Eosinopteryx feathered dinosaur offers clues on bird evolution

A newly-discovered feathered dinosaur pre-dates those birds were thought to have evolved from, a Southampton palaeontologist claims.

The Eosinopteryx was a 30cm (11.8in) flightless dinosaur whose remains were found in north-eastern China.

Dr Gareth Dyke said the find challenged "widely accepted theories on the origin of flight".

His co-authored paper backs up theories birds evolved from dinosaurs whose feathers were not used for flying.

Eosinopteryx lived about 140m years ago. It had a small wingspan and a bone structure that would have restricted its ability to flap its wings.

'Jumping from trees'
It also had toes suited to walking along the ground and fewer feathers on its tail and lower legs, which would have made it easier to run.

Dr Dyke, who is senior lecturer in vertebrate palaeontology at the University of Southampton, said: "This discovery sheds further doubt on the theory that the famous fossil Archaeopteryx - or 'first bird' as it is sometimes referred to - was pivotal in the evolution of modern birds.

"Our findings suggest that the origin of flight was much more complex than previously thought."

Dr Dyke said he was "very excited" to study the only Eosinopteryx skeleton in existence.

"It's such a well preserved complete skeleton of a small dinosaur," he said.

"It would have lived in a forested, swampy environment.

"I imagine it running around and jumping around from tree trunk to tree trunk, maybe using its wings to speed up its running."

The findings were published in a paper called "Reduced plumage and flight ability of a new Jurassic paravian theropod from China".

It was also authored by Pascal Godefroit of the Royal Belgian Institute of Natural Sciences, Helena Demuynck of Earth System Science Vrije Universiteit Brussel, Dongyu Hu of Paleontological Institute Shenyang Normal University China, François Escuillié of Eldonia France, and Philippe Claeys of Jilin University Geological Museum China.