**Scientists Discover How Some Dinosaurs Grew So Big**

**科学家揭秘恐龙身形巨大的原因**

Scientists studying the remains of ancient creatures say that large dinosaurs did not grow at the same rate.

研究恐龙这一古老生物遗骸的科学家们表示，大型恐龙的生长速度并不一样。

Some dinosaurs grew slowly and steadily. Others experienced a growth spurt as they neared adulthood. A “growth spurt” is when something or someone grows very quickly. For example, children usually have a growth spurt between the ages of 12 and 18.

有些恐龙生长的缓慢而稳定，而某些恐龙则在接近成年期时会经历了一次迅猛发育。“迅猛发育”是指某物或某人长得非常快。例如，儿童通常在12岁到18岁之间有一个快速增长期。

The same appears to be true for some dinosaurs!

对某些恐龙来说也是如此!

The research appeared recently in the Proceedings of the Royal Society B publication.

这项研究最近发表于《英国皇家学会学报B版》。

To reach their findings, scientists cut through the fossilized bones of dinosaurs. They examined the yearly growth rings of the bones from 11 kinds of theropods. Theropods are a group of dinosaurs that mainly walked on two legs and include big meat-eating dinosaurs, like tyrannosaurus rex, commonly known as T. rex.

为了对恐龙进行研究，科学家们对恐龙化石进行了切割。他们研究了11种兽脚类恐龙化石的生长年轮。兽脚类恐龙是一类主要靠两条腿行走的恐龙，包括大型食肉恐龙如霸王龙。

Reuters news agency reports that this new study provides a look into the lives of some of the most fearsome hunters ever to walk the Earth.

路透社报道称，这项新的研究向大家展示了行走于世间的某些最凶猛的捕食者的生活。

The research team looked at fossils from museums in the United States, Canada, China, and Argentina. They were able to cut into the fossilized bones of one of the world’s most famous T. rexes, known as Sue. Sue is housed at the Field Museum in Chicago.

研究小组研究了美国、加拿大、中国和阿根廷博物馆的化石。他们切割了世界上最著名的霸王龙之一——“苏”的骨骼化石。“苏”目前藏于芝加哥的菲尔德博物馆。

The researchers used machines to cut into Sue’s largest leg bones. These bones showed that the T. rex and its relatives - known as tyrannosaurs - have a period of extreme growth during the years before adulthood. It also shows that they reached full adult size by around age 20.

研究人员用机器切割霸王龙“苏”最大的腿骨。这些骨头表明，霸王龙和它的亲属（也是霸王龙）在成年前的几年里有一段极速生长的时期。研究还显示，它们在20岁左右就达到了成年的体型。

Sue is about 13 meters tall. She is believed to have lived to about 33 years. She lived in an area that is modern day South Dakota, a state in the north-central part of the United States.

苏大约13米高，据信她活到了33岁左右。她住在一个现今为南达科他州的地区。南达科他州是美国中北部的一个州。

Other groups of large theropods had more steady rates of growth over a longer period of time. Examples of these include two kinds of North American dinosaurs -- Allosaurus and Acrocanthosaurus.

其他大型兽脚类恐龙则在较长时间内有着更为稳定的生长速度。这类恐龙包括两种北美恐龙——异特龙和高棘龙。

Another dinosaur from Antarctica, Cryolophosaurus and a dinosaur recently discovered in Argentina also grew slowly.

另一种来自南极洲的恐龙——冰脊龙和最近在阿根廷发现的一种恐龙也生长缓慢。

The Argentinian dinosaur has not yet been named, but it was as big as a T. rex. This dinosaur did not reach its full adult size until it reached about 40 years of age. It is believed to have lived to about age 50.

阿根廷发现的恐龙还没有被命名，但它有霸王龙那么大。这种恐龙到40岁左右才会达到成年的体型，而据信它活到了50岁左右。

Big theropods share the same basic body design. They walked on two legs and had large skulls and strong jaws. And of course, they had threatening teeth.

大型兽脚类恐龙拥有相同的基础身体构造。它们用两条腿走路，头骨大，下颚结实。当然，它们都有很吓人的牙齿。

The lead researcher on the study is Tom Cullen. He is a paleontologist with the North Carolina Museum of Natural Sciences and North Carolina State University.

汤姆·卡伦是这项研究的首席研究员。他是北卡罗来纳州自然科学博物馆和北卡罗来纳州立大学的古生物学家。

He said that before this study, “it was known that T. rex grew very quickly, but it was not clear if all theropod dinosaurs reached gigantic size in the same way,” or if there were many ways they grew so big.

他说，在这项研究之前“人们都知道霸王龙的生长速度非常快，但并不清楚是否所有的兽脚类恐龙都是以同样的方式生长成巨大的体型的”，也不了解它们长这么大是否存在多种生长形式。

I’m Anna Matteo.

安娜·马特奥报道。

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