1

00:00:00,000 --> 00:00:07,360

Now, here are some of the stories Sightings is following in the news.

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00:00:07,360 --> 00:00:12,080

Only 12 astronauts have made it as far as the moon, and the chance that any of us will

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00:00:12,080 --> 00:00:15,960

be able to travel any farther may be remote than Pluto.

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00:00:15,960 --> 00:00:20,540

But thanks to the Jet Propulsion Laboratory, there will soon be a way for one million lucky

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00:00:20,540 --> 00:00:29,680

people to send a small part of themselves all the way to Saturn.

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00:00:29,680 --> 00:00:34,760

In Pasadena, California, at Jet Propulsion Laboratory, the next great interplanetary

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00:00:34,760 --> 00:00:38,800

observer is being readied for its October 1997 launch.

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00:00:38,800 --> 00:00:44,040

Spacecraft Cassini is a joint effort between NASA and the European Space Agency.

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00:00:44,040 --> 00:00:45,040

Its goal?

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00:00:45,040 --> 00:00:49,320

To reach the rings of Saturn and explore its many intriguing moons.

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00:00:49,320 --> 00:00:52,080

Many researchers have their eye on this one.

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00:00:52,080 --> 00:00:55,740

Titan is Saturn's largest moon, half the size of Earth.

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00:00:55,740 --> 00:01:01,020

It has a dense atmosphere denser than Earth's, and for this reason, scientists like Planetary

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00:01:01,020 --> 00:01:05,420

Society's Tom McDonough speculate that there could be life on Titan.

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00:01:05,420 --> 00:01:09,420

Titan is one of the most fascinating moons in the solar system, because it's similar

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00:01:09,420 --> 00:01:14,060

in a lot of ways to what Earth was like when we first got started as a planet and when

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00:01:14,060 --> 00:01:16,100

life first got formed.

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00:01:16,100 --> 00:01:20,500

Titan's surface is hidden beneath a thick, smoggy cloud, believed to be similar to the

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00:01:20,500 --> 00:01:23,420

haze over Los Angeles or Mexico City.

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00:01:23,420 --> 00:01:28,060

In order to see through this cosmic veil to the moon below, Cassini is equipped with

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00:01:28,060 --> 00:01:31,180

an unmanned probe called the Huggins' Probe.

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00:01:31,180 --> 00:01:36,420

It will descend through the cloud, land on the surface of Titan, and snap the first pictures

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00:01:36,420 --> 00:01:39,100

of this unexplored moon.

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00:01:39,100 --> 00:01:43,380

It's really important to send a probe to a place like Titan, because it's so far away

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00:01:43,380 --> 00:01:45,660

that we cannot see it very well with our telescopes.

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00:01:45,660 --> 00:01:48,780

If we want to see what's really down on the surface, are there oceans and things like

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00:01:48,780 --> 00:01:53,380

that, then you have to send a probe that penetrates through the atmosphere and lands on the surface.

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00:01:53,420 --> 00:01:57,100

NASA wants the public involved on this project.

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00:01:57,100 --> 00:02:00,500

On their website, you can watch Cassini's progress.

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00:02:00,500 --> 00:02:05,460

Every four minutes, live video images from the construction site at JPL are downloaded

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00:02:05,460 --> 00:02:08,380

for you to see.

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00:02:08,380 --> 00:02:14,360

And NASA is also creating a CD-ROM to be carried aboard Cassini with one million signatures

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00:02:14,360 --> 00:02:15,900

from planet Earth.

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00:02:15,900 --> 00:02:19,180

You can send your signature to Cassini Program JPL.

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00:02:19,180 --> 00:02:29,700

Names will be included on a first-come basis until the CD-ROM is filled.

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00:02:29,700 --> 00:02:35,100

In Siberia, Russia, two scientists from Kagoshima University in southern Japan have taken the

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00:02:35,100 --> 00:02:40,700

first step toward recreating a creature that has been extinct for nearly 10,000 years.

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00:02:40,700 --> 00:02:46,300

Recently, the researchers unearthed this baby woolly mammoth and now hope to extract DNA

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00:02:46,300 --> 00:02:51,300

from the sperm of the Stone Age carcass and use it to fertilize an elephant egg.

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00:02:51,300 --> 00:02:54,580

The result, they hope, will be a modern mammoth.

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00:02:54,580 --> 00:02:59,740

What we're able to do in space is at a standstill.

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00:02:59,740 --> 00:03:05,940

And yet our genetic technology, this really seems to be the next big frontier.

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00:03:05,940 --> 00:03:10,740

Paleontologist Dr. Charles Pellegrino of Brookhaven National Laboratory is familiar

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00:03:10,740 --> 00:03:14,380

with genetic manipulation like that proposed by the Japanese team.

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00:03:14,500 --> 00:03:19,700

Pellegrino's own work formed the basis for the book and the movie Jurassic Park.

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00:03:19,700 --> 00:03:26,140

The genetic distance between a woolly mammoth and an elephant is probably about the genetic

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00:03:26,140 --> 00:03:33,580

distance between a horse and a donkey, probably somewhere in the range of less than 1%.

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00:03:33,580 --> 00:03:40,620

So you would only have to go in and basically re-edit less than 1% of the genetic code of

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00:03:40,620 --> 00:03:44,940

an elephant that is already walking around today.

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00:03:44,940 --> 00:03:49,300

Many scientists question the feasibility of this process, but if indeed it is possible

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00:03:49,300 --> 00:03:54,420

a larger question needs to be addressed, why should we resurrect such a creature?

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00:03:54,420 --> 00:04:00,300

It's almost like asking why do we want to go to the moon, why do we want to go to the

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00:04:00,300 --> 00:04:01,900

bottom of the ocean.

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00:04:01,900 --> 00:04:08,100

To me, bringing back a woolly mammoth or bringing back a dinosaur, it's the ultimate paleontological

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00:04:08,100 --> 00:04:09,100

tool.

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00:04:09,100 --> 00:04:14,100

It's the closest you can have to building a time machine and going back into time and

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00:04:14,100 --> 00:04:18,220

studying these creatures face to face, nose to nose.

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00:04:18,220 --> 00:04:22,980

Although Pellegrino believes that such a genetic feat would be invaluable, he worries about

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00:04:22,980 --> 00:04:27,260

the new mammoths' impact outside the scientific community.

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00:04:27,260 --> 00:04:31,500

There are probably industrial types around the world right now who are looking at this

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00:04:31,500 --> 00:04:37,340

and saying, gee, if we can bring back extinct life forms, then we don't have to worry so

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00:04:37,340 --> 00:04:39,820

much about endangering species.

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00:04:39,820 --> 00:04:46,260

So let's cut down more of the Amazon rainforest, or it might incite people to get a bit cocky

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00:04:46,260 --> 00:04:50,620

about creating the conditions that lead to extinction in the first place.

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00:04:50,620 --> 00:04:58,740

Each door you open to a tremendous new technology, it seems to be the yin-yang principle.

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00:04:58,740 --> 00:05:03,420

We can either do wonderful things with it, or we can unleash horrors on a scale that

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00:05:03,420 --> 00:05:04,780

we've never known before.

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00:05:08,340 --> 00:05:12,340

We'll have more stories in the news next time.

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00:05:12,340 --> 00:05:15,340

Now here's what's coming up as sightings continues.