

# Death from above?

*If it is there, we are closer than ever to finding alien life in our solar system. But will the greatest discovery of all time be followed by the greatest disaster of all time?*

I love space exploration as much as the next guy, but sometimes I wonder if it might lead to our doom one day.

**Worldview by**  
**Guy P. Harrison**  
 guy@cfp.ky

The aliens-wiping-us-out scenario is routine sci-fi stuff, but it worries more than a few respectable scientists too. I'm not suggesting that we lose sleep over this, but it really is possible that our activities in space might introduce a deadly and unstoppable lifeform into the Earth environment by accident. It has long been a concern of NASA; the Apollo Moon voyagers were quarantined and observed for a short period upon their return, for example. The pace is picking up, however, as we are trying to bring more and more samples back from planets, moons and from deep space itself. Wouldn't it be a sad joke if we ended up delivering invaders to our own doorstep just so they could whack all six billion of us?

I'm not talking about wrestling with Hollywood clichés here. The big-headed, coal-eyed perverts that come to probe us with flashlights in the night are pure fantasy. If we find ourselves at war with aliens anytime soon, it is almost certainly going to be against the microscopic variety.

The danger is that an alien microbe might survive on Earth and attack us, perhaps in the way viruses and bacteria do. Its otherworldly weirdness could make us helpless. Our bodies would have few or no natural defences against it and our medical technology would be overmatched.



The *Genesis* probe's chute failed to open, dooming it to crash in 2004. What if dangerous alien microbes had been dispersed on impact? Photo: NASA

*"In the near future, NASA plans to bring back to the surface of the Earth, a canister from Mars filled with Martian soil, which could contain possible pathogenic viruses and/or bacteria. The International Committee Against Mars Sample Return (ICAMSR) urges the scientific and environmental communities to make an informed decision on whether they feel the risks outway the benefits. We only have one Earth."*—The International Committee Against Mars Sample Return

Some scientists believe there is no danger because an alien species would not have evolved within its environment to feed on Earth life. This argument fails to recognize that many Earth species are capable of harming lifeforms they do not naturally confront. A tiger's teeth, for example, would function quite well on a llama's torso, even though the two animals come from different neighborhoods. Menus can be flexible.

The alien microbe risk is very low, admittedly, but it's worth thinking about these days because the odds of finding new life have never been better. We now know, for example, that life is extraordinarily tough. Not all life on Earth needs water, oxygen or even sunlight to thrive. In recent years, scientists have discovered microbes deep

in solid rock, on the deepest ocean floors, and beneath Antarctic ice. That means life is possible out in space within environments previously considered uninhabitable. Many astrobiologists suspect that the greatest scientific discovery of all time is just around the corner.

**"Ooh. Ah. That's how it always starts. Then later there's running and screaming."**

The discovery of alien life would be a profound moment for humankind. The stars above would never look the same again. Finally, we would know that life really is out there. Such an accomplishment and awakening is too important to shy away from, so obviously we must continue to peek under rocks on faraway worlds. Let's

just make sure we don't fast-track our own extinction in the process.

That slim chance of hostile alien microbes hitching a ride on one of our returning probes and running wild on Earth could have played out just last year when a NASA probe named *Genesis* returned from space loaded with samples of solar wind (and whatever else it may have happened to scoop up). The parachute system failed and it crashed in a Utah desert. Just suppose, as in Michael Crichton's *Andromeda Strain*, that among the wreckage were a few liberated microscopic creepy-crawlies who quickly learned how to dine on carbon-based life forms—from the inside out. We can't even come up with a vaccine for AIDS, a home-grown virus, so don't count on anyone whipping up the cure for a fast-breeding army of microbes from outer space.

In 2006 a probe named *Stardust* is scheduled to complete an eight-year mission and land in that same Utah desert where *Genesis* crashed in 2004. If all goes well, the *Stardust* capsule will be packed with material collected during a close encounter with a comet. The samples may tell us a lot about the beginnings of the solar system.

NASA also has exciting plans to bring back soil samples from Mars over the next several years. The samples may include evidence of past-or current-life on Mars.

I'm excited about the possible discoveries ahead, but let's hope somebody is standing by with a very fine-mesh net, just in case.

*Guy P. Harrison's column appears every Wednesday.*