



Exhibit message

Predators can come in small packages and some may live in a backyard near you! Predators of all shapes and sizes eat insects (such as moths, grasshoppers or flies) as a part of their diet.

Quick fact

Any predator that mostly eats insects is called insectivorous.

It has been estimated that roughly half of the world's insects only eat plant material (they are herbivorous), while the other half eat other insects and other animals (insectivorous or carnivorous).

Graphic panel text

Animals don't always use fearsome teeth and claws to hunt their prey.

Tiny predators such as the Malaysian orchid mantis trick their prey by looking like orchid flowers.

The bird-dropping spider looks like bird poo, but smells like a female moth. Male moths attracted by the smell and fooled by the spider's appearance, land close enough to the spider to be caught.

Archer fish squirt water at insects resting on plants to knock them into the river and grab them.

Want to know more about predatory insects?

The following predators are lurking on the board game exhibit Dice with Death:

Archer fish

Archer fish spit parcels of water at insects resting on overhanging vegetation. When the insects fall into the water, the archer fish manages to calculate the landing spot, swim over and eat the insect in about one tenth of a second.

Bird

The generic bird used in the board game represents many insectivorous birds.

Bird dropping spider

This spider has an abdomen that looks like a black and white bird dropping, so it becomes camouflaged as bird poo on plants. It also releases a scent which smells like a female moth. Male moths are fooled by this scent and by the spider's bird poo appearance, and they are drawn closer to the spider, so the spider can catch the moth.

Bomardier beetle

This beetle squirts a toxic chemical at almost 100 °C from its backside to irritate attackers and escape.

Chameleon

There are many different species of chameleon. Chameleons have eyes that can move independently, so one eye can look forwards at prey, while the second eye surveys above and behind for potential attackers. Once prey is lined up, the chameleon shoots out its muscular tongue and contracts muscles at the tip of its tongue, so it forms a suction cup to stick to prey.

Green iguana

The green iguana is actually a herbivore (plant eater). People tend to think that all lizards eat insects. The green iguana was included in the board game exhibit as a kind of 'joker' to surprise players!

Horned frog

The horned frog is mostly found in South America. It sits, camouflaged and waiting in ambush for snakes, lizards, mice, and other vertebrates that pass within range.



Horseshoe bat

This bat has a fleshy nose, which is shaped a bit like a horseshoe. Like most bats, the horseshoe bat uses bio sonar, where it releases an ultrasonic squeak and listens to the sounds that bounce back. This helps them to find prey in the dark.

Humans

Humans around the world capture and eat insects as a normal part of their diet.

Malaysian orchid mantis

The Malaysian orchid mantis is shaped and coloured like an orchid. Their body is pinkish white with brown markings, and its legs are flattened and shaped like petals. This allows them to sit camouflaged on orchids, so they can ambush passing prey.

Meerkats

Meerkats dig in the ground to find insects to eat. Meerkats even dig up scorpions to eat and they appear to be immune to scorpion venom.

Net casting spider

The net casting spider weaves a web and holds it between its two front legs. The spider usually hangs upside down with the net stretched out, ready to throw over any prey that passes underneath.

Venus fly trap

Insects walking inside the Venus fly trap bend over tiny hairs, which trigger the closure of the Venus fly trap. Then the fly trap releases digestive juices to metabolise the trapped insect.

Further information

Insects as Predators. T.R. New. 1991.

Archer fish

<http://www.amonline.net.au/fishes/fishfacts/fish/tcharar.htm>

Outstanding in the Outfield

<http://jeb.biologists.org/cgi/reprint/205/21/2103/i.pdf>

<http://jeb.biologists.org/cgi/reprint/205/21/3321.pdf>

Bombardier beetle

<http://www.animalfact.com/article1008.html>

http://www.ento.csiro.au/aicn/name_c/a_413.htm

ABC story <http://www.abc.net.au/science/news/stories/s44387.htm>

Bird dropping spider

http://www.amonline.net.au/factsheets/bird_dropping_spider.htm

http://www.ento.csiro.au/aicn/name_c/a_271.htm

http://www.ento.csiro.au/aicn/name_c/a_3173.htm

<http://www.qm.qld.gov.au/features/spiders/spiders/BirdDroppingSpider.asp>

Chameleon

http://www.thetech.org/exhibits_events/traveling/robotzoo/about/chameleon.html

<http://jeb.biologists.org/cgi/reprint/205/15/2167.pdf>

Horned frog

http://www.honolulu zoo.org/horned_frogs.htm

Horseshoe bat

<http://www.amonline.net.au/bats/records/bat15.htm>

http://www.amonline.net.au/wild_kids/bats/eastern_horseshoe.htm

Humans

<http://www.food-insects.com/Vol3%20no1.htm>

Malaysia orchid mantis

http://www.mantisuk.com/variety/malaysianorchid_mantis.asp

Meerkats

<http://www.meerkats.com/info.html>

Net casting spider

http://www.amonline.net.au/factsheets/netcasting_spider.htm

http://www.ento.csiro.au/aicn/system/c_272.htm

<http://www.qm.qld.gov.au/features/spiders/spiders/NetCastingSpider.asp>

Venus fly trap

http://www.sciam.com/print_version.cfm?articleID=00045544-C58D-1D5B-90FB809EC5880000