

My main article appeared in Naturwissenschaften in 1995, volume 82, pp. 360-369.

Betz replied and Ertel did another (misguided) analysis of the data, and those articles appeared in 1996, Naturwissenschaften vol. 83, starting on p. 272, and on p. 233; and my response to those attempted defenses was published in the same journal, also in 1996, volume 83, pp. 275-277.

(Most University libraries ought to have Naturwissenschaften. It is the official organ of the Max Planck Society, which is the German equivalent of the National Academy of Sciences of the U. S. and the British Royal Society.)

What kind of response have I had? None from the pro-dowsing community (other than the Betz and Ertel "rebuttals" mentioned above), but quite a few e-mails from fellow skeptics. Among those whose names occur to me now are Jan Nienhuys, a Dutch mathematician who has published critical articles on the "Mars effect", and Norwegian academic named Rolf Manne, who told me that Betz's experiments had been used in Norway as justification for government encouragement of the use of dowsing to find people buried by avalanches. He was glad to have my analyses and graphs as ammunition to attempt to counter that superstition. And, of course, Eric Krieg, and James Randi.

The endorsement by Nienhuys is the only authoritative "Expert" comment by someone who understand statistics and experimental design at the level my article has addressed, but of course there was also an anonymous referee (also a statistician) who endorsed publication of my original article.

Betz's field trials? There is a vast literature, going back several centuries, of anecdotal reports of dowsers' successes. In 1917, the US Geological Survey evaluated that literature (up to that date) and concluded that it was all worthless: "...it should be obvious to everyone that

further tests by the USGS on this so-called 'witching' for water, oil or other minerals would be a misuse of public funds." (cited from my original Naturwiss. article). I do not know the details of Betz's field trials, but I think there is strong reason to presume that they were uncontrolled "fishing expeditions", that do not deserve the name "tests", much less scientific experimentation. I am willing to grant that there may be some dowzers who have an intuitive, subconscious understanding of underground topography that permits them to choose a better spot than just a random guess; and they may even use a dowsing rod to confirm what their subconscious tells them. Even I would, I think, be able to make a guess about better and poorer places to bore on the basis of obvious superficial landscape features: don't drill at the top of a hill; look for a gentle valley with a large potential drainage area behind it, etc.

I have seen private correspondence from Betz, in which he as much as admits that the "barn" experiments are not in themselves particularly convincing. Quote: "selbst wenn er die Ergebnisse der Scheune nicht besonders werten moechte (wofuer ich ein gewisses Verstaendnis habe)...", which, in rough translation, says "Even if he [meaning me] prefers not to put much faith in the results from the barn (and I have a certain understanding for such a position)..." And then Betz says that one should instead put more faith in what dowzers have been reported to do under field conditions; but it is exactly that sort of anecdotal reports that, in my opinion, deserves no more credibility than the claim by my aged aunt, that her knees ache the day before the weather will change: a typical problem involves failure to remember all the times that the weather changed without hurting knees, and all the times that her knees hurt when the weather didn't change-- the kind of selective memory that has led to all the superstitions in the book.

You ask whether anyone has addressed this point about the field testing, and I think I must answer in the negative, as far as written comment that I've seen goes, other than the expression of severe doubts about any sort

of anecdotal evidence without proper experimental controls.

Any more questions that I might be able to answer?

Cheers!

Jim Enright

P. S. Your message, in another place, refers very casually to "earth rays".

Among those who believe in them, have you found anyone who can tell you exactly where they fit into the electromagnetic spectrum, and if so, what sort of physical instrument (other than a dowsing rod) that might be designed to reliably demonstrate their existence? It seems a bit naive for the believers to postulate some new source of energy, with all its remarkable properties, without being a bit more specific.

Note from Eric, you can subscribe to NatureWissenSchaften by going to:

<http://link.springer.de/link/service/journals/00114/subs.htm>

This and other dowsing information can be found from:

<http://www.voicenet.com/~eric/dowsing.htm>

