Insects & arachnids

For every human, there are an estimated 1.4 billion insects alive right now



The fastest insect wingbeat under natural conditions is 62,760 beats per min by a tiny midge of the genus Forcipomyia.

Most venomous spider

The Brazilian wandering spiders of the genus *Phoneutria* are highly venomous, particularly the Brazilian huntsman (*P. fera*), which has the most active neurotoxic venom of any living spider. Just 0.006 mg of its venom is sufficient to kill a mouse.

Fastest insect

A speed of 3.36 mph (5.4 km/h), or 50 body lengths per sec, was registered by *Periplaneta americana*, the familiar American cockroach of the order Dictyoptera, in 1991.

The fastest caterpillar is the larva of the mother-of-pearl moth (*Pleuroptya ruralis*), which can travel at 0.8 mph (1.37 km/h).

The fastest flying insect is the Australian dragonfly (Austrophlebia costalis), at 36 mph (58 km/h) in short bursts. In 1917, a ground velocity of 61.3 mph (98.6 km/h) was recorded over 240–270 ft (73–82 m).

Least classifiable insect

A newly discovered nymph (juvenile) form of plant hopper resembles nymphs from at least four taxonomic families but has defied classification. It was found in the rain forest of southeastern Suriname.

Most toxic insect venom

Pogonomyrmex
maricopa is a stinging
species of harvester
ant native to Arizona,
USA. The LD₅₀ value
of its venom (the
dosage required
to kill 50% of mice
subjected to it) is
0.0000019 oz/lb
when injected
intravenously
into mice.

Loudest insect

The African cicada
(Brevisana brevis),
discovered in 1850,
produces a calling
song with a mean
sound pressure level
of 106.7 decibels at a
distance of 1 ft 7 in (50 cm).
Songs play a vital role in
cicada communication
and reproduction.

Largest appetite relative to weight

The caterpillar of the North American silk moth (*Antheraea polyphemus*) eats more food relative to its own body weight than any other animal. Living on the leaves of oak, birch, willow, and maple trees, it eats up to 86,000 times its own weight during the first 56 days of its life.

Most times for an insect to molt

All insects molt several times during the course of their lifetime. Up to 60 molts have been

Longest insect tongue

recorded for the firebrat (Thermobia domestica), a primitive, wingless insect that is widely distributed in North America and other temperate regions worldwide. The firebrat molts throughout its life, whereas most insects do so only during their juvenile (nymph, or larval) stage.

Largest ant

The wingless queen of the fulvous driver ant *Dorylus fulvus* is native to South Africa. It grows to a maximum length of 1.9 in (5 cm), some 0.7 in (2 cm) longer than the male of the species. The term "fulvous" describes the ant's characteristic tawny brown coloration.

OUTSIZE INSECTS, CENTIPEDES, AND ARACHNIDS



queen): length 1.9 in

Giant centipede: length 10.2 in

Hercules beetle: length including horns 6.6 in

Titan beetle: body length 5.9 in

Giant water bug: length 4.5 in

Goliath birdeating spider: leg span 11 in

Chan's megastick: length 13.9 in

