



The coconut trail

The claim: "Falling coconuts kill 150 people a year, but sharks only kill about 10!"

Step 1

A social media post

A popular post compares coconuts and sharks. It gives no source.

Who says this? What is their evidence?

Step 2

A 2002 news story

A respected shark scientist is quoted giving the 150 figure, to show how rarely sharks kill people.

Who says this? What is their evidence?

Step 3

Asked where the number came from

The scientist said he had found it online, in a press release from a British travel insurance company.

Who says this? What is their evidence?

Step 4

The only related study

A 1984 medical paper looked at coconut injuries at one hospital in Papua New Guinea. It did not estimate deaths worldwide.

Who says this? What is their evidence?

Where does the trail break? Is the claim supported?



The plastic and fish trail

The claim: "There will be more plastic than fish in the sea by 2050."

Step 1

A speech by a politician

The claim is repeated by leaders, charities and news sites around the world.

Who says this? What is their evidence?

Step 2

A 2016 report

A report projected 850 to 950 million tonnes of ocean plastic by 2050, against 812 to 899 million tonnes of fish, by weight.

Who says this? What is their evidence?

Step 3

Where the fish figure came from

It came from a 2008 study. In 2016, one of that study's authors said he no longer stood by those figures.

Who says this? What is their evidence?

Step 4

A newer estimate

A 2015 paper put the total weight of ocean life at about 4.9 billion tonnes, more than six times the report's figure.

Who says this? What is their evidence?

Where does the trail break? Is the claim supported?



The plastic bottle trail

The claim: "A plastic bottle takes 450 years to break down. Fishing line takes 600."

Step 1

A school poster

A colourful chart lists how long different rubbish lasts in the sea.

Who says this? What is their evidence?

Step 2

Hundreds of similar charts

The same numbers appear on websites, posters and even government pages, usually with no source.

Who says this? What is their evidence?

Step 3

Scientists check the charts

In 2020, researchers reviewed 57 of these infographics and could not find a credible scientific source for the numbers. All 37 that mentioned fishing line said exactly 600 years.

Who says this? What is their evidence?

Step 4

What studies actually show

Plastic lasts a long time, but how long depends on the type of plastic and where it ends up. Nobody has measured a 450-year bottle.

Who says this? What is their evidence?

Where does the trail break? Is the claim supported?
