

PREHISTORIC SPIDER

The term “Fake News” is much in the media today. At its extreme, these stories are deliberately published hoaxes, propaganda, and disinformation. However, there are more subtle types of false reporting that may, or may not, be deliberate. It seems that many persons today do not possess a reasonable amount of skepticism, or even common sense, to question the elements of news articles, especially those on the Internet.

This story is an example of the latter type of article. It originally appeared on the Yahoo News website on 8 October 2012 (<http://news.yahoo.com/100-million-old-spider-attack-found-amber-193233281.html>).



Researchers have found trapped in amber a rare dinosaur-age scene of a spider attacking a wasp caught in its web. The piece of amber, which contains 15 intact strands of spider silk, provides the first fossil evidence of such an assault, the researchers said. It was excavated in a Burmese mine and dates back to the Early Cretaceous, between 97 million and 110 million years ago.

“This juvenile spider was going to make a meal out of a tiny parasitic wasp, but never quite got to it,” George Poinar, Jr., a zoology professor at Oregon State University, said in a statement.

“This was a male wasp that suddenly found itself trapped in a spider web. This was the wasp's worst nightmare, and it never ended. The wasp was watching the spider just as it was about to be attacked, when tree resin flowed over and captured both of them.”

Poinar and Ron Buckley, an amber collector from Kentucky, described the find in a paper published in the October issue of the journal *Historical Biology*. They wrote that while there are examples of amber-trapped insects caught in webs, “there is no previous fossil record of a spider attacking its ensnared prey.”

The amber chunk also contains the body of another male spider in the same web, which might make the fossil the oldest known evidence of social behavior in spiders, according to the authors.

Both the spider and wasp species are today extinct. But the type of wasp (*Cascoscelio incassus*) belongs to a group that today is known to parasitize spider eggs, Poinar said. The attack on the wasp by the bristly orb-weaver spider, *Geratonephila burmanica*, might then be considered revenge.

I sent a copy of this article to Dr. Beatrice Vogel, one of our Unit members. Dr. Vogel is a retired arachnologist and the founder and first President of the American Arachnological Society. This is her response:

“Thanks for the info. The object was interesting, but the sensational style of writing is gratuitous, and ‘Attack’ is entirely uncalled for. Spiders in amber are quite common and quite a few people have a small collection of them. I even have one.”

Dr. Vogel also forwarded to me a response she received from one of her colleagues, Dr. Paul Selden. Dr. Selden is the Gulf-Hedberg Distinguished Professor of Invertebrate Paleontology at the University of Kansas and past-President of the International Society of Arachnology.

“In any amber find, the null hypothesis is always that the associations observed are fortuitous, and I don’t find that the authors have made a very convincing case for rejecting that hypothesis. The wasp and the spider could have been caught in the resin hours, days, or even weeks apart, or by separate resin flows from a wound in the tree. The facts that they are close to one another and that there is a lot of silk in the inclusion really proves nothing, nor does the presence of a male spider in the same inclusion show anything about ‘social behavior.’ To me, a classic case of over-interpretation that reviewers should have caught.”