

Is it a bird? Is it a plane? No, it's a squid

February 8 2013, by Harumi Ozawa



Image taken by Kouta Muramatsu of Hokkaido University on July 25, 2011 shows the oceanic squid flying in the air in the northwest Pacific Ocean. It propels itself out of the ocean by shooting a jet of water at high pressure, before opening its fins to glide at up to 11.2m per second, the university said.

A species of oceanic squid can fly more than 30 metres (100 feet) through the air at speeds faster than Usain Bolt if it wants to escape predators, Japanese researchers said Friday.

The Neon Flying Squid propels itself out of the ocean by shooting a jet of water at high pressure, before opening its [fins](#) to glide at up to 11.2 metres per second, Jun Yamamoto of Hokkaido University said.

Olympic Gold medallist Bolt averaged 10.31 metres a second when he won at the London Games last year.

"There were always witnesses and rumours that said squid were seen flying, but no one had clarified how they actually do it. We have proved that it really is true," Yamamoto told AFP.

Researchers say is the first time anyone has ever described the mechanism the flying [mollusc](#) employs.

Yamamoto and his team were tracking a shoal of around 100 squid, part of the Japanese Flying Squid family, in the northwest Pacific, 600 kilometres (370 miles) east of Tokyo, in July 2011.

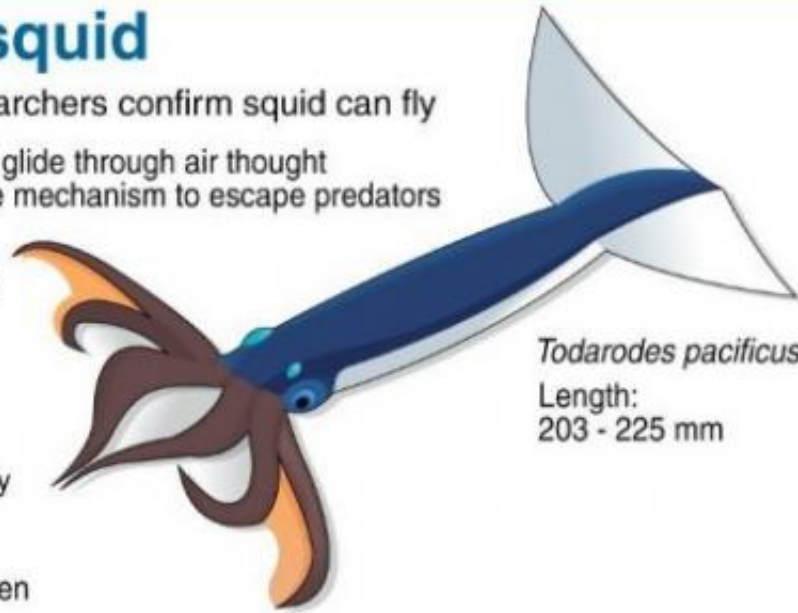
As their boat approached, the 20-centimetre (eight-inch) creatures launched themselves into the air with a powerful jet of water that shot out from their funnel-like stems.

Flying squid

Japanese researchers confirm squid can fly

- ▶ Jet launch and glide through air thought to be a defence mechanism to escape predators
- ▶ Can fly more than 30 metres in 3 seconds

Research:
Jun Yamamoto
Hokkaido University



Membrane between tentacles helps form "wing"

Opens mantle to draw in water

High pressure jet of water launches squid

Glides by spreading out fins and arms

Fins fold back for re-entry into water

Source: Hokkaido University

AFP

Graphic on a species of squid that can fly more than 30 metres through the air to escape predators.

"Once they finish shooting out the water, they glide by spreading out their fins and arms," Yamamoto's team said in a report.

"The fins and the web between the arms create aerodynamic lift and keep the squid stable on its flight arc.

"As they land back in the water, the fins are all folded back into place to minimise the impact."

A picture researchers snapped shows more than 20 of the creatures in full flight above the water, droplets of water from their propulsion jet clearly visible.

"We have discovered that squid do not just jump out of water but have a highly developed flying posture," the report said.

The squid are in the air for about three seconds and travel upwards of 30 metres, said Yamamoto, in what he believed was a defence strategy to escape being eaten.

But, he added, being out of the ocean opened a new front, leaving the cephalopods vulnerable to other [predators](#).



An image from footage taken by NHK and Discovery Channel in July 2012 and released on January 7, 2013 shows a giant squid up to 8m long, filmed at a depth of 630m in the sea near Ogasawara islands.

"This finding means that we should no longer consider squid as things that live only in the [water](#). It is highly possible that they are also a source of food for sea birds."

The study was published by German science magazine Marine Biology this week.

News of the finding comes after other Japanese scientists last month unveiled the world's first pictures of the elusive giant squid in its natural habitat, deep in the Pacific ocean.

Japan's National Science Museum succeeded in filming the huge creature at a depth of more than half a kilometre (a third of a mile) after teaming up with Japanese public broadcaster NHK and the US Discovery Channel.

Footage of the giant squid—Architeuthis to scientists—provided final proof of the quasi-mythical ocean-dwelling beast reported by sailors for centuries.

Researchers say Architeuthis eats other types of [squid](#) and grenadier, a species of fish that lives in the deep ocean. They say it can grow to be longer than 10 metres.

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