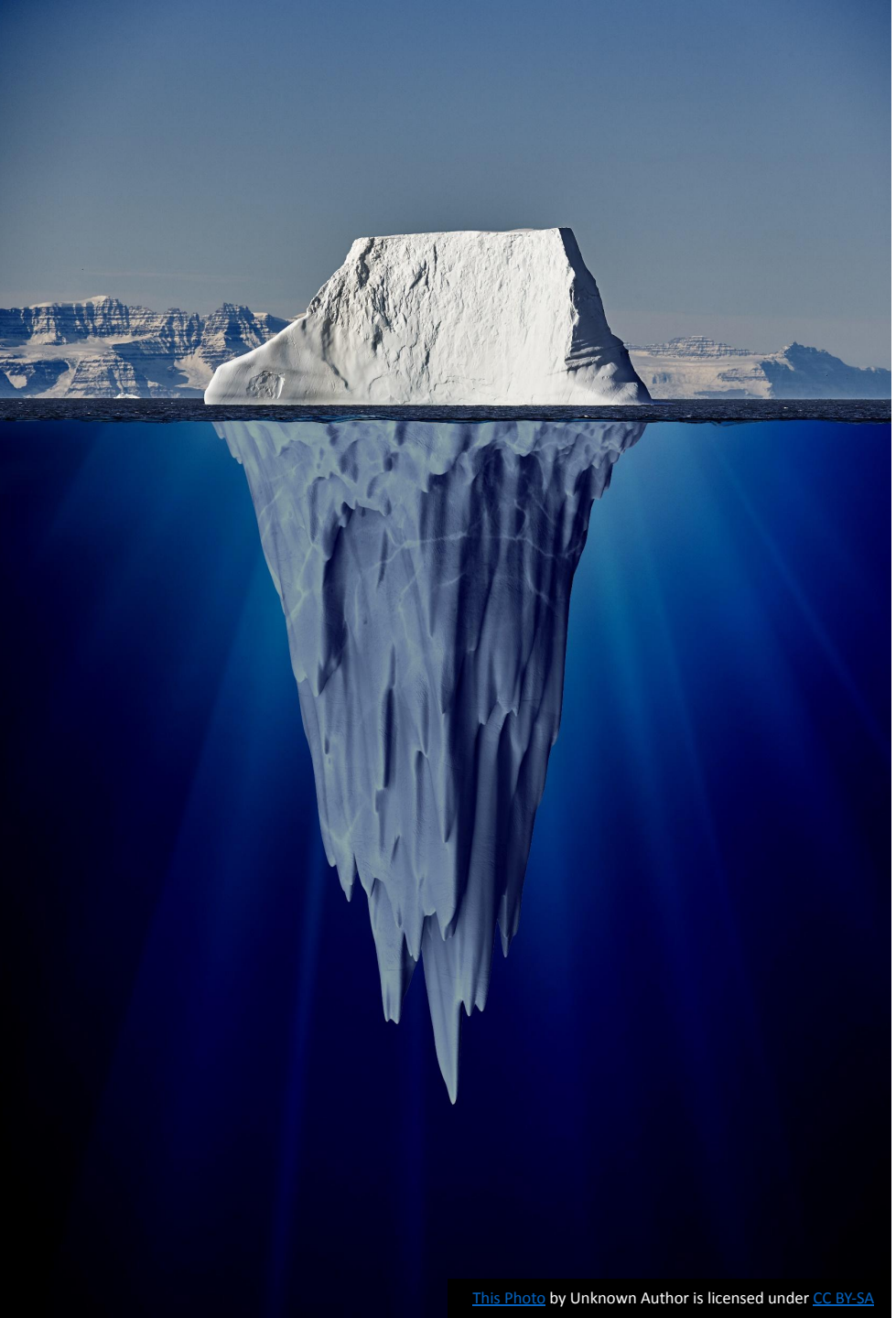
Owains Iceberg Experiment

By Owain Quigley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Introduction

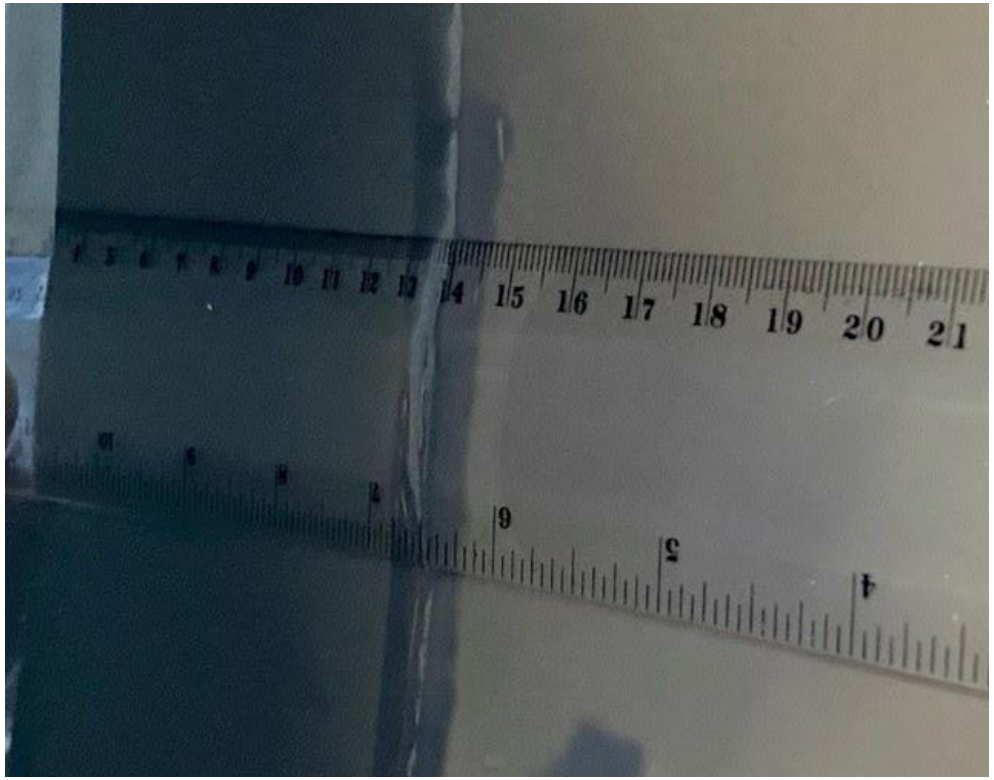
- I am planning to create a man made iceberg and will record what happens to the iceberg when it is placed in fresh water.

- I am interested in what happens as the iceberg starts to melt like it would with global warming. I am also interested in how the iceberg floats in the water and how much of it is above or below the water line.

Preparation

First I filled a bucket with cold water and measured the water level with a ruler.

The water level was 14cm deep. I filled a zip lock bag full of water and placed it in the freezer until it turned to ice.



The iceberg

•Once the water had turned into an iceberg, I took it out of the plastic zip lock bag and weighed it.

•The iceberg weighed 2476grams, which is the same as 2.476 Kilograms.

•The iceberg was sort of round in shape.

Into the bucket

I placed the iceberg into the bucket at around 9:30am.

I measured the water level again and it was 18.5 cm, which means the iceberg had displaced 4.5 cm of water in the bucket.

Results

•From looking at the iceberg in the bucket, it looks like 10% of the iceberg is above the water level with 90% of the iceberg being underneath the water. This is similar to the icebergs that are in saltwater in the Arctic.

•The water has been displaced by 4.5cm due to the weight of the iceberg.

•Once melted, the water level did not rise because the weight of the iceberg was replaced with water.