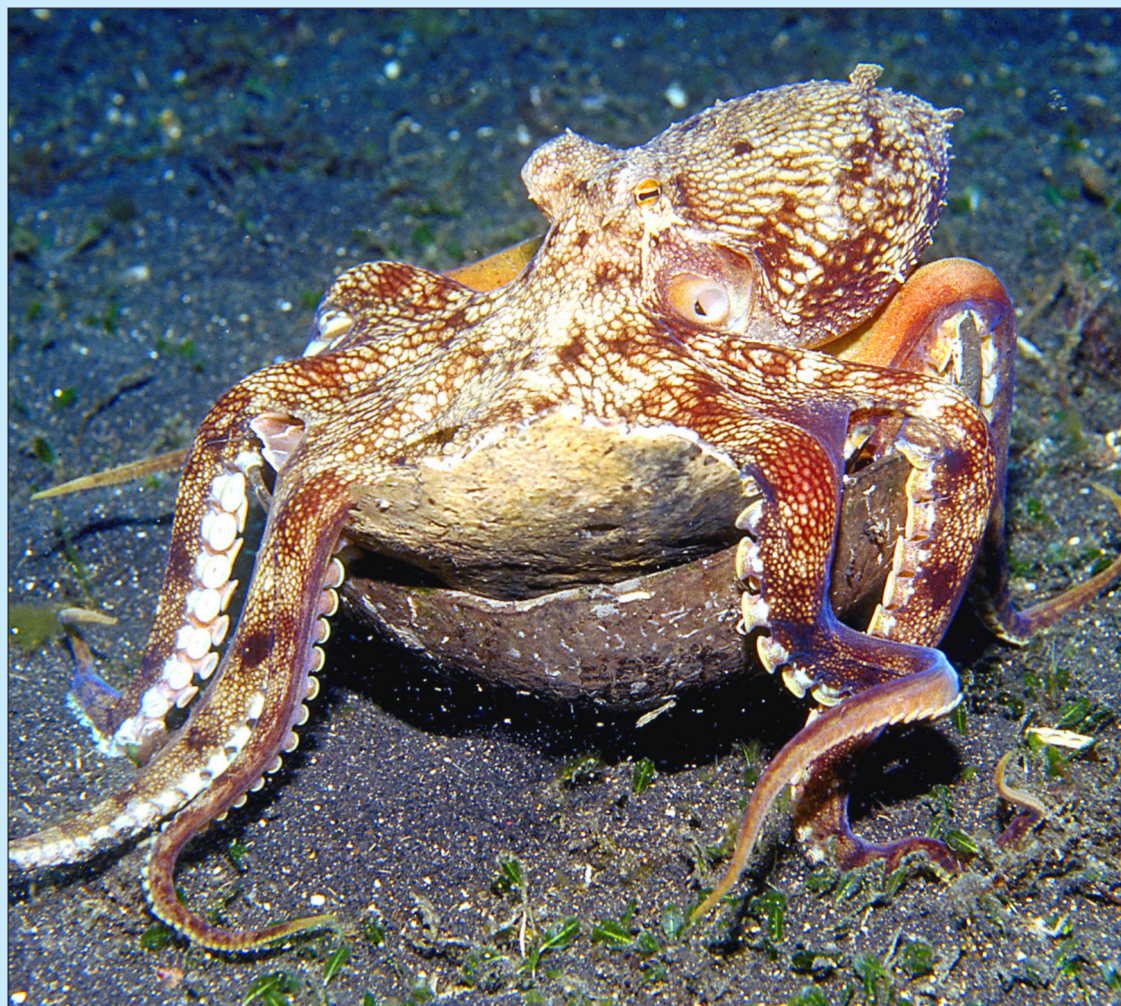


Coconut-carrying octopus stuns scientists

椰殼章魚震驚科學界



The octopus may be smarter than you think. Australian scientists revealed the eight-tentacled species can carry coconut shells to use as **armor** — the first case of an invertebrate using tools.

Research biologist Julian Finn said he was “blown away” the first time he saw the fist-sized veined octopus, *Amphioctopus marginatus*, pick up and scoot away with its **portable** protection along the sea bed.

“We don’t normally associate complex behaviors with **invertebrates** — with lower life forms I guess you could say,” Finn, from Museum Victoria, told AFP.

“And things like tool-use and complex behavior we generally associate with the higher vertebrates: humans, monkeys, a few birds, that kind of thing.”

“This study, if anything, shows that these complex behaviors aren’t limited to us. They are actually employed by a wide range of animals.”

The use of tools is considered one of the defining elements of intelligence and, although originally considered only present in humans, has since been found in other primates, mammals and birds.

But this is the first time that the behavior has been observed in an invertebrate, according to an article co-authored by Finn and published in the US-based journal *Current Biology*.

Finn said when he first saw the octopus walk along awkwardly with its shell, he didn’t know whether it was simply a freak example of wacky underwater behavior by the animal whose closest relative is a snail.

“So over the 10-year period basically we observed about 20 octopuses and we would have seen about four different individuals carrying coconut shells over large distances,” he said of his research in Indonesia.

“There were lots that were buried with coconuts in the mud. But we saw four individuals actually pick them up and carry them, jog them across the sea floor carrying them under their bodies. It’s a good sight.”

Finn said the animals were slower and more **vulnerable** to predators while carrying the broken shells, which they later used as shelters.

“They are doing it for the later benefit and that’s what makes it different from an animal that picks up something and puts it over its head for the immediate benefit,” he said.

Other animals were likely to be discovered to exhibit similar behaviors, he said. (AFP)

章魚可能比你想像中更聰明。澳洲科學家發現，八腳章魚會拿椰殼當盔甲——這是科學界發現無脊椎動物使用工具的首例。

生物研究學者朱利安·芬恩說，他第一次看到這種拳頭大小的紋理章魚在海底撿起椰殼，並隨身帶著這護殼溜走時「驚為天人」。

維多利亞博物館的芬恩對法新社說：「我們通常不會把複雜行為和無脊椎動物——我想或可說是低等生物——聯想在一起。」

「提到使用工具和複雜行為這類事情，我們通常會聯想到較高等的脊椎動物：人類、猴子、些許鳥類等。」

「要說有什麼的話，這項研究顯示，不只有人類會有這種複雜行為。事實上，各種動物都會出現這類行為。」

工具的使用被視為智慧高低的關鍵因素之一，雖然該行為原來被視為是人類特有的表現，但科學家後來在其他靈長類、哺乳類和鳥類等動物身上也發現同樣行為。

但芬恩和他人共同著作、發表在美國期刊《現代生物學》上的文章指出，這是科學家第一次在無脊椎動物身上觀察到這種行為。

芬恩說，他第一次看到章魚背著殼笨拙地前進時，他不知道這隻蝸牛近親的癡癡行為，是否僅是海底的一個特例。

談及他在印尼進行的研究時，他說：「因此，過去十年間，我們主要觀察了約二十隻章魚，看到有四隻章魚背著椰子殼行走了一大段距離。」

「許多（章魚）和椰殼一起埋在泥下，但我們只看到四隻章魚真正撿起椰殼帶著走，他們把椰殼抱在身後，在海底慢步了一段。那景象很有趣。」

芬恩說，章魚行動速度較慢，比較容易受到掠食者的攻擊，然而背著破椰殼可以躲避攻擊，後來牠們便以此作為遮蔽的屏障。

他說：「他們背著椰殼走是為了可能面臨的攻擊作準備，這和其他動物面臨攻擊時才隨手撿個東西放在頭上遮蔽不同。」

他說，其他動物也可能表現出類似的行為。

(法新社/翻譯：袁星慶)

This undated handout photo from Melbourne’s Museum Victoria shows an octopus wrapped inside the shell of a coconut and using it to protect itself on the seabed floor.

PHOTO: AFP/MUSEUM VICTORIA

墨爾本維多利亞博物館提供的這張未註明日期的資料照片中，一隻章魚躲在海底一個椰殼裡，用它來保護自己。

照片：法新社/維多利亞博物館

TODAY’S WORDS 今日單字

1. **armor** /ˈɑrmə/ n.

盔甲 (ku1 jia3),
防護鋼板 (fang2 hu4 gang1 ban3)

例: The bullet failed to penetrate the vehicle’s armor.

(子彈沒射穿車子的防護鋼板。)

2. **portable** /ˈpɔrtəbl/ adj.

可攜帶的 (ke3 xi1 dai4 de5)

例: I bought a portable television set for the bathroom.

(我買了一台可攜式電視放在浴室。)

3. **invertebrate** /ɪnˈvɜːtəbrɪt/ n.

無脊椎動物 (wu2 ji3 zhui1 dong4 wu4)

例: Worms and butterflies are both invertebrates.

(蠕蟲和蝴蝶都是無脊椎動物。)

4. **vulnerable** /ˈvʌlnərəbl/ adj.

易受傷的 (yi4 shou4 shang1 de5)

例: Many elderly people feel vulnerable in the city center.

(許多老人在市中心都會感到無助不安。)