

**BIRD AND T-REX**

**THE EVIDENCE**



Retrieved from: [http://sciencefriday.com/pages/1998/Jun/hour1\\_062698.html](http://sciencefriday.com/pages/1998/Jun/hour1_062698.html)

### Archaeopteryx fossil (150 million years old)

Bird features: wings and feathers

Reptile features: long legs, three toes with claws, jawbone and teeth, tail



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Protarchaeopteryx robusta (Theropod dinosaur) (121-135 Million years old)

- Feathers, could not fly
- Long legs and short arms





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### Caudipteryx (Theropod dinosaur) (121-135 Million years old)

- Feathers, but did not fly
- Long legs, short arms
- Short feathered tail



Retrieved from: <http://www.ucmp.berkeley.edu/diapsids/saurischia/theropoda.html>

### Theropod dinosaur bones

- Hollow bones



Retrieved from: <http://platospond.com/WatsonsBlog/?p=22>

## Modern Bird Bones

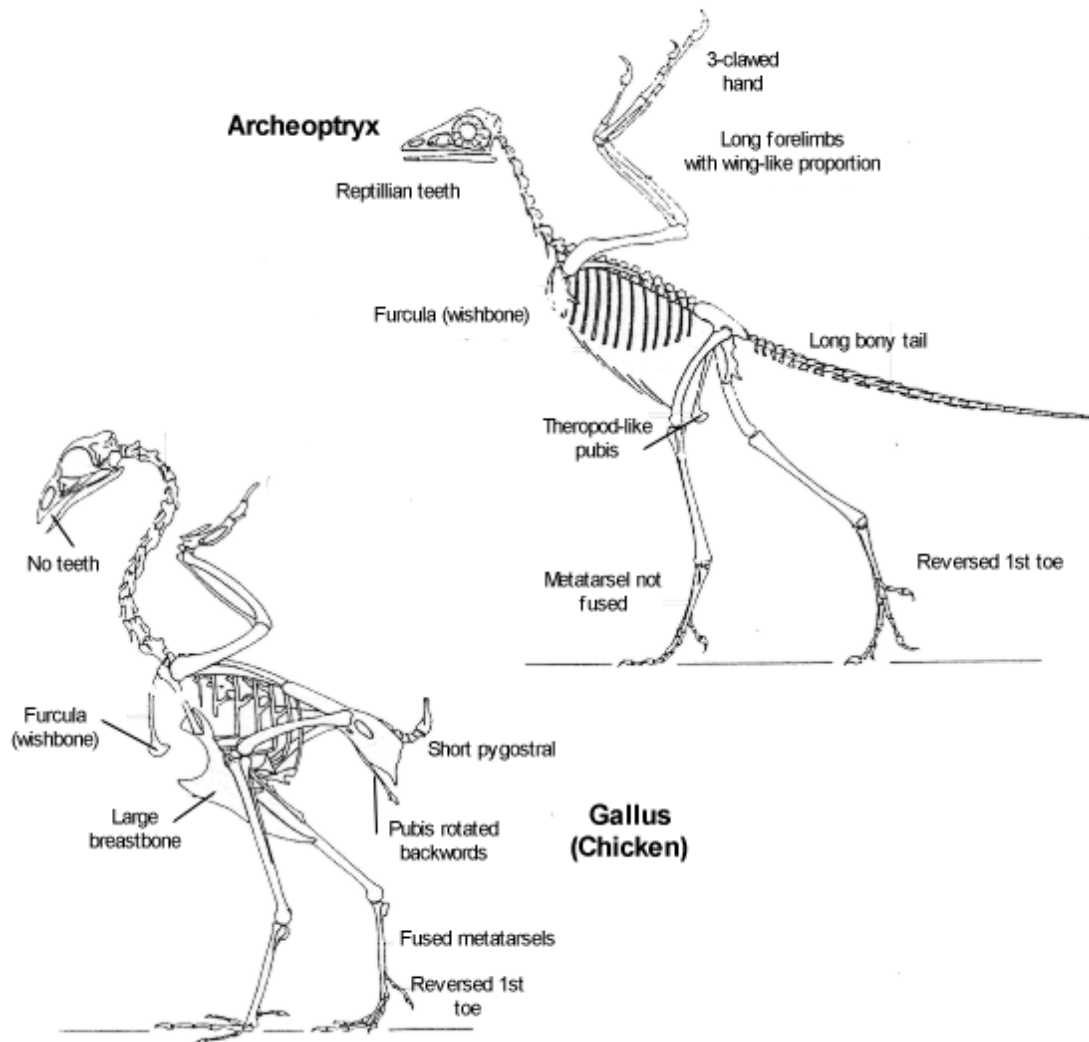
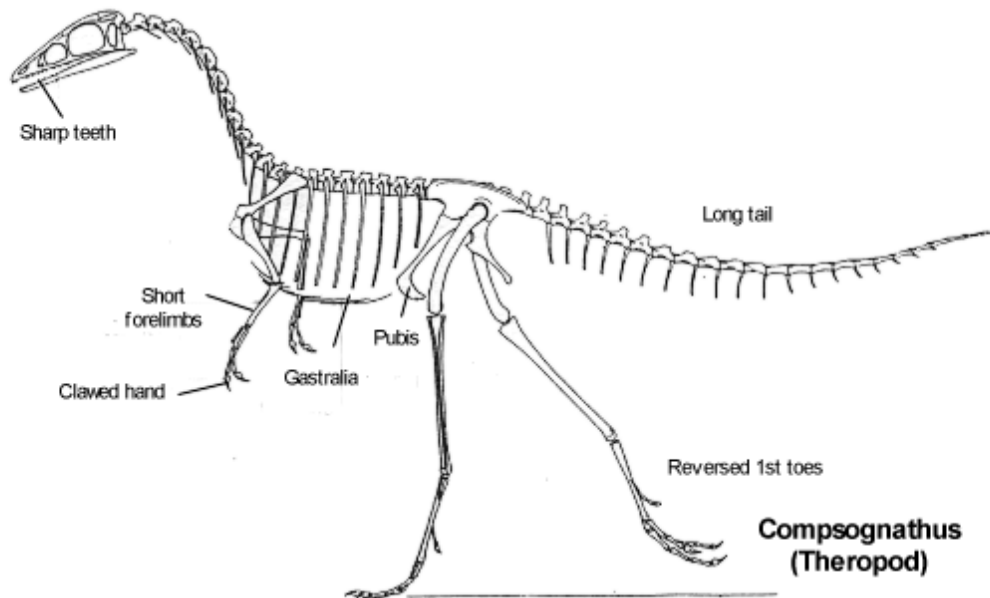
-Hollow bones



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## Skeleton of Theropod

Tyrannosaurus Rex belongs to a group of dinosaurs called **Theropods**.



(Hill and Davis, 2007)



## *What does the evidence tell us?*



(PBS, 2001: <http://www.pbs.org/wgbh/nova/id/tran-nf.html>)

- ✓ Archaeopteryx, Caudipteryx, and Proarchaeopteryx are important transitional **fossils**. They have features of theropod dinosaurs, yet also have wings and feathers.
- ✓ Using **comparative anatomy** of the fossil **evidence**, Theropod dinosaurs had many features that are common to modern birds like hollow bones, reversed first toes on the back legs, wishbones, three toed feet.
- ✓ Tyrannasaurus Rex belongs to the dinosaur group Theropod. The fossil evidence shows us that birds also descend from Theropod dinosaurs. Tyrannasaurus Rex and modern birds like the Pelican likely share a close common ancestor.
- ✓ Some scientists disagree and believe that birds descended from a group of animals that include crocodiles, but evidence hasn't been found to support it.