**Study Suggests Gorillas Become More Violent in Crowded Forest**

**研究表明族群增多使大猩猩变得更加暴力**

Gorillas are very social animals -- up to a point. Crowded areas can make silverbacks more violent, scientists say.

某种程度上讲，大猩猩是喜欢群居的动物。但科学家们表示，拥挤的环境或会导致银背大猩猩变得更加暴力。

Silverbacks are adult male mountain gorillas that often have a white area across their backs. They are the leaders of gorilla families.

银背大猩猩是指通常背部有白毛的成年雄性山地大猩猩。他们通常也是大猩猩家族的领袖。

Mountain gorillas are genetically similar to humans. The large animals spend most of their time sleeping, eating, and cleaning each other. They are mostly peaceful creatures.

山地大猩猩的基因与人类相似。这些大型动物大部分时间都在睡觉、吃饭和互相帮助同类清洁毛发。它们大多是性情平和的动物。

They live in parts of Uganda, the Democratic Republic of Congo, and Rwanda.

它们生活在乌干达、刚果民主共和国和卢旺达的部分地区。

Researchers recently studied 50 years of data from Rwanda. They found that as the number of gorilla family groups increased, so too did the of violent fights between them. Most often, silverbacks led the fights.

研究人员最近研究了卢旺达50年来的数据。他们发现，随着大猩猩家族数量的增加，它们之间的暴力冲突也在增加。银背大猩猩带头互斗是最常见的情况。

Some gorillas died, especially infants, or babies. These deaths, in turn, slowed population growth.

争斗中会造成部分大猩猩死亡，特别是婴儿或幼儿。这些死亡反过来又减缓了大猩猩数量的增长。

Damien Caillaud of the University of California, Davis, was a co-writer of the new study, published in Science Advances.

加州大学戴维斯分校的达米安·凯劳德是这项新研究的合著者。该研究发表于《科学进展》。

“Males will fight to protect the females and infants in their group, and to acquire new females,” he said.

他表示：“雄性会为了保护雌性和幼崽而战斗，与此同时获得新的雌性。”

The study found that the amount of fighting was not a result of the total number of individuals in an area. What was important was the number of family groups in an area.

研究发现，争斗次数并非某是由当地大猩猩的总数引起的，更为重要的是一个地区族群的数量。

Since the 1960s, mountain gorillas have been carefully studied and protected in central Africa. These animals almost died off in the 1970s. The population has since grown to just over 1,000 animals.

自20世纪60年代以来，非洲中部地区对山地大猩猩进行了仔细的研究和保护。20世纪70年代这些动物差点灭绝。此后它们的数量已经增长至1000多只。

Rich Bergl is a primatologist at the North Carolina Zoo. Bergl was not involved in the study.

里奇·伯格是北卡罗来纳动物园的灵长类动物学家。伯格没有参与这项研究。

“Rarely do we think about how an animal’s behavior and social structure can influence population size,” Bergl said. He added, “But it turns out we should, especially for social animals like gorillas.”

“我们很少考虑动物的行为和社会结构会如何影响种群的数量，”伯格说道。他还补充道，“但事实证明我们应该这样做，尤其是对于像大猩猩这样的群居动物。”

Tara Stoinski was a co-writer of the new paper. She is also president of the Dian Fossey Gorilla Fund, a nonprofit group.

塔拉·斯托因斯基是这篇新论文的合著者。她还是非营利组织迪福斯大猩猩基金的主席。

“Everyone wants to know how many gorillas can live inside the protected habitat area. It turns out the answer depends partly on how they organize themselves socially,” she said.

她表示：“每个人都想知道保护区内能生活多少只大猩猩。事实证明，在一定程度上答案取决于它们如何构建自己的社会组织。”

While in Rwanda, Stoinski said she saw changes in gorilla behavior beginning about 2007. Around that time, three large family groups broke into many smaller family groups.

斯托因斯基表示，在卢旺达她看到大猩猩的行为在2007年左右开始发生变化。大约在那个时候，三个大家庭分裂成了许多小家庭。

The gorilla population grew and families spread out in Volcanoes National Park.

大猩猩的数量增加，各个家庭分散在火山国家公园里。

There were about 10 family groups in the study area. The number of fights between them increased by three times. The number of infant deaths increased by five times. The population growth fell by half.

在研究区域内大约有10个家族。它们之间争斗的次数增加了三倍。婴儿死亡数量增加了五倍。种群数量的增长率则下降了一半。

The large family groups likely broke apart after the deaths of important silverback leaders, said Stoinski.

斯托因斯基表示，在重要的银背大猩猩领导去世后，这些大家族可能会分崩离析。

“When these ‘elder statesman’ gorillas got older and died, the younger males weren’t able to keep the groups together,” she said.

她说：“当这些‘年长的领导者’大猩猩老去并去世后，年轻的雄性大猩猩无法维持群体的团结。”

The study was based on data from about 400 gorillas in Rwanda between 1968 and 2017.

这项研究基于1968年至2017年间卢旺达大约400只大猩猩的数据。

I’m John Russell.

约翰·拉塞尔报道。

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