long.





Harwoods Hole today

Although there are deeper caves in New Zealand, Harwoods Hole is still one of the deepest shafts ever found here. These days, it's a popular place for experienced cavers to explore. But today's cavers don't use a winch to go into the hole – they **abseil**.

Harwoods Hole is an exciting journey for cavers, who follow in the footsteps of those first explorers.

Life in caves

Caves are cold and very dark, so not many kinds of creatures live in them. Here are some that do.



Inside
glow-worms (titiwai)

Near the entrance

- cave wētā (tokoriro)
- spiders (pūngāwere)
- native bats (pekapeka)



In water

- eels (tuna)
- freshwater crayfish (koura)



Glossary

abseil: to lower yourself down a cliff or rock face by using a rope

carbide lamp: a lamp that gives off light by burning gas

limestone: a rock made over millions of years from the shells and skeletons of sea creatures

load-bearing: designed to take weight without breaking

marble: a type of rock similar to limestone but harder and much older

shaft: an opening or hole that goes straight up or down

stalactite: a formation of minerals shaped like an icicle that hangs from the roof of a cave

winch: a device with a rope or wire cable that winds around a drum and is used for lifting or pulling

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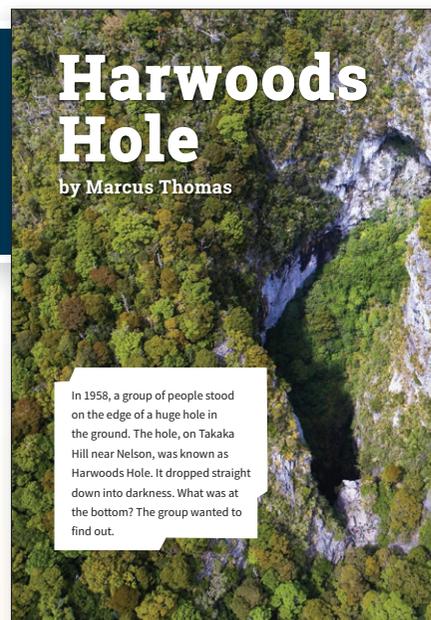
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