

Elephants really can't hold their liquor

Humans are not the only animals that get drunk. Birds that **gorge** on **fermented** berries and sap are known to fall out of trees and crash into windows. Elk that overdo it with rotting apples get stuck in trees. Moose wasted on overripe crabapples get **tangled** in swing sets, hammocks and even Christmas lights.

gorge 吞下; 暴食

fermented 酿造; 发酵的

tangle 缠结; 混乱; 争吵

Elephants, though, are the animal kingdom's most well-known boozers. One scientific paper describes elephant trainers rewarding animals with beer and other alcoholic beverages, with one elephant in the 18th century said to have drunk 30 bottles of port a day. In 1974, a herd of 150 elephants in India, became **intoxicated** after breaking into a brewery, then went on a rampage that destroyed buildings and killed five people.

intoxicated 喝醉的; 极度兴奋的

enzyme 酶

In fact, elephants are likely exceptional lightweights because they lack a key **enzyme** that quickly **metabolizes ethanol**.

metabolize 新陈代谢

ethanol 乙醇

Humans, chimpanzees, bonobos and gorillas have an unusually high tolerance for alcohol because of a shared genetic **mutation** that allows them to metabolize ethanol 40 times faster than other **primates**. The mutation occurred around 10 million years ago, coinciding with an ancestral shift from **arboreal** to **terrestrial** living and, most likely, a diet richer in fallen, fermenting fruit on the forest floor.

mutation 突变; 变化

primate 灵长目动物; 首领

arboreal 树木的; 树栖

terrestrial 地球的; 陆地的

But most other mammals did not possess the mutation, and in some species, including elephants, dogs and cows, the ethanol-metabolizing gene had lost all function.

"It was far more likely for animals that eat the leafy part of plants or for carnivores to lose the gene, " said Amanda Melin, a molecular ecologist at the University of Calgary.

Forest elephants today regularly seek and eat fruit, but their ancestors became grass eaters around 8 million years ago. Evidence indicates they then switched to a mixed diet around 1 million years ago.