

No matter WHICH country you live in around the world, there is one kind of animal life that you are SURE to find everywhere! Can you guess what that is? The answer is INSECTS or BUGS! Insects are found all around us - deep in the soil, in the air, in lakes, in the sea and also even in the frozen Arctic and Antarctic during the warmer months!! How many different kinds of insects can you think of? You could walk around outside your house and see how many you can find! There are flies and wasps; beetles and ants; caterpillars and butterflies; fleas, crickets, mosquitoes..... the list goes on and on!



In fact there are well over ONE MILLION different kinds (or species) of insects in the world!



Some insects are very interesting to us - like pretty spotted ladybugs, funny inchworms, and fascinating dung beetles that push along balls of cow manure to make a cozy home to lay their eggs! Sometimes we want to collect insects, such as to make a beautiful butterfly collection or ant farm; but other insects make us afraid because they could hurt us - such as big wasps, stinging fire ants and poisonous scorpions! But although most insects are very small, they are also very important as many of them help break down and recycle dead animals and plants - and so without them, the world would be a very STINKY place!!

Some insects provide us with food - you probably quickly think about the delicious honey produced by bees!



But in many parts of the world, such as Asia, South America, and Africa, people actually EAT insects! In **Mexico** favorites include chocolate ants and candy with agave worms! In the **Philippines** people love eating many varieties of insects including grasshoppers and beetles that may be fried or cooked with vegetables. In many parts of **Africa**, fat beetle grubs and termites are often eaten raw, soon after being caught. Finally, one of the most popular foods throughout **Asia** is the giant cockroach which is easily caught at night near pools of water, and is then roasted and eaten whole! In the Bible in **Matthew 3:4** we read that John the Baptist lived in the desert and ate locusts and wild honey! Also God often refers to insects in the

Bible to help us understand how we should live. See if you can answer these questions by reading the Bible verses:

- 1) Which insect example teaches us not to be lazy? Proverbs 6:6-8
- 2) Which insect gives us an example of being strong if we work together? Proverbs 30:27
- 3) Which insect did Jesus warn about when he taught about true treasure? Matthew 6:19,20
- 4) Which insect did God use to teach Jonah a lesson about His love and mercy? Jonah 4: 5-11
- 5) Which insect did God use as an example of causing great pain to man? Revelation 9:5

Do you know how many PEOPLE there are in the world? It is estimated that there are about 6.77 BILLION right now - that's 6,770,000,000! But there are so many insects in the world that we cannot even begin to count how many!! In **England** in 1943, a scientist found that one acre of a field there supported over 1 billion (1,000,000,000) insects. On an ordinary farm in **Iowa**, **USA** another scientist found that on just one square meter

there were about 100 million springtails alone (these are just one kind of "ordinary" insect). In the deserts of **Africa**, swarms of locusts have been estimated as containing as many as 28 BILLION individuals with a total estimated weight of 70,000 tons!!! In **Japan**, one huge super colony of 45,000 interconnected nests had over a million queen ants and about 300 million worker ants! In fact some scientists say that there are more ants than any other insect and that possibly 10% of the total mass of animals in the world is made up of ants!





Here are some more fascinating facts about insects: The **BIGGEST** (heaviest) is probably the Goliath Beetle (see picture). It is found mostly in rainforests in **Africa** and it can weight nearly 100 grams (that's 3.5 oz)! It is similar to the Scarab Beetle of **Ancient Egypt** which was said to have been as big as a dog - but we can't believe everything we read on the Internet!! Another type of beetle from **South America**, called a Longhorn Beetle, is also huge and can be over 16cm (6 ins) long, not including its antennae! The **SMALLEST** insect is probably the "Fairy Fly" that is actually a tiny wasp found in **Costa Rica** and is a type of parasite on eggs laid by other insects. It may be as small as 0.139mm

in length – almost invisible to the naked eye, and there are similar tiny beetles or flies in other parts of the world.

The LONGEST insect is named Chan's Megastick after the man who discovered it in Borneo. It is a stick insect and including its legs measured 55.6 cm long (22 ins). None has ever been found alive but it is believed to live in the tops of giant trees in the rainforest. Here is a picture of one. The FASTEST insects include the male Deer Bot fly, which is believed to fly over 100 mph (160 km/h).



Another type of horse fly has been clocked at 90 mph (145 km/h). The cockroach (found everywhere!) is probably the fastest running insect at about 1 ft/sec - over 3 mph (about 5 km/h). That is the equivalent for its size as a human sprinter running at 200 mph (320 km/h)!! The **HIGHEST JUMPER** is probably the flea which can jump over 200 times its body length - the equivalent of a human jumping over a 70 story building!



There are many types of stinging or poisonous insects all over the world, including wasps, bees, scorpions, ants and centipedes, and it is said that the world's most toxic venom is found in a certain type of harvest ant. Also, many insects such as parasites cause mankind a lot of pain and suffering, but probably the MOST DANGEROUS insect of all is the Common Housefly! It is found EVERYWHERE and because it tastes with its feet and lands on everything, it can spread disease easily causing diarrhea, typhoid, cholera and even tuberculosis - so it is very important to kill flies!

Nearly everyone could tell an interesting story that involves an insect - when we lived in **Mexico** my husband and I had quite a scary encounter with a very dangerous centipede. We were moving into a house that had not been lived in for several years, and after washing down all the walls and floors with water a few days earlier, we finally brought all our furniture and belongings into the house from another part of the country. We were exhausted and just slept on a mattress on the floor. While I was getting dressed the next morning, I reached for something close to my pillow and almost caught hold of a HUGE insect! It ran off but it frightened me, so

Gerald finally caught it and killed it and so I took it in a jar to a nearby store to ask what it was. Apparently it was a very dangerous desert centipede that could kill a man in 6 hrs! We praised God that He had protected us from danger even though we didn't know it was there! You can read the whole story, and also many others on our website page "Cross-cultural Ministry – Personal Stories" www.imofinc.org





Finally, I want to share with you a fun game that I have played with children - it is called "Insect races". First you need to find and collect several different insects, at least one of each kind for each child or team. Try to find ones that are different sizes or colors so you know which insect belongs to each child. For example, you can use beetles, grasshoppers, millipedes (NOT poisonous centipedes!), caterpillars and even snails - but nothing that flies! Keep them in different jars (so they don't eat each other!) while you mark out some circles on the ground like the picture but up to several feet across. Start the race by placing all the beetles (or snails) together in the middle

Decide which circle is the "finish line" and whoever's beetle/snail crosses that line first, gets points. Repeat the race with other insects, using the smaller circles for slower-moving insects, larger circles for bugs that move fast! Enjoy yourself and remember the lessons about insects that God gives us in the Bible!

'Til next time, Your friend, Shirley

Answers: 1) ant; 2) locust; 3) moth; 4) worm; 5) scorpion. Facts from: <u>www.earthlife.net</u> and <u>www.entomon.net</u> World Kids PAL Project is a ministry of IMOF Inc, 8069 FM 1251E, Henderson, TX. Tel: (903) 889-2233 **E-mail:** <u>shirley@imofinc.org</u> <u>www.imofinc.org</u>