

9 May 2008

By: Stefan Anitei, Science Editor



Ivory billed
woodpecker
(*Campephilus
principalis*)
FWS

[4 Things About Woodpeckers](#)

Special tongue and beak

The real woodpeckers may not be able to put on performances like Woody the Woodpecker, but they still make a special group of birds nonetheless. 1. The closest relatives of the woodpeckers are the honeyguides. Out of 204 species of woodpeckers, only the two species of wrynecks (*Jynx*) do not drill and drum the wood. The largest bird was the imperial woodpecker (*Campephilus imperialis*), that inhabited pine and oak mountain forests in Mexico. The now extinct bird was 55 cm (1.8 ft) long and weighed in at 563 grams (1.2 pounds). The ivory billed woodpecker (*Campephilus principalis*) of North America was 52 cm (1.7 ft) long. This species may be extinct too. Given this, the largest living woodpeckers would now be the great slaty woodpeckers or ant woodpeckers (*Mulleripicus pulverulentus*), hailing from the forests of southeast Asia. One of these birds measures 50 cm (1.6 ft) long. The smallest woodpecker is the bar-breasted piculet (*Picumnus aurifrons*) from South America: 7 grams and 8 cm (3.2 in) in length. 2. Woodpeckers have various adaptations for their lifestyle. Their tail has stiff feathers, so that it can be used when leaning on tree trunks. These birds have one of the longest tongues amongst birds, relatively to their body size: up to 14 cm (5.6 in). The cylindrical tongue is protractile (like in chameleons), while its tip is sticky and covered by spiky hairs orientated backwards. By using it, the birds extract insects from the drilled wood, piercing them like with a skewer. The tongue is launched and retracted with great speed. The beak of the woodpeckers grows continuously precisely because of the way in which it is used. The sharp beak is used like a chisel. The beak hits the tree with a speed of 6-7 m (20-23 ft) per second, equaling 20 km (12 mi) per hour. The stop is instant. The slowdown at the impact is 1,000 times more powerful than the gravitational force, and about 100 times higher than the acceleration experienced by an astronaut during the launch of a spaceship. The brain of a woodpecker, that weighs a mere 2 to 4 grams, can stand the shock and the speed with which the blows of the head take place because of the large cranial surface (which distributes the shock evenly) and the stiff neck muscles which do not allow the twist of the neck. 3. Drumming is used by males during the courtship ritual. It is also a territorial signal. Woodpeckers can start to make 2-3 nests, but they only get to finish just one. Some species can drill their nest in cacti, termite mounds and soil. That's why in young forests, they have an important role in creating tree holes. The wryneck can lay 7-10 eggs, but up to 62 when the eggs are extracted. 4. Woodpeckers eat insects (many species are specialized in ants), seeds, sap, fruits and honey. During winter, the food is mainly made of plant matter, and the acorn woodpecker (*Melanerpes formicivorus*) of western US and Central America is famous for drilling holes in trees, fences and edifices and then filling them up with acorn reserves.