



# Dinosaurs return to Bollington



Some of our SciBar participants prepared this glossary, independently of Dr Manning. Your feedback on the level of information and usefulness of the SciBar glossaries is most welcome.

<b>Archaeopteryx</b>	One of the oldest known fossil birds. A magpie-sized bird with teeth.	<b>Jurassic</b>	A geological period between the Triassic and Cretaceous periods, during which many dinosaurs evolved (the first dinosaurs appeared in the Triassic, but many disappeared in the late Triassic extinction). Time period: circa 200 to 145 million years ago.
<b>Biomechanics</b>	Using the physical principles or laws that relate to movement to study the movement or structure of living things. Simulations can attempt to reconstruct an animal's gait and speed from its skeleton, muscle mass and tracks. Did dinosaurs walk, run or even hop?	<b>Palaeontology</b>	The study of fossilised animals or plants.
<b>Ceratopsian</b>	A group of herbivorous, quadrupedal dinosaurs. Most had beaked and horned heads and a bony 'frill' protecting the neck. Ceratops and Triceratops are both ceratopsians.	<b>Synchrotron source</b>	High-energy ('super-bright') X-rays from a particle accelerator. A scan using a hair-thin synchrotron beam can accurately map the location of chemical elements within fossilised soft tissues, for example, the presence of trace metals in feathers or skin. Metals such as copper are the chemical remains of pigments, giving a non-biodegradable record of colour patterning in extinct animals.
<b>Cretaceous</b>	From the Latin meaning chalk; the geological period following the Jurassic. The heyday of the dinosaurs, which ended in a huge extinction. Time period: circa 145 to 65 million years ago.	<b>Taphonomy</b>	From the Greek meaning study of the grave; the study of how organisms decay and become fossilised (if they do).
<b>Fossil</b>	The preserved traces or remains of an organism which lived a very long time ago.	<b>Theropod</b>	A group of fast-moving, bipedal, mostly carnivorous dinosaurs that had short arms with clawed hands, long strong back legs, a long neck and long tail. Tyrannosaurus is a theropod. Birds are the descendants of theropods.
<b>Hadrosaur</b>	Known as the duck-billed dinosaurs; a group of herbivorous, bipedal or quadrupedal dinosaurs with a stiff tail. Edmontosaurus is a hadrosaur.		
<b>Ichnology</b>	The study of the tracks, footprints and traces. Provides evidence of the behaviour of extinct animals.		

### Useful weblinks:

- <http://www.dinosaursabbatical.blogspot.com/>
- <http://natgeotv.com/uk/jurassic-csi>

Phil Manning's blog about his dinosaur research, including live links when he is in the field, digging dinosaurs.

New National Geographic series 'Jurassic CSI' starring Phil Manning. Video clips and stills from the series available online.

Next SciBar: 14 November 2011. Meteorites: what they tell us about how planets formed. Time: 6.30pm as usual.