

# Mars rover escapes from the "Bay of Lamentation"

**SPACE** 6 June 2006

By **Kelly Young**



**Opportunity spun its wheels backwards to gradually inch out of a sand trap**  
(Image: NASA/JPL)

NASA's Opportunity rover has once again freed itself from a sand trap on Mars.

On 28 May, the rover's two rear wheels became **mired** in loose soil that the vehicle unexpectedly encountered while driving in a trough between two dunes. The rover was

expected to drive for 24 metres but only made it 1.5 m, as its wheels churned in the soft soil.

To escape, the rover drove backwards for 5 to 28 centimetres each day. And at 0600 EDT (1000 GMT) on Tuesday, mission managers learned that the strategy had worked – all six of the rovers' wheels were back on solid bedrock.

Rover officials do not yet know what caused the wheels to get stuck, but they planned to turn Opportunity's cameras back on the trouble spot on Tuesday to find out more.

And they have decided to name the sand trap "Jammerbugt", which translates to "Bay of Lamentation" in Danish. "It's a bay on the northwest coast of Denmark that historically has been the site of many shipwrecks," Steve Squyres, the rovers' principal investigator and a planetary scientist at Cornell University in New York, US, told **New Scientist**.

## Slip checks

The rover team will continue to use Danish names for any new features it discovers in the next several weeks, in honour of the country's contributions to the mission. Several Danes work on the rover and Danish institutions provided instruments to study magnetic minerals in the Red Planet's soil, rocks and atmospheric dust. Denmark also celebrated its Constitution Day on Monday.

This is not the first time Opportunity has become trapped on Mars. It got stuck in another location, nicknamed "Purgatory Dune", in April 2005, and was delayed for five weeks.

That experience caused the rover team to implement slip checks that stop the rover from driving if its wheels slip beyond a certain amount. The checks prevented Opportunity from getting seriously entrenched in this trap.

After the rover observes the soil that ensnared it, it will continue trundling south towards an 800-metre-wide crater called Victoria that still lies 900 metres away. "Southward ho," Squyres says.

**More on these topics:**   **MARS**