Welcome to Spotlight. I'm Luke Haley. And I'm Robin Basselin. Spotlight uses a special English method of broadcasting. It is easier for people to understand, no matter where in the world they live. Imagine standing in a large city. You are surrounded by people and buildings. The sky is blue. The sun is shining. Suddenly, you hear a sound far away. It sounds like a storm. But that is not possible. There is no storm. You look up. There in the sky, you see a dark cloud. It is not a storm cloud. It is a cloud made of birds - millions and millions of birds. It is more birds than you have ever seen before. This cloud of birds is so large that it takes more than an hour for the birds to pass over you. These birds are passenger pigeons. In the 1800s, they were the most common birds in all of North America. It was common to see large groups of passenger pigeons - groups that made a sound like a storm. There were groups of pigeons so large that it took hours for them to pass a single place. But there was a problem. For many years, people destroyed the forests where passenger pigeons lived. People also hunted passenger pigeons for food. And today, there are no passenger pigeons anywhere in the world. The last passenger pigeon died on September 1, 1914. Passenger pigeons are extinct. Today, some scientists want to bring passenger pigeons back to life. These scientists believe it is possible. They would do this using new technology and scientific ideas. They call this process de-extinction. Today's Spotlight is on the possibility of de-extinction. Passenger pigeons are only one extinct animal. There are many more. Millions of years ago, a very large animal lived on earth. This animal was the woolly mammoth. It was the same size as an elephant. It was covered in thick, dark hair. It had large, white, ivory teeth called tusks. Scientists think that woolly mammoths began to disappear because the earth’s climate changed. They did not have enough food. However, they also died because of people. Ancient humans hunted and killed woolly mammoths. Humans used the tusks to make weapons and tools. Humans also ate woolly mammoth meat. Together, climate change and hunting killed all the woolly mammoths. Passenger pigeons and woolly mammoths demonstrate an important problem. It is a problem that still exists today: humans can cause extinction. You may remember other Spotlight programs about endangered species. These are kinds of animals that are in danger of becoming extinct. When an animal is endangered, there are very few of that animal left on earth. This often happens because of human behaviour. People have caused large changes in the places animals live and the food they eat. People also hunt some of these animals for money or food. And if the remaining endangered animals die, they will become extinct. Elephants, small koala bears, and large albatross birds are endangered animal species. All of them are endangered because of people. However, people have also tried to solve this problem in many different ways. Laws protect endangered animals from hunters. Other laws protect the forests and land where these animals live. Some endangered animals are kept in separate, safe places, called sanctuaries. Some scientists believe that de-extinction may be another solution to this problem. They hope that new technology and scientific knowledge will help them bring some extinct animal species back to life. De-extinction has not happened yet. It is still just an idea. The process of de-extinction is very difficult. First, scientists must collect DNA from the bodies of extinct animals. This genetic information is what makes every kind of animal different. DNA provides the information scientists need to bring an extinct species back to life. Scientists and researchers kept many passenger pigeon bodies. They use these bodies to collect and study passenger pigeon DNA. An animal's DNA is in every cell of its body. Scientists can collect DNA from very small parts of the dead pigeons. They can take this DNA and put it in the eggs of similar animal species, like rock pigeons. When these rock pigeons become adults, they will have babies. But these baby birds will not have the DNA of rock pigeons. They will be passenger pigeons. Passenger pigeons are not the only animals scientists want to bring back to life. They believe it is also possible to bring back woolly mammoths and many other animals. However, not everyone thinks this is a good idea. Stuart Primm is the world's leading expert on modern animal extinction. He works to save endangered animals. But he believes that there are many problems with de-extinction. He believes that bringing extinct animals back to life is bad for the earth. He believes these animals no longer have a safe place to live. They could cause other animals to die. In an article for National Geographic News, he wrote, "The science of changing DNA simply does not address the core problems. At worst, it makes organizations wrongfully think that they are saving the world. People can hide their selfish reasons for development. They simply promise to fix things later. It makes us think about less important things - instead of protecting our planet's biodiversity for future generations." Many other scientists do not agree with Stuart Primm. They still believe that de-extinction is important. Stuart Brand is a writer and scientist. He believes de-extinction is good for many reasons. He believes it is just as important as protecting endangered species. He believes it can fix the harm humans have caused in the past. He wrote, "The current generation of children will experience the return of some remarkable creatures in their lifetime. It may be part of what defines their generation and their attitude to the natural world. They will take their parents to zoos to see the woolly mammoth and growing populations of captive-bred passenger pigeons, and maybe even dodo birds. This will provide a good deal of money for zoos busy with extinct species revival and restoration. Humans killed off a lot of species over the last 10,000 years. Some resurrection is in order. Good results for everyone might come with it." How do you feel about de-extinction? Is it a good answer to an important problem? Or does it create more problems than it fixes? Tell us what you think. You can leave a comment on our website. Or email us at radio@radioenglish.net. You can also comment on Facebook at Facebook.com/spotlightradio. The writer of this program was Ryan Geertsma. The producer was Michio Ozaki. The voices you heard were from the United Kingdom and the United States. All quotes were adapted for this program and voiced by Spotlight. You can hear this program again, and read it, on the Internet at www.radioenglish.net. This program is called, "Bringing Animals Back to Life." We hope you can join us again for the next Spotlight program. Goodbye.