
GRAVITY ASSIST
Podcast
NASA
RETURNS APRIL 17

1
00:00:00,960 --> 00:00:07,720
Hi. I'm Jim Green NASA's chief scientist
and your host on NASA's podcast gravity assist.

2
00:00:07,720 --> 00:00:11,440
You know, life on earth is just
about everywhere we look - from the depths

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00:00:11,450 --> 00:00:15,650
of the ocean to even the Antarctic
Tundra. Here on Earth we find that

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00:00:15,650 --> 00:00:21,740
against all odds, life survives and
thrives but what do we know about life

5
00:00:21,740 --> 00:00:24,880
beyond Earth? Are we alone?

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00:00:24,880 --> 00:00:29,000
Life on Earth just occupies a teeny portion of all of time.

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00:00:29,000 --> 00:00:32,600
To me, life seems so inevitable and the universe is so

8
00:00:32,600 --> 00:00:38,540
broad and vast that I can't imagine that
we would be alone in all of that space.

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00:00:38,540 --> 00:00:42,600
If we're the only game in town,
it's an awful waste of space.

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00:00:42,600 --> 00:00:48,240
We do not know if there is life beyond the Earth. You just have to search and search.

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00:00:48,240 --> 00:00:52,940
If you've ever wondered if there's life out
there beyond our planet, you won't want

12
00:00:52,940 --> 00:00:58,489
to miss this season's Gravity Assist. In
each episode, I'll be talking with

13
00:00:58,489 --> 00:01:04,549
scientists that specialize in the field
of astrobiology. I'll be asking them, "How

14
00:01:04,549 --> 00:01:10,340
do we define life? What is life anyway?
What do we know about how life got

15
00:01:10,340 --> 00:01:14,860
started here on Earth and how it
developed in this beautiful complexity that we

16
00:01:14,860 --> 00:01:23,240
see today? What could life be like beyond Earth and how do we look for it?"

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00:01:23,240 --> 00:01:26,720
So there are a lot of wild and crazy places that we could search for life.

18
00:01:26,720 --> 00:01:30,460
The moons of Saturn and
Jupiter are so compelling-

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00:01:30,460 --> 00:01:33,280
Ganymede,Titan, Europa, Enceladus.

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00:01:33,300 --> 00:01:37,980
Life might have existed on Mars in its past and might even exist there today.

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00:01:37,980 --> 00:01:41,420
On exoplanets,
because there's a lot. On average, there's

22
00:01:41,420 --> 00:01:45,740
an exoplanet for every star in the sky

and for every 10 stars there's one that

23
00:01:45,740 --> 00:01:47,260
might have liquid water oceans.

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00:01:47,260 --> 00:01:52,080
Advancing the technologies for one helps us look for it in any place that we might be looking.

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00:01:52,120 --> 00:01:54,079
Here at NASA, we have a fleet of

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00:01:54,079 --> 00:01:57,240
spacecraft going out into the solar
system and beyond

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00:01:57,240 --> 00:02:01,470
and a lot of fabulous scientists that
are piecing together this puzzle from

28
00:02:01,470 --> 00:02:04,180
the observations these missions make.

29
00:02:04,180 --> 00:02:07,840
Join me on this journey to find out what's out there.