

Cryptozoology? No need for an apology

March 15 2013, by Dustin Welbourne



Claims of mysterious creature sightings dominate cryptozoology – but where is the evidence? Credit: Chi-Yun

All forms of science are reliant on facts, hard evidence and statistics to maintain relevance and credibility. But what of the legitimacy of the so-called "pseudosciences"?

A warning: I'm going to pick on [cryptozoology](#) here – the study of hidden, extinct or mythical creatures.

Creatures dear to the cryptozoologist's heart include: the kraken, ogopogo, Nessie, the chupacabra, yowies, mermaids, orang pendek, and the coolest of them all, the Mongolian Death Worm. If you're interested in these and others, [Wikipedia](#) will keep you busy for hours.

Despite the (lack of) plausibility, one of the main criticisms levelled at scientists is that we won't investigate cryptozoologists' claims. As Australian cryptozoologist Rex Gilroy said:

Go and search for the evidence rather than be critical. I have struck a lot of academic criticism over the years by people who stick to a textbook and who are glued to their office desk.

Why not go and search?

I can already hear the dull chanting of [Carl Sagan's](#) "extraordinary claims require extraordinary evidence". But this is not why we don't investigate strange ideas.

To publish or not to publish

Scientists consider strange ideas all the time. Indeed, we make up most of them. If we lived by Sagan's mantra, [scientific inquiry](#) would never happen.

The reason research is not done on extraordinary claims is quite simple: "publish or perish".

Let me explain.

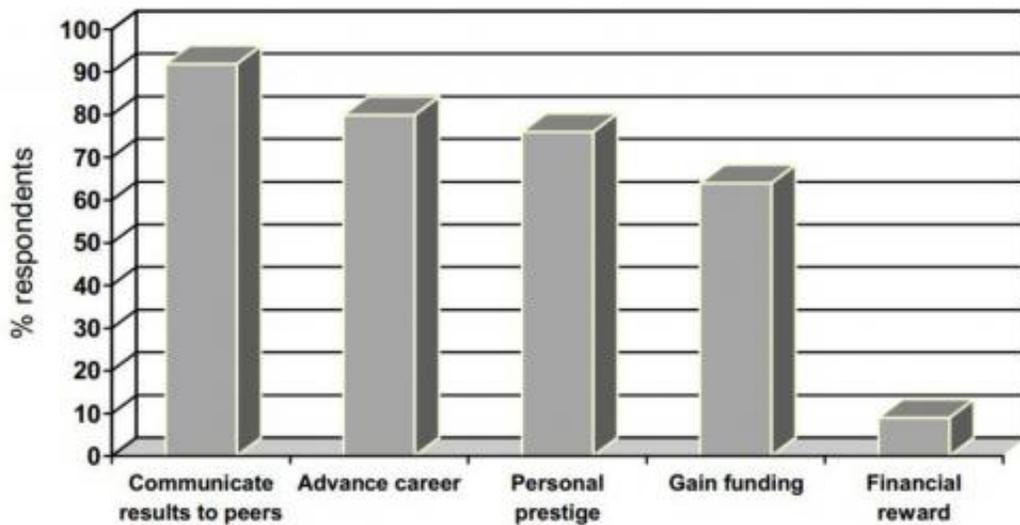
If you want to be a professional scientist, you need to do science. This means formulating questions to answer, doing the research, and then, publishing the work.

As you can imagine, doing research costs money. This means going on bended knee to those holding the purse strings. They evaluate your project and your ability – that is, your published research – to carry out the project.

It is basically a catch-22 situation. Without a good publishing history, you will likely not get funded. But you can't do much research without the funding. And around we go.

Hence the phrase, publish or perish.

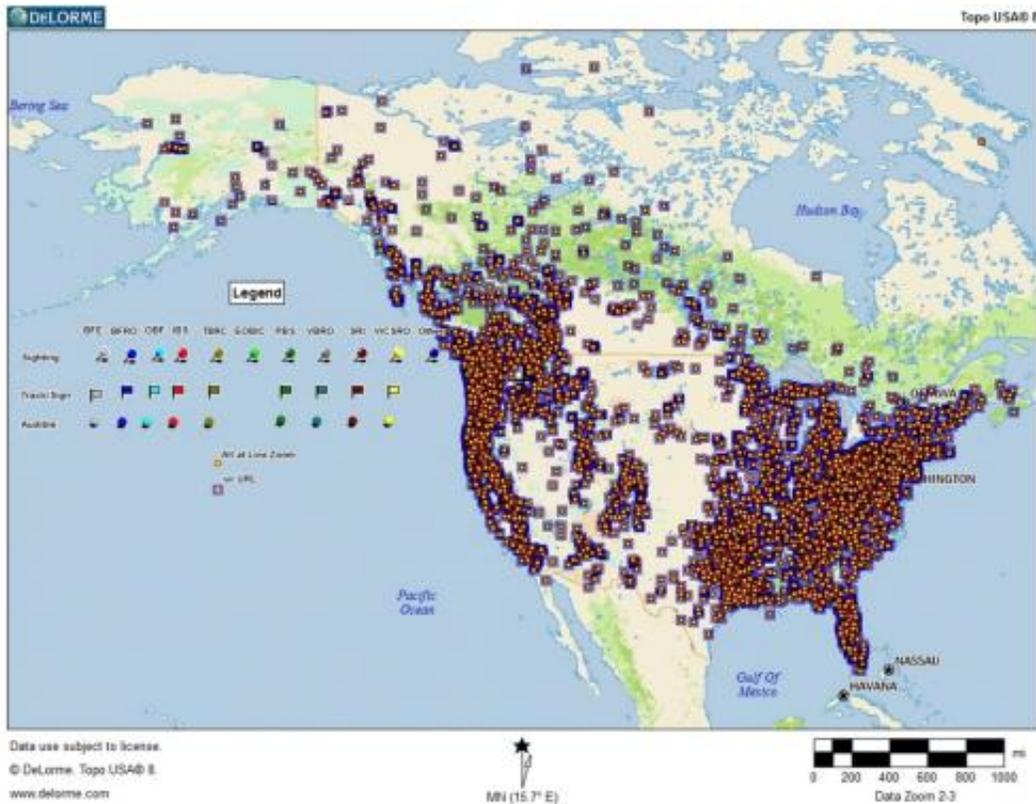
You would think then that making a big discovery would be great for a scientific career. It absolutely is!



Why do researchers publish their work? Credit: Alma Swan

No scientist, ever, would turn down discovering a new species, especially something such as Bigfoot. It would be an instant publication in a major journal, and research funding would flow like the Amazon River.

As such, scientists are not shying away from strange claims because they don't want to make discoveries. They shy away because of the plausibility and probability of making the discovery.



Bigfoot sightings in Northern America – seems like you can't go outside without running into him. Credit: Mangani's Bigfoot Maps

Let's take Bigfoot as an example.

Bigfoot, a 500-kilo bipedal primate standing 3.0 metres, is biologically possible. Other than the bipedal locomotion, a primate from South-eastern Asia, gigantopithecus, would have fit the bill – if it hadn't gone extinct 100,000 years ago.

But given biogeography and population biology, such a species is not plausible.

Bigfoot's biggest bunions are his biggest supporters, the Bigfoot hunters.

Sightings of the creature have come from all over North America.

Yet any species with a huge distribution would consist of a large number of individuals, and therefore, we would have plenty of physical evidence.

Proponents justify this lack of evidence by claiming Bigfoot is low in numbers, and they bury their dead, and ...

Whoa Nelly! You're telling me in a country where there are 88 guns for every 100 people no one has shot and recovered the body.

Until 2009, there were no sightings of pygmy hippos in all of Australia, nevertheless a NT hunter managed to shoot one.

You can't have it both ways. The Bigfoot population cannot stretch across North America enabling sightings every other Tuesday, and be in such low numbers that solid evidence never materialises.

In Bigfoot's case, scientists don't look because he is simply not plausible.

Dealing with claims

Not all claims are in this canoe though. If tomorrow's newspaper headline was: "Panther found in Australia", I wouldn't be surprised.

Wildlife trafficking is one of the three largest crimes in the world and large cats are certainly on the price list. If you do a search of "exotic" animals in Australia, you quickly realise Australia is not immune from the industry.

Regardless of whether animals are being kept legally or illegally, escapes can and do happen. In 2008, a 1.5 metre alligator was found in Pambula, on the south coast of New South Wales.

Though a big cat living in Australia is as plausible as a hippo or alligator, to commit research time and funding to finding it is too much of a gamble.

If one could be found, great! But what if nothing is found? Years could pass without finding a thing – and that translates to not publishing a thing.

And for a scientist, that's game over.

Cryptozoologists shouldn't be too concerned. Scientists are doing research all over Australia: if strange critters are out there, they will be detected incidentally.

At the end of the day, it's encouraging that passionate, amateur zoologists are out looking for animals. I, for one, would rather they look for Bigfoot than sit at home watching Big Brother. And if they find solid evidence, a scientist will always be keen to have a look.

When it comes to scientists conducting research, it boils down to a simple calculation that everyone recognises:

What do we spend our finite resources on?

Odd animals may exist, but there are certainly many that need our attention now. And in the meantime, let's see what else we come across.

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