

Are there tarantulas here? I think I saw part of a dead one. How do they mate?

We usually see tarantulas in open space areas in the late summer to early fall when the males are out looking for potential mates (usually spotted crossing roads and/or trails). Unfortunately, the males are very vulnerable to predators when they are out of their burrows moving around; it is very possible that you did see part of a dead tarantula. I have seen yellow jackets crawling in and out of the exoskeleton from a dead tarantula!

Male tarantulas that are ready mate will molt with a couple of important body changes: first their pedipalps (the two short "legs" on either side of their mouths) will be slightly shortened, they will eventually carry their sperm sacks on them; second on the underside of their two front most legs they will develop mating hooks (to hold the females fangs during the actually mating).

Before leaving his burrow to find a mate the male will produce what is called a sperm web; a hammock like net that he will rub himself all over depositing sperm onto it. When he has finished producing sperm he will walk on the sperm web taking the sperm into the sack like ends on his pedipalps. After he has picked up the sperm he will destroy the web and then go off in search of a mate.

When a male tarantula finds a burrow with a female in it he will begin to tap the ground with his feet and abdomen to announce his presence. Presuming that she is receptive, the female will answer with tapping of her own; if she is not and the male gets too close she may kill and eat him.

When the male is close enough to touch the female he will keep taping the females legs until she goes into the threat posture (reared back slightly with her front legs raised) and then lift the front of her body off the ground (this can be a challenge since the male is usually about 2/3 the size of the female). He will then hook her fangs with his mating hooks and use his pedipalps to search for her epigastric furrow (a space between two plates that protect the underside of the spider's body) where he will deposit his sperm sacks; in the furrow is the opening that leads to the female spider's oviduct.

After the sperm sack has been deposited by the male, the female will, depending on multiple factors (species of spider, humidity, temperature, food availability, etc.), produce an egg sack in several weeks to a few months. The eggs will develop and hatch in a month or two (again depending on many factors). First out of the egg case will be nymphs (all white but otherwise looking like spiders) after the first molt they are considered spiderlings, it will take several molts for them to become mature spiders capable of starting the process all over again.