

Japan scientists launch freeze-dry animal sperm bank

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A mother giraffe suckle her one-month-old baby at Tokyo's Tama Zoo on February 9, 2013. Japanese scientists have launched a sperm bank for endangered animals that uses freeze-drying technology, the chief researcher said Wednesday.

Japanese scientists have launched a sperm bank for endangered animals that uses freeze-drying technology they hope could one day help humans recreate animal populations on other planets, the chief researcher said

Wednesday.

The team at Kyoto University's Institute of Laboratory Animals Graduate School of Medicine successfully preserved sperm taken from two [endangered primates](#) and a type of giraffe, associate professor Takehito Kaneko said.

They mixed the sperm with special preservation liquid and freeze-dried it in a way that allows them to store it at just 4 degrees Celsius (39 Fahrenheit), Kaneko said.

The temperature is much higher—and less energy intensive—than conventional ways of storing sperm.

Kaneko and his researchers have previously successfully freeze-dried sperm from rats and mice without the use of bulky [liquid nitrogen](#) equipment, and were able to prove the viability of the spermatozoa up to five years later.

"In this way, scientists will be able to obtain genetic information more easily, which means we could help to preserve endangered animal species," Kaneko said.

Kaneko is quick to point out that there is presently no human application for the technology, but adds it is an avenue that may be explored in the future.

"This may sound like a dream, but we could in future take genetic information into space," he said, adding it may allow for the transfer of material to help establish [animal populations](#) on future colonies.

More immediately, the technology makes it possible to store sperm at room temperature for short periods, meaning it would be safe in the

event of power failures caused by a natural disaster, for example.

A challenge now, said Kaneko, is to develop a way to apply the method to the other side of the procreative equation.

"Now we have to use fresh eggs or those frozen conventionally," he said. "We are studying methods to freeze-dry eggs as well."

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