This is **SCIENCE IN THE NEWS**, in VOA Special English. I'm Bob Doughty. And I'm Barbara Klein.

This week, we will tell about a genetic map for an animal that disappeared long ago. We will tell about an unusual-looking insect from South America. And we will tell about a reported link between animals and health problems in children.

Scientists say they have completed most of a genetic map for an ancient creature -- the woolly mammoth. The map is said to be the first to show the genetic structure of an animal that no longer exists.

Biologists at the Pennsylvania State University studied the remains of two woolly mammoths from Siberia. One mammoth lived twenty thousand years ago. The other lived at least sixty thousand years ago.

The woolly mammoth belongs to a species, or group, linked to the modern African elephant. With its thick, long hair, the now extinct mammoth was able to survive in cold weather. Lead researcher Stephan Schuster says the mammoth and African elephant share more than ninety-nine percent of their genetic material.

STEPHAN SCHUSTER:"So this tells you that they are very, very similar. And also, just because the mammoth is extinct does not mean it is an ancient elephant. It is as modern as an Asian or African elephant. But unfortunately, it had the bad luck to go extinct before today."

Mr. Schuster and the research team studied genes, or DNA, that were found in long pieces of mammoth hair. They say genes from hair are better to study than those from bones or other remains. That is because the genes from hair are less likely to mix with other kinds of DNA.

The researchers say they were able to uncover about seventy percent of the mammoth's genome, or genetic structure. They also say the study will help scientists better understand how elephants evolved, or developed.

Mr. Schuster says the information shows the mammoth evolved from the African elephant six million years ago. Mammoths disappeared about ten thousand years ago.

The researchers hope their work will also increase understanding of how the woolly mammoth evolved and why it died out. Their findings were reported in the publication Nature.

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The study also provides some information that would be needed to re-create the mammoth. But scientists say such an animal would not be possible any time soon -- if ever.

Some researchers like to study animals that disappeared long ago. But others want to discover new species -- creatures that may have existed for thousands of years, but remain unknown to scientists.

One recent discovery was made in Brazil. This is where a researcher from the United States discovered a new ant species. Christian Rabeling is a graduate student at the University of Texas in Austin. He believes the species could be linked to some of the earliest kinds of ants to have evolved.

The ant has a very unusual appearance. It is extremely light in color and has no eyes. It also has large extensions from its head called mandibles. These are likely used to capture food.

Because of its appearance, the ant was given the scientific name Martialis heureka. The name means "ant from Mars."

The insect is two to three millimeters long. Scientists believe its appearance resulted from changes that took place for the ant to better live under the ground.

Genetic testing shows the ant belongs to a new ant subfamily. There are twenty-one known ant subfamilies. The discovery marks the first time since nineteen twenty-three that a new ant subfamily has been identified. Since then, new subfamilies have only been found from fossilized ant remains.

The genes of the new ant also show that it comes from a species that first evolved from the wasp. Ants developed from these insects more than one hundred twenty million years ago. Some species changed to live in trees or in their leaves.

Scientists believe others like the new species may have evolved to live in the dirt. That would explain the ant's loss of eyes and light color.

Christian Rabeling collected the only example of the new species in two thousand three. It was found among leaves in the Amazon rainforest. Mr. Rabeling reported on the discovery in the Proceedings of the National Academy of Sciences. He says finding new ant species could help scientists understand more about the evolution of ants. He believes many other species have yet to be discovered in warm climates.

Many families in the United States have at least one pet. The most popular are

dogs, cats and fish. Some Americans own exotic, less traditional pets. They care for animals like hedgehogs, monkeys or snakes.

Recently, a report warned that non-traditional pets may cause serious health problems in children. The report appeared in Pediatrics, a publication of the American Academy of Pediatrics. It says families with children less than five years old should not have exotic pets. It says children that age should avoid contact with such animals in petting zoos, schools and other public places.

The report says the number of exotic pets available in the United States has increased since nineteen ninety two. Many people find them easier to care for than other pets. For example, more than four million American homes have reptiles like snakes and turtles as pets.

Another exotic pet, the hedgehog, is native to Europe, Asia and Africa. But hedgehogs can now be found in forty thousand homes. Yet the animal also can spread salmonella infections. The sharp spines on their back also make it easier to spread infections like E. coli. Exotic pets also can cause allergic reactions and sicknesses like rabies.

Larry Pickering was a lead researcher in the study. He says eleven percent of salmonella infections in children are believed to be caused by touching lizards or other reptiles. Salmonella can cause the uncontrolled expulsion of body wastes. It also can cause high body temperatures and stomach problems.

Children can become sick by kissing or touching animals and then putting their fingers in their mouths. Young children are especially at risk because their natural defenses against disease are still developing. Also at risk are other persons with weakened defense systems, older adults and pregnant woman.

The report says parents need to be educated about the health risks caused by exotic pets. And, it says, families with children under the age of five should not own such animals.

It says parents should first talk with their children's doctors and animal experts to see if there is cause for concern. And, it suggests washing hands often to help decrease risks for disease.

Bacterial meningitis must be treated with antibiotic drugs as soon as possible or the infection can cause hearing loss and brain damage. It can also kill.

A large area in Africa holds the world record for the most meningitis cases. Known as the meningitis belt, this area extends from Senegal in the west to

Ethiopia in the east. More than two hundred fifty thousand people got sick there in nineteen ninety-six and nineteen ninety-seven. Twenty-five thousand of them died from meningitis. The disease still strikes the area from time to time.

Nations along the meningitis belt agreed in September to support a campaign to protect their populations with a new vaccine. The World Health Organization will provide technical aid with the vaccine.

The campaign will also get help from weather experts. One partner in the effort is America's National Center for Atmospheric Research. It will make long-term weather predictions along the meningitis belt. Local health officials can then plan the best times to vaccinate people.

The disease often strikes during dry, dusty weather. One possible reason is that dust can affect the breathing passages and people may be more open to infection. Another theory is that people may stay in their homes more during the dry season, making it easier to catch meningitis from others. The infections usually stop when the rainy season begins.

Weather experts will provide fourteen-day forecasts of atmospheric conditions. The weather program will start in Ghana next year.

This SCIENCE IN THE NEW was written by Lawan Davis, Jerilyn Watson and Brianna Blake, who was also our producer. I'm Barbara Klein. And I'm Bob Doughty. Join us again next week for more news about science in Special English on the Voice of America.