

SAIL & CONQUER!

NATIONAL GEOGRAPHIC KIDS is on board a **24-m-long replica longship** – called **Aslak** – and we're exhausted. We're **rowing** the vessel across **Roskilde Fjord**, trying to time our strokes with those of our 'Viking' companions, so the ship moves effortlessly through the water. It's hard work, but heaps of fun. "Stop rowing!" shouts our captain **Tonny Andersen**, from Denmark's **Maritime Research Centre**. We slide our **wooden oars** back into the ship, trying to avoid getting splinters in our fingers. Then Tonny hoists the large sail and the wind takes charge. Before we know it we're hurtling along at more than **eight knots** – nearly **15kmph**. It's breathtaking!



Their ability to build speedy ships like this was the secret to the Vikings' success – along with their impressive **sailing skills**. The vessels were perfectly designed for **surprise attacks**. Let's take a closer look...

FIGHTING FAR AWAY

Danish Vikings first invaded **Britain** in 793AD, ruling parts of England on and off well into the 11th Century. But the Danish Vikings also sailed to **France, Germany and Italy**. **Swedish** Vikings headed east, sailing down rivers into **Russia** and into **Turkey**. **Norwegian** Vikings reached **Scotland, Ireland, Iceland, Greenland** and **North America**.



The large **square sail** was decorated in striking colours to make the ship seem even more threatening! It was lowered when the men were rowing, and to protect it during battles.

Food and other supplies were stored at the **stern** (rear) of the ship.

As many as **80 oarsmen** would be onboard the longships, ready to row – and fight! – whenever necessary!

Longships were also called **dragonships** because some had a ferocious **dragon** carved onto their **pro**w (front). The decoration was designed to scare off **sea monsters**!

NAVIGATION!

The Vikings used the Sun, Moon and stars to help guide them across the oceans. But they also followed the movements of animals – in particular marine mammals, schools of fish and seabirds. They knew, for example, that **fulmars** (below) head ashore at night – clever or what?!



Fulmars helped Vikings find their way

WRECK IT!

One of the best places to see the wrecks of actual longships is at **The Viking Ship Museum in Roskilde, Denmark**. In 1962, five 1,000-year-old Viking ships were discovered at the bottom of **Roskilde Fjord**. It appears the Vikings **deliberately sunk** them to create a blockage and prevent an attack. Archaeologists excavated the ships and found the wooden hulks in **thousands of pieces**. But these fragments were **painstakingly reassembled** – and visitors can now see **two trading vessels**, a **30m warship** for international raiding, a **17m warship** and a **fishing boat**. Cool!



This wreck was pieced together like a jigsaw!

The ships were **steered** by a large oar at the **rear**, fixed to the ship's **right-hand side**. This oar gave us the word **'starboard'**, meaning the right-hand side of a ship. 'Styra' is Norse for 'steer'.

As many as **30 pairs of 3.9m oars** would be used by the men to row the ship out of port or power through the ocean when the wind had dropped. They also enabled them to row up rivers.

Warriors kept their **shields** in racks on the outside of the ships, helping to protect them from the waves.

Storage chests onboard the vessel were used as **seats** for the warriors.

Longships were **shallow and light**. They could **glide up rivers and land on beaches** – the perfect way to launch **sneaky attacks**!

Up to **37m long** and **3m wide**, Viking longships were **clinker-built**, meaning they had a very strong **hull** (body) made of overlapping planks of oak, fastened together by **iron rivets**.

The ship's **keel** (a bit like a spine) was made from a single piece of wood. This stopped the boat rolling from side to side and meant it was faster across the water – up to 15 knots (28kmph)!

Illustrations: Marek Jagucki. Sailing and wreck photos © Tim Herbert. Fulmar and map © Getty Images UK.

Turn over to find out about the Viking gods...