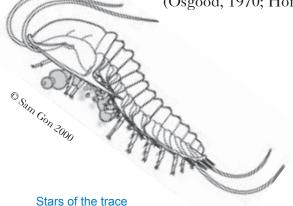
These trace fossils, called *Rusophycus*, were made by trilobites digging straight down into the muddy bottom. The holes they left were filled in by sand. That's why the tracks sometimes look upside down. They're actually sand casts of the tracks. The trilobite dug into the mud layer from side to side with its legs. This left a set of scratch marks on each side. The marks are wider toward one end, narrowing back toward the other. This matches the body of the trilobite, and the size of its legs (Whittington, 1997a).

Scientists are certain that these types of tracks were made by trilobites because trilobite fossils are sometimes found in the holes at the end of the trails. One *Rusophycus* was found with a complete exoskeleton of the trilobite *Flexicalymene meeki* right on top (Osgood, 1970). Other trace fossils show imprints of the bottom edges of the trilobite, as well as its footmarks (Osgood, 1970; Hofmann, 1979).





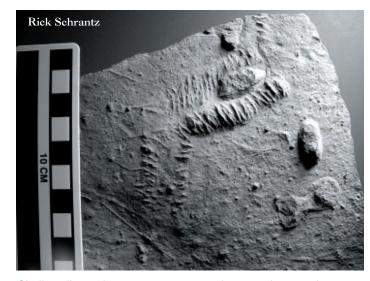
Rusophycus fossils.



fossil movie "Trilobite Snatches Worm!" From Gon (2001).



Some *Rusophycus* burrows occur above worm burrows, suggesting that the trilobites were hunting the worms.



Shallow dig marks seem to turn toward a worm burrow, then get deeper.