

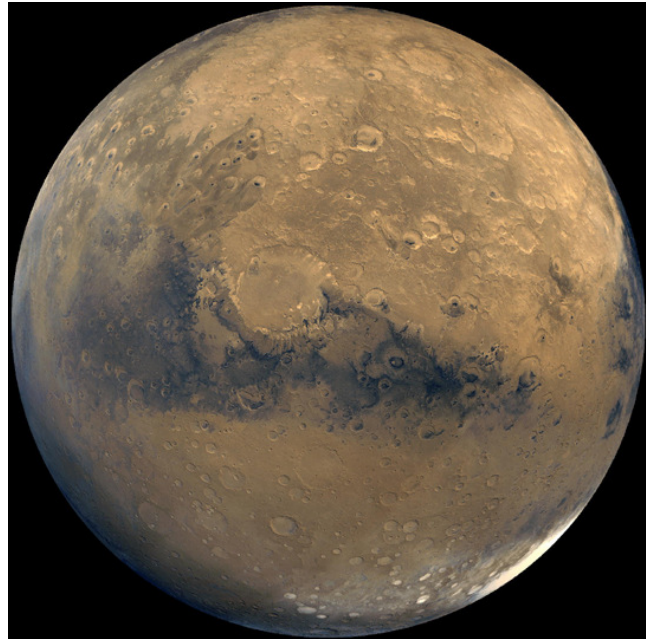
Mars Asteroid Stirs Concern for Earth

Irene Klotz, Discovery News

Jan. 2, 2008 -- It's been 100 years since a sizeable space rock smacked into Earth, leveling more than 1,200 square miles of trees in a Siberian forest. But a visceral reminder of just how much devastation an asteroid impact can have may be just around the corner.

Astronomers are keeping a close watch on a 160-foot wide asteroid designated 2007 WD5, which on Wednesday had a one in 20 chance of striking Mars on Jan. 30. Of course there are no cities or ecologies to worry about, and the prospect of Mother Nature boring a hole into the Martian terrain actually has scientists quite excited.

Scientists are on a quest to determine if Mars ever had habitats suitable for life and ultimately hope to learn if life ever evolved anywhere beyond Earth.



All Eyes on Mars

A newly discovered asteroid now has a one in 25 chance of slamming into the Red Planet on Jan. 30, scientists say.

Three spacecraft are in orbit around Mars, including two equipped with sensors to scope out minerals. NASA has two rovers on the planet's surface as well, and a third lander slated to arrive in May, but the asteroid, if it hits at all, will leave its mark beyond the robots' range.

It would be quite another story if 2007 WD5 were heading toward Earth, as a similarly sized object did in 1908. What is believed to be a fragment from a comet plowed into the planet's atmosphere on June 30 that year and exploded over central Siberia with the force of a large nuclear bomb.

Fortunately, the region was unpopulated.

"Something of this size could take out a fairly large metropolitan area," said Donald Yeomans, a planetary scientist at NASA's Jet Propulsion Laboratory in Pasadena, Calif., who manages the agency's Near-Earth Objects program.

It was a Congressionally mandated, ongoing search for potentially threatening asteroids and comets that turned up 2007 WD5 as a target in the first place. Originally identified as a possible risk to Earth, later analysis showed that the asteroid may be on a collision course with Mars.

"The odds are it's going to fly right past," Yeomans told Discovery News. In the long run, that may not be good news for Earth, which could find itself in the asteroid's path at some point in the future.

Unlike the 1908 event, there would be advance warning of a possible strike, as well as the tools and knowledge to divert the threat, Yeomans said.

For now, there is no plan to save Earth, though discussions are under way about how to coordinate a worldwide response and just what actions would be possible.

"We have the technology to deflect it, but sending a probe into it, using a gravity tug or sending up a nuclear weapon. The trick is to find it early enough," Yeomans said. "With an object this size, all you need to do is slow it down a bit."