

# Magnetic cow findings cause row among Google Earth researchers

15 November 2011, by Bob Yirka



(PhysOrg.com) -- Sometimes, scientists hard at work in their field, come across findings that they cannot explain, and instead of simply writing a paper describing what they've seen, they instead choose to write a paper describing what they think their observations have shown. Case in point, back in 2008, a group of guys with Biology and wildlife backgrounds were apparently sitting around looking at pictures taken by Google Earth, when they noticed that there seemed to be a pattern in the way some cows in a pasture aligned themselves. After looking at more pictures, a larger pattern began to emerge. Oddly enough, the cows seemed to be aligning themselves with the Earth's magnetic field lines. The group, led by Hynek Burda wrote up a paper describing what they'd found and [had it published](#) in the *Proceedings of the National Academy of Sciences*. Later, the team did additional research and found that no such kinds of lining up occurred around power lines which they thought might disrupt the cow's ability to sense magnetic fields.

When the paper came out, it was followed by a bit of media noise, some of which poked a little bit of fun at the whole idea. Others responded that cows lining up is nothing new, they do it to get the best angle on the sun to help keep warm, or to avoid a cold wind. But to do it based on the Earth's

magnetic field, seemed, well, a little out there.

Then, because the whole thing was technically based on science, another group decided this year to see if they could replicate what the first group had found. Unfortunately, this second group failed to find any real good examples to back up the claims made by the first, and said so in their paper published in the *Journal of Comparative Physiology A*.

The first group, clearly annoyed at the findings of the second group, asked to have a look at what they had been looking at in basing their findings, and lo and behold, found, at least to their eyes, all manner of errors, not the least of which was that the second group seemed to be looking at hay bales, barns and other inanimate objects in addition to the cows that were supposed to be the focus of the research. They also found that the second group had apparently been looking at individual cows, rather than at herds overall. This led them to conclude that the work done by the second group was flawed and thus their findings were not valid.

The second team then responded by stating rather emphatically that they had not studied inanimate objects but did suggest that the two teams may have been looking at different pictures, which might account for some discrepancies in findings. They also said they won't be conducting any further research on the topic.

Luckily, others have also had a look at the work that both teams did and have done some looking of their own, and most apparently, at least at this point, are siding with the first team, saying that there does indeed seem to be some evidence that shows that [cows](#), for whatever reason, do indeed tend to align themselves with the Earth's magnetic field lines. Which means, of course, we can all smile inwardly and get on with our day, safe in the knowledge that the world's scientists are hard at work trying to solve the great mysteries of our time.

**More information:**

via [Nature](#)

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