



Aliens On Earth.com

Resources for those who are stranded here



[UFOs](#) | [Paranormal](#) | [Area 51](#)
[People](#) | [Places](#) | [Random](#)
[Top 100](#) | [What's New](#)
[Catalog](#) | [New Books](#)

Search... for keyword(s)

in Page Titles

Our Bookstore
is [OPEN](#)

[Mothership](#) -> [UFO](#) -> [Updates](#) -> [1998](#) -> [Jul](#) -> Here

UFO UpDates Mailing List

Seeking Intelligent Life Out There And Right Here

From: Mark LeCuyer <randydan@wavetech.net>
Date: Sun, 12 Jul 1998 01:32:02 -0500
Fwd Date: Sun, 12 Jul 1998 12:40:28 -0400
Subject: Seeking Intelligent Life Out There And Right Here

Source: MSNBC's Space News July 10
Space: the final and best frontier
Seeking intelligent life out there and right here
By Athena Andreadis

I believe in math. All less-than-zero probabilities carried to infinity are certainties, which is why I know that E.T. will phone one day. Whether we'll be able to carry a meaningful conversation is a separate topic but, given the odds, it's a sure bet E.T. - or some other form of extra-terrestrial life - is out there.

Neither Earth nor the solar system will live forever. The search for life on other planets offers a new idea of what it means to be human.

IT'S IN THE numbers. There's a famous equation which makes the point, called the Drake equation after Frank Drake of the SETI Institute who formulated it for Project Ozma in 1960. It calculates the number of civilizations capable of long-range communication.

The equation has seven terms. The first three address astrophysical and geological questions =97 the rate of star formation, the fraction of stars with planets and the number of Earthlike planets within each system. The last four address chemical and biological questions =97 the fraction of planets on which life develops and flourishes long enough to develop intelligence, then technology and then ultimately becomes mature enough not to destroy itself before sending out an obvious signal of its presence.

Twenty years ago, as a Harvard undergrad, I listened to a taped lecture by Carl Sagan, in which he went through the Drake equation. Twenty years ago, we knew just a bit about the first term, and nothing about the others. In the years since, we've witnessed stars form, flare, dim and die. In the last three years, we saw star orbits wobble from what could only be surrounding planets. Two months ago, we gazed at the first pictures of a planetary system forming, a dark ring around a star, a celestial embryo in its first division. And a few weeks ago, the Hubble telescope directly photographed a rogue planet streaking away from nearby stars.

All of these observations essentially set the first three terms of the Drake equation to values close to one, and serve to remind us, again, that Earth's experience is not so unique after all. In fact, given that only a few stars were sampled for planets, we might be just another block in the Levittown we call the universe. Earth is not so unique after all. We might be just another block in the Levittown we call the universe.

So now we're left with the other four terms of the Drake equation, which deal with chemistry - of planets, as well as of brains - and which have not yet been systematically explored. Still, answers have been accumulating to reassure us that life on Earth is not an odd

accident, not an isolated shooting star destined to burn unobserved.

Even within our own solar system, we have met with encouraging hints wherever we've sent a craft with sensitive instruments. Water, the solvent that would support life forms similar to us, exists in the atmosphere of Titan, under the surface of Europa and in the Martian polar caps. Several other planets have conditions similar to those in hot sulfur springs, polar regions and ocean depths. Such locales may be hell for creatures who utilize oxygen and prefer ambient temperatures. Nevertheless, they teem with exotic life. Finally, there is the unusual soil chemistry of Mars, and its abundance of optically active quartz. An equally "exotic" chemistry of silicon scaffolds supporting complex carbon compounds heralded the dawn of life on Earth.

With the intractable problems on Earth, why should we care if there is life beyond our planet? Because what makes us human is our ability and need to venture into the unknown. At this point, we have overrun Earth, leaving no more space to experiment, no new lands to discover, no frontier - except for the ersatz thrills of cyberspace.

Having neither a strong antagonist nor a great cause to unite us, we have become navel-watchers, despoilers and cannibals, just like rats when they are confined in too small a cage. Without real challenges, we invent artificial ones that are often malign. Our spirits are shrinking along with our boundaries, giving rise to endless petty disputes, random Balkanization, social fragmentation and a sense of free fall. Without real challenges, we invent artificial ones that are often malign. Our spirits are shrinking along with our boundaries, giving rise to endless petty disputes.

The discovery of life on another planet - or even of conditions favorable for life - will reopen outlets which are now dammed (as well as guarantee our long-term survival, since neither Earth nor our solar system will live for ever). The pursuit of these questions will not only infinitely expand our scientific knowledge, but will also grant us a new definition of what it means to be human, just as each discovery about the terms of the Drake equation has led us to re-evaluate our vision of the universe and our position in it. By providing endless nourishment for our irreducible needs as an exploring, curious race, space is not the final but the best frontier.

From: Mark - Alien Astronomer
<http://www.geocities.com/Area51/Shadowlands/6583>

[[Next Message](#) | [Previous Message](#) | [This Day's Messages](#)]
[[This Month's Index](#) | [UFO UpDates Main Index](#) | [MUFON Ontario](#)]

UFO UpDates - Toronto - updates@globalserve.net
Operated by Errol Bruce-Knapp - ++ 416-696-0304

A Hand-Operated E-Mail Subscription Service for the Study of UFO Related Phenomena.
To subscribe please send your first and last name to updates@globalserve.net
Message submissions should be sent to the same address.

[[UFO Topics](#) | [People](#) | [Ufomind What's New](#) | [Ufomind Top Level](#)]

To find this message again in the future...
Link it to the appropriate [Ufologist](#) or [UFO Topic](#) page.

Archived as a public service by [Area 51 Research Center](#) which is not responsible for content.
Software by Glenn Campbell. Technical contact: webmaster@ufomind.com

Financial support for this web server is provided by the [Research Center Catalog](#).

