



科学家们说，他们已经破解了海蟾蜍的 **DNA** 蓝图，该物种对部分动植物栖息地造成了破坏，而这一发现让人们重新燃起了控制这一事态的希望。

The cane toad originally came from South America and was introduced to Australia in 1935 with the hope that they would eat the beetles which were **devouring** sugar cane. But they ended up eating everything except the beetles. And they've been spreading through Australia ever since, **poisoning native** wildlife as they go.

海蟾蜍源于南美，并在 1935 年被引进澳大利亚，当时人们希望它们能吃掉吞食甘蔗的甲虫。然而它们却吃了除甲虫以外的所有动物。而且自那以来，海蟾蜍蔓延至澳大利亚各地，其所到之处的当地野生动植物都受到了毒害。

Snakes, lizards and even crocodiles can die if they **ingest** the amphibian's deadly **toxin**. Now the possibility of a **genetics-led solution** is at hand. An international team of scientists has succeeded in unlocking more than 90% of the toad's **genome** – its genetic material. To get this information, the teams used advanced computers to **sequence** 360 billion DNA pairs, meaning they've worked out the exact order of the four bases in a strand of DNA.

如果摄入了这种两栖动物的致命毒素，蛇、蜥蜴，甚至鳄鱼都可能会被毒死。现在，由遗传学主导的潜在解决方法就近在咫尺。一支由多国科学家组成的团队已成功破解了海蟾蜍超过 90% 的基因组信息，即其遗传物质。为了得到这一信息，这些团队用先

进的计算机测定了三千六百亿对 DNA 序列，这意味着他们已算出一串 DNA 中四种碱基的顺序。

The researchers said the discovery would offer **biological clues** about the animal's evolution. The scientists have also discovered three new viruses within the toad's DNA, which could be used to control **pests**. But in a country which has a long history of introducing species with **disastrous** consequences, scientists will be **cautious** with the way they use this new information.

这组研究人员说，该发现将为解释该动物的进化过程提供生物学线索。科学家们还在这种蟾蜍的 DNA 中发现了三种新的病毒，它们可能被用来控制有害动植物。但在澳大利亚，由于长期以来引进新物种导致了诸多灾难性的后果，科学家会谨慎考虑应如何利用这些新信息。

1. 词汇表

devouring	吞食
poisoning	毒害
native	当地的，原生的
ingest	摄入、摄取
toxin	毒素
genetics-led solution	遗传学主导的解决办法
genome	基因组
sequence	测定 DNA 的排列顺序（生物学术语）

biological clues	生物学线索
pests	有害的动植物
disastrous	灾难性的
cautious	谨慎的

2. 阅读理解：请在读完上文后，回答下列问题。（答案见下页）

1. How were cane toads supposed to stop Australia's sugar cane being destroyed?
2. What have scientists discovered in the toad that has given them 'biological clues' about their evolution?
3. What has been discovered in the toad's DNA that could control pests?
4. True or false? *Introducing other animals in Australia has not always gone well.*

3. 答案

1. How were cane toads supposed to stop Australia's sugar cane being destroyed?

They were supposed to eat the beetles which were devouring sugar cane but they ended up eating everything except the beetles.

2. What have scientists discovered in the toad that has given them 'biological clues' about their evolution?

Scientists have succeeded in unlocking more than 90% of the toad's genome - that's its genetic material.

3. What has been discovered in the toad's DNA that could control pests?

The scientists have discovered three new viruses within the toad's DNA, which could be used to control pests.

4. True or false? *Introducing other animals in Australia has not always gone well.*

True. The reporter said the country had a long history of introducing species with disastrous consequences.