Science or B.S.? When should you spend your money?

Rachel Gilker and Kathy Voth
On Pasture Editors
BS!
How reliable is the source of the claim?
Does the source make similar claims?
Have the claims been verified by someone else?
Does this fit with the way the world works?
Has anyone tried to disprove the claim?
Where does the preponderance of evidence point?
Is the claimant playing by the rules of science?
Is the claimant providing positive evidence?
Does the new theory account for as many phenomena as the old theory?
Are personal beliefs driving the claim?
AS YOUR SOIL GETS RICHER
SO DO YOU

L65J-10
(L for Three Point Linkage.
65 for Distance Across Beams in Inches.
10 for Approximate Frame Width in Feet.
Sj for Stump Jump Model)
What is a Yeoman's Plow?
Does this fit with the way the world works?
1,000 Years to build ONE INCH of Soil.
8 inches of topsoil from a plow they say?

They better show me the data, Waldorf!
Have the claims been verified by someone else?
Is the claimant providing positive evidence?
Is the claimant playing by the rules of science?
Thousands of Soil Samples

Forage Samples
Keyline plowing didn’t change soil or forage quality on these four farms over the 2 ½ years we were monitoring pastures.
$280/acre treatment = 522,720 more worms per acre
Soil Balancing

Sometimes Scientists Get the Wrong Answer
Calcium to Magnesium ratio should be 5:4
Never mind. Research shows that as long as Calcium is adequate ratios don’t make a difference.
Have the claims been verified by someone else?
Has anyone tried to disprove the claim?
Does this fit with the way the world works?
Where does the preponderance of evidence point?
But I believe my soil balancing is working!

Seems to be due to other practices like compost & cover crops
Farmers constantly experiment. We try new products, new methods, new management styles, all within the domain of an ever-changing mother nature.

Mas Masumoto
Epitaph for a Peach:
Four seasons on my family farm
http://tinyurl.com/OnFarmResearch
1. What do you want to know?
2. What practices will you test?
3. Where will you do the test?
4. What will you measure and how?
5. How will you analyze the data?
Sample Paired Designed for Farm with Permanent Paddocks

(Notice the treatments within the experimental units are randomized, not just alternated)

(Paddock)

(Control Experimental Unit)

(Treated Experimental Unit)

(Each Paddock is one replicate)

(Each Paddock contains one pair of treatments)

(Treated)

(Control)

Flags or fenceposts are useful to mark where one treatment ends and the next one begins.

Be sure to record where you applied the treatment, and what side of the paddock is the control! The best way is to make a detailed map.
Keep good records.