

# Holy Squid! Photos Offer First Glimpse of Live Deep-Sea Giant

James Owen for [National Geographic News](#)

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Like something straight out of a Jules Verne novel, an enormous tentacled creature looms out of the inky blackness of the deep Pacific waters.

But this isn't science fiction. A set of [extraordinary images](#) captured by Japanese scientists marks the first-ever record of a live giant squid (*Architeuthis*) in the wild.



The animal—which measures roughly 25 feet (8 meters) long—was photographed 2,950 feet (900 meters) beneath the North Pacific Ocean. Japanese scientists attracted the squid toward cameras attached to a baited fishing line.

The scientists say they snapped more than 500 images of the massive cephalopod before it broke free after snagging itself on a hook. They also recovered one of the giant squid's two longest tentacles, which severed during its struggle.

The photo sequence, taken off Japan's Ogasawara Islands in September 2004, shows the squid homing in on the baited line and enveloping it in "a ball of tentacles."

Tsunemi Kubodera of the National Science Museum in Tokyo and Kyoichi Mori of the Ogasawara Whale Watching Association report their observations this week in the journal *Proceedings of the Royal Society B*.

"*Architeuthis* appears to be a much more active predator than previously suspected, using its elongated feeding tentacles to strike and tangle prey," the researchers write.

They add that the squid was found feeding at depths where no light penetrates even during the day.

## Giant Breakthrough

Despite people's fascination with this deep-sea behemoth, the giant squid's life and habits have remained largely a mystery. The little information known has been mostly based on [dead and dying specimens](#) that were caught by commercial fishing boats or washed ashore.

The mysterious creature has inspired countless sea monster tales and has been the subject of various scientific expeditions. Since the mid 1990s there have been a number of research trips in search of giant squid. Cameras attached to deep-diving subs or sperm whales have been used to try to capture the elusive animals on film, but without success.



The Japanese researchers used sperm whales as guides to help them pinpoint likely giant squid haunts. Over the years whalers have reported finding a high number of large squid beaks in the mammals' stomachs, pegging sperm whales as primary [predators of large squid](#).

The images are generating considerable excitement among squid experts.

"I think it's wonderful that we've finally got a picture of a living giant squid," said Richard Ellis, a research associate at the American Museum of Natural History in New York and author of *The Search for the Giant Squid*.

"I thought it would only be a matter of time before someone got images of *Architeuthis*," he added.

"After all, it's not an endangered

species, not even all that rare, and it's one of the largest of all invertebrates. So the Japanese film finally breaks through and renders the statement 'nobody has ever seen a living giant squid' inoperative."

Squid expert Martin Collins of the British Antarctic Survey based in Cambridge, England, says the new images are a "fantastic" achievement.

The marine biologist says he was skeptical that a dedicated giant squid hunt would succeed. He thought the first wild sighting would probably come by accident.

"Fair play to these guys who've made the effort, gone out there and looked in what they thought was a good area, and found it," he said.

### **Hunting for Clues**

Collins is especially interested in clues the images might provide to the way giant squid swim and hunt in the deep ocean. "Seeing the animals on film gives you a tremendous insight into how they live down there," he said. "It shows they are pretty active animals, and that answers a big question that's been out there for some time."

Collins says there were two competing schools of thought among giant squid experts.

"One was the idea that [giant squid] were fairly inactive and just drifted around, dangling their tentacles below them like fishing lures to catch what came by," he said.

"The other theory was that they were actually quite active. This new evidence supports this, suggesting they are active predators which can move reasonably quickly."

"The efforts the squid went to untangle itself [from the baited fishing line] also shows they are capable of quite strong and rapid movement," he added.

The study team reports that [the severed tentacle](#) repeatedly gripped the boat deck and crew after it was hauled aboard. The squid's tentacles are armed with suckers, each ringed with tiny teeth to help snare prey.

Measuring 18 feet (5.5 meters) long, analysis of the tentacle confirmed it came from a giant squid and allowed the researchers to estimate the total length of the animal.

But the researchers caution that their data assume the tentacle was severed at its base. If not, the squid may have been considerably larger. The longest giant squid on record measured 59 feet (18 meters), including its two elongated tentacles.

### **Shedding Light on Giant Squid**

Giant squid, along with their close cousins colossal squid (*Mesonychoteuthis*), have the largest eyes of any animal.

"Giant squid do have particularly large eyes, which would suggest vision is important to them. Having a large eye isn't unusual in deep-sea animals—you see it quite often in fish."

The fact that the animal caught on film was swimming in total darkness suggests the species detects prey using alternative light sources. "The only light down there is likely to be light produced by other animals," said Collins of the British Antarctic Survey.

The Japanese team thinks that research techniques similar to their own could be used to bring about more close encounters with giant squid. Ellis of the American Museum of Natural History agrees.

"I'm sure we can learn a lot from an analysis of these images," he said. "And now that we have an idea of where to look for [the squid], we will undoubtedly get more pictures."



Name \_\_\_\_\_

1. What occurred in the article?
2. Where in the ocean did this story take place?
3. Describe the organism, how large was it, how deep in the ocean were the pictures from?
4. Compare the depth of the photographs with the length of campus (1200 meters), which is longer/deeper?
5. Describe the habitat the organism lives in.
6. Why were sperm whales used as guides?
7. How large can this organism grow?
8. List one other fact that you learned from this article.