

Scientific Articles

6. Dyke, G., *Scientific American*, Winged Victory: Modern Birds Now Found to Have Been Contemporaries of Dinosaurs, July, 2010, 303(1), 70-75. "The article presents an overview of molecular studies and research on ancient modern bird fossils which suggests that modern bird species, which were previously thought to have originated after dinosaurs became extinct, may have existed along side of dinosaurs... It is funny to think of a robin perched on the back of a Velociraptor or a duck paddling alongside a Spinosaurus. But the molecular evidence for the contemporaneity of modern birds and dinosaurs was so compelling that even the paleontologists--who have typically viewed with skepticism those DNA findings that conflict with the fossil record--began to embrace it. Still, those of us who study ancient skeletons urgently wanted fossil confirmation of this new view of bird evolution.... Yet our comparisons in the museum that cold winter in 2001 demonstrated conclusively that the wing--with its straight carpometacarpus (the bone formed by the fusion of the hand bones) and details of canals, ridges and muscle scars--did indeed belong to a presbyornithid, which, moreover, was the oldest unequivocal representative of any neornithine group. Our finding fit the predictions of the molecular biologists perfectly. In a 2002 paper that formally described the animal, we gave it the name *Teviomis*.... One investigator, Sylvia Hope of the California Academy of Sciences in San Francisco, had been arguing for years that bird species she has identified from fossils found in New Jersey and Wyoming that date to between 80 million and 100 million years ago are modern."