

Tardigrades may have survived spacecraft crashing on moon

The *Israeli* Beresheet *probe* was meant to be the first private lander to touch down on the moon. And all was going smoothly until mission controllers lost contact in April as the robotic craft made its way down. Beyond all the technology that was lost in the crash, Beresheet had an unusual cargo: a few thousand tiny *tardigrades*, the *toughest* animals on Earth.

Israeli 以色列的

probe 探针; 探测器

tardigrade 水熊虫

toughest 最坚硬的

Tardigrades have fascinated scientists since their discovery in the 18th century. They have been found on mountain tops, in *scorching* deserts, and *lurking* in *subglacial* lakes in Antarctica. They survived being frozen in liquid *helium* and being boiled at 149C.

scorching 灼热的; 激烈的

lurking 潜伏

subglacial 冰川下的

helium 氦

The tardigrade's secret is the ability to *shrivel* into a seed-like *pod*, expelling nearly all of its water and slashing its *metabolism*. In this "tun" state, the animals can *hunker* down and survive conditions that would normally be swiftly fatal.

shrivel 枯萎; 皱缩

pod 蚕茧; 豆荚

metabolism 新陈代谢

hunker 守旧者; 蹲下

"Tardigrades can survive pressures that are comparable to those created when *asteroids* strike Earth, so a small crash like this is nothing to them," said Lukasz Kaczmarek, a tardigrade expert and *astrobiologist*.

asteroid 小行星

astrobiologist 天体生物学家

"They cannot colonise the moon because there is no atmosphere and no liquid water," Kaczmarek said. "But it could be possible to bring them back to Earth and then add water. They should *resurrect*."

resurrect 复活