鲸鲨：原子能试验解开世界上最大鱼类的年龄之谜 Whale sharks: Atomic tests solve age puzzle of world's largest fish

冷战期间进行的原子弹试验数据帮助科学家们准确地测定了世界上最大鱼类的年龄。鲸鲨是体型庞大、行动速度缓慢、性情温和的生物，主要栖息在热带水域中。

Stretching up to 60 feet in length and weighing around 20 tonnes, the slow-moving whale shark is very popular with divers. But despite their docile nature, scientists still lack basic information, such as how long the whale sharks actually live.

全身长达60英尺（约18米）、重约20吨——行动缓慢的鲸鲨在潜水者当中很受欢迎。但尽管它们性情温顺，科学家们仍缺乏有关它们的基本信息，比如鲸鲨的真实年龄。

To solve the problem, researchers turned to data from the dozens of atomic bomb tests carried out in the 1950s and 60s. These explosions produced huge amounts of an isotope called Carbon-14.

为了解决这个问题，研究人员参考并利用了20世纪50年代和60年代进行的数十次原子弹试验的数据。这些爆炸产生了大量被称作 “碳-14” 的同位素。

As scientists know how long the element takes to decay, they can work out the whale shark’s age, depending on how much Carbon-14 is contained in their bones. One whale shark was 50 years old at time of death. Some can live to be 150.

由于科学家们知道这种元素衰变需要多长时间，因此他们可以根据鲸鲨骨骼中碳-14 的含量计算出鲸鲨的年龄。其中一头鲸鲨在死亡时有50岁。有些可以活到150岁。

**词汇**

stretching 长度（可达）……  
weighing 有……重  
slow-moving 行动缓慢的  
docile 性情温顺、温和的  
turned to 求助于  
isotope 同位素  
element 元素  
decay 衰变

**阅读理解：请在读完上文后，回答下列问题 。**

1. True or false? Whale sharks are fast and fierce creatures.

2. How heavy is a whale shark?

3. To work out how long the whale sharks live, what did researchers turn to?

4. Which parts of the whale shark’s body indicate their age?

**答案**

1. True or false? Whale sharks are fast and fierce creatures.  
False. Whale sharks are slow-moving and docile creatures.

2. How heavy is a whale shark?  
A whale shark weighs around 20 tonnes.

3. To work out how long the whale sharks live, what did researchers turn to?  
Researchers turned to data from the dozens of atomic bomb tests carried out in the 1950s and 60s.

4. Which parts of the whale shark’s body indicate their age?  
Their bones. The amount of Carbon-14 contained in their bones helps scientists figure out their age.