

Hello, my friends, and welcome back. I'm Jim Tedder in Washington. On today's program, we dream of traveling to other worlds as we gaze at the starry night sky. What was once just science fiction is becoming more real every day.

And after we look upward, we'll come back down to earth and visit Uganda. The country's lion population is dropping, and tourism is suffering as a result. We'll have the details in about five minutes.

You are listening to "**As It Is**," a radio and Internet program designed to help you learn and improve your American English.

The television program Star Trek called space "the final frontier." It appears that the last great unknown is about to become more crowded.

The demand for communication satellites and imaging services based in space is growing. Launching rockets into space has become increasingly common. The space industry is worth an estimated 200 billion dollars a year, and growing.

The future of space business looks bright — booming, in fact. Orbital Sciences Corporation, based in the U.S., is one of two American firms hired by the space agency NASA to take supplies to the International Space Center. The center is orbiting 400 kilometers above earth.

Commercial rocket pioneer Arianespace launched its first satellite three decades ago. It says 2014 has all the makings of a record year. Clayton Mowry heads the U.S. arm of the private European space group.

"Last year we launched eight times, and we're looking to actually break our record of 10 launches this year. We're hoping, right now, our planning is to conduct 13 launches this year."

Mr. Mowry says the increase in rocket launches is partly caused by rising demand for space-based technologies. He says these can go from ultra-high definition broadcasts to satellite broadband.

Experts say more commercial satellites are needed. But the end of NASA's space shuttle program in 2011 has had discouraging effect on the space community. Janice Starzyk at International Launch Services leads educational efforts at the Washington Space Business Roundtable. She notes major losses of jobs.

"The shuttle program shutting down was a huge, huge set of layoffs in the industry."

Even as NASA services have decreased, other countries are rushing to fill the demands. In December, China became the third country to land a spacecraft on the moon. And India launched its first communications satellite in early January.

Kristian Von Bengtson helped establish Copenhagen Suborbitals in Denmark. He said "Suborbitals" is trying to prove that space flight can be done at costs that are not so expensive. He hopes to achieve a childhood dream of launching a homemade rocket 100 kilometers into space using open design sources and private donations.

"Everybody believes that space flight, manned space flight, can only be done with billions of dollars and it has to be government financed. I hope we can show that you can do it on a shoestring budget. You can pretty much do it yourself."

Mr. Von Bengtson's goal is to launch a manned rocket into space by 2020.

Experts agree that more space scientists will help the industry. Ms Starzyk says Space Business Roundtable's goal in 2014 is to encourage more students to consider careers in space.

"Actually, it's a major problem in most countries of getting young people interested in studying engineering, specifically aerospace engineering," she said.

Janice Starzyk says as demand for rocket launches grows, so will demand for fresh talent.

Participation in the organization's space academy program has increased greatly over the last three years. Perhaps this proves that, once again, when it comes to space, the sky is the limit.

## **Now Let's Come Back Down to Earth**

Uganda's lion population has fallen by 30 percent in the last ten years. Experts are warning that the big cats could soon disappear from the country. As Caty Weaver reports, that could hurt Uganda's important and profitable tourism industry.

We are in one of Uganda's national parks. There are grasslands as far as the eye can see. And there are many travelers from around the world. They have woken up early -- before the sun rises -- and their camps are now empty.

They are hunting, not with guns but with cameras.

Jossy Muhangi works for the Uganda Wildlife Authority. He knows what the tourists seek.

“For most of our game drives, people want to wake up at 6 a.m., in the wee hours, and they really look. Their first choice or the favorite animals for the tourists -- be it local or international -- would be a lion. For every tourist who comes to Uganda, the dream would be to at least spot a lion.”

Lions are growing harder to find throughout Uganda. Last month, the non-profit organization Wildlife Conservation Society said now only a little more than 400 lions remain in Uganda. That is one third less than ten years ago.

Tutilo Mudumba is a researcher with the Wildlife Conservation Society, or WCS. He says lions face many threats.

“You may find illegal poaching using, for example, air snares, taking place in Murchison Falls National Park. You may have a problem of competition for grazing land between lion prey and cattle, and then you have sometimes poisoning, we suspect to clear the area of predators so that they can use it for grazing.”

Mr. Mudumba says if no action is taken to reduce these threats, lions could one day disappear from Uganda.

“If nothing is done and the population keeps going down, then it will not be likely that we will have them. If they reduce by 30 percent every 10 years, then of course those are the number of years left for you to have zero.”

The disappearance of lions from Uganda could hurt the country’s economy. In 2006, the WCS studied the expectations and spending of visitors to Uganda. It found that each lion was worth \$13,500 a year to the economy.

The study also found that only 60 percent of tourists would still visit Uganda's national parks if there were no lions left. The World Bank estimates tourism brought 1 billion dollars to Uganda's economy last year. I'm Caty Weaver.

And I'm Jim Tedder in Washington. Thank you for spending some time with us as we near the end of the first month of the new year. On this date in 1882, Franklin Delano Roosevelt was born in Hyde Park, New York. He went on to become the 32nd President of the United States, and the only President to serve more than two terms in office. Many still remember the words of encouragement he spoke when he first took office, as the country was suffering from the great economic depression.

"Let me assert my firm belief that the only thing we have to fear is fear itself."

My firm belief is that our time is gone, at least for today. But more Learning English programs are just seconds away. And world news follows at the beginning of the hour.





