

PLANETARY EXPLORATION

Scientists Pick Two Sweet Spots for Rovers on Mars

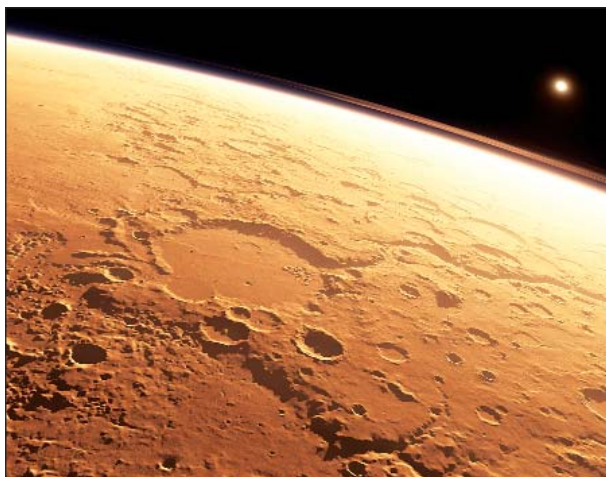
In the end, the choice of where to land NASA's two Mars Exploration Rovers next year turned out to be a no-brainer for planetary scientists. They just obeyed their thirst.

Researchers have pored over 185 potential landing sites for more than 2 years looking for technically practicable, reasonably safe, and scientifically interesting choices. In a meeting last week near the Pasadena, California, campus of NASA's Jet Propulsion Laboratory, they agreed that two sites stood head and shoulders above the rest. Those choices—the Terra Meridiani (now called Meridiani Planum) and Gusev Crater sites (*Science*, 10 May 2002, p. 1006)—satisfied NASA's desire to ferret out sites where water and therefore life might once have existed. One of the selections poses some lingering safety issues, says John Grant of the National Air and Space Museum in Washington, D.C., co-chair of the workshop. But the safer alternatives were mostly too “big, flat, ugly, and boring,” as one wit put it,

to tempt the scientists.

The participants were intrigued by new evidence gleaned from 30-year-old spacecraft data suggesting that the hematite spotted from orbit at Meridiani Planum has an aqueous origin—perhaps an ancient hot spring. And new imaging from the Odyssey spacecraft alleviated concerns that all the deposits on the floor of Gusev, where water pooled billions of years ago, might now be covered by deep dust or volcanic ash. Instead, small impacts have blasted out debris that a rover could inspect, although the crater floor might be a tad rougher and windier for the lander than engineers would like.

Safety and science ruled against the two remaining alternatives. Doubts arose about whether the Isidis impact basin really would



Destination Mars. Gusev Crater (diameter 175 kilometers) offers an ancient lake bed for NASA's next rover to explore.

have water-washed rocks from the adjacent highlands, as hoped. The fourth potential target—sited in smooth, flat, and boring Elysium for its low winds—looks too inscrutable to merit the trip. The final decision rests with NASA's space science chief, Ed Weiler, who will make the call in early April.

—RICHARD A. KERR

SCHOLARLY CONDUCT

Skeptical Environmentalist Labeled 'Dishonest'

COPENHAGEN—A Danish panel decided last week that Bjørn Lomborg's controversial 2001 best-selling book, *The Skeptical Environmentalist*, is “scientifically dishonest.” The government misconduct committee also may be asked to examine whether Lomborg's views have colored the work of the environmental institute that he heads. At the same time, the Danish Research Agency (DRA) plans to review the panel itself, which is under fire for its vaguely worded report.

In *The Skeptical Environmentalist*,

Lomborg, a 38-year-old political scientist, argues that ills ranging from air pollution to global warming are less injurious to the environment than has been claimed—a message at which many scientists take umbrage. After receiving three detailed complaints, DRA's Committee on Scientific Dishonesty mounted a 6-month investigation. It concluded that although Lomborg was not deliberately deceptive, his naiveté resulted in “systematic one-sidedness.” “Lomborg is highly selective in his use of references in practically every field he covers. This is not in accord with scientific standards,” committee chair Hans Henrik Brydensholdt, a high-court judge, told *Science*.

It's “an unusually hard ruling by a committee known for being immensely difficult to convince of any wrongdoing,” says ecologist Carsten Rahbek of Copenhagen University. The ruling, adds Stuart Pimm, an ecologist at Duke University who authored one of the complaints lodged with the panel, “serves as a warning to people who think they can hijack the scientific process.”

Lomborg defends his book

and protests that the committee's 16-page report “does not actually give examples” of any missteps. Brydensholdt doesn't dispute that, saying that the details can be found in 600 pages of supplemental materials that the committee analyzed. Included there are allegations that Lomborg disregarded known extinction rates when estimating species loss and that he glossed over the effects of uncurbed population growth in some regions when discussing the reassuring implications of a global slowdown.

The controversy could also embroil the Institute for Environmental Assessment, which Lomborg heads. Prime Minister Anders Fogh Rasmussen told Danish TV last week that he still “has full confidence” in Lomborg but that it would be a “good idea” to have an impartial investigation into eight reports from the institute. One environmental group says that it plans to file a request with the scientific misconduct committee to investigate an institute report touting the benefits of burning aluminum cans instead of recycling them.

Meanwhile, some critics accuse the committee of having tailored its criteria for scientific honesty to fit the Lomborg case. DRA has agreed to hold a meeting later this month to look into this allegation.

—LONE FRANK

Lone Frank is a science writer in Copenhagen.



Crushing news. The work of Lomborg's Institute for Environmental Assessment may now come under scrutiny, starting with its recent report on the benefits of burning aluminum cans.

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