Walking roos

If there is one thing we know about kangaroos, it's that they hop. But that might not be true for extinct species of roos. They may have walked instead.

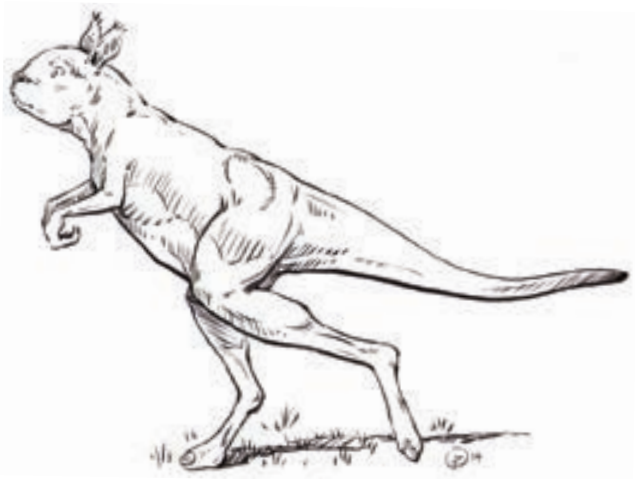
Long ago, the sthenurine (ss-THEN-you-reen) kangaroos lived in Australia. They are extinct now, but we know they had a short face and could grow bigger and heavier than the kangaroos around today.

Could these giant roos hop? To find out, scientists compared the skeletons of sthenurine kangaroos to modern kangaroos. Extinct roos had larger hips and knees, and a stronger ankle joint. They also had a wider pelvis, leaving more room for a bigger bottom.

Based on the bones, scientists think the sthenurines could stand upright and support their weight on one leg. This meant they were more suited to walking than hopping.

Hopping is an extremely efficient way to get around for present-day kangaroos. Why didn't the ancient roos do it too? Scientists think that walking on two legs allowed sthenurines to grow bigger than the kangaroos we see today.

Julia Cleghorn



Ancient sthenurine kangaroos might not have hopped.

Cosmic rays

Can you help solve the mystery of cosmic rays?

As cosmic rays hit the Earth from space, they create a shower of tiny particles over Earth that can be detected by a phone's camera.

Smartphone apps can make your phone do all sorts of fun and crazy things, from making your voice sound like a chipmunk to creating fart noises. Now, there's an app being created that can discover objects from outer space! It's called CRAYFIS, for '**C**osmic **RAY**s **F**ound **I**n **S**martphones'.

Cosmic rays are very small and are just parts of an atom – the tiny building blocks of everything that exists. These rays fly through space at incredible speeds. Sometimes they hit our Earth. When they do, they shatter into even tinier pieces and packets of energy, that shower over large areas.

Even though we can't see showers from cosmic rays with our eyes, smartphone cameras can detect them. Scientists at the University of California are working on the CRAYFIS app, so more phones can be used to detect cosmic rays. The information can be sent back to scientists, so they can learn more about these cosmic rays that may hold answers to some ancient mysteries of the universe.

Greta Kite-Gilmour