

A Must Read for HortIdeas Editors

The article *A must read for permaculturists* in **HORTIDEAS**, March 2012, 29(3) presents a distorted, and in places clearly incorrect view of permaculture. While the article begins by qualifying what amounts to an attack by saying that it pertains to only *some* permaculturists, the overall impression it gives is that the unfavorable characterization pertains to the permaculture mainstream (whatever that is.) As a longtime reader, supporter, and contributor to *HortIdeas*, I am miffed.

I dislike self-advertising, but it seems necessary before proceeding to substantiate that I speak with a solid authority about what permaculture really is. After attending a permaculture design course led by Bill Mollison in 1981, I immediately began teaching short, introductory programs. In 1984, at Mollison's insistence, I began teaching the full Permaculture Design Course with a five-week program in Otates, Mexico. Meanwhile, I was awarded 5 advanced diplomas (teaching, media, community service, design and design implementation) from the Permaculture Institute in Australia. I was also selected for the first round of the Institute's Community Service Awards. I've published a sporadic permaculture journal since 1983, taught permaculture around the world, and for the past 15 years have taught an annual 6-month online course. Two of my main contributions to the development of permaculture have been development (with help from students) of a statement of core principles of permaculture design which are a free download from our website, <http://www.barkingfrogspermaculture.org/livinglovingly.pdf> and ongoing work on principles of transformation, an attempt to present in lay language the patterns by which constructive changes take place (used in my course but not ready for publication).

The first implicit error in the *HortIdeas* article is that permaculture is concerned mainly with food production, and especially perennial crops. Such a characterization is like equating a stomach with the whole person, in the first case, and a total, if not uncommon, misconception in the second. We advocate the best combination of practices considering *the specifics of site and residents*. In some permaculture designs, such as in urban settings, food production may be limited to window boxes, or small plots in remote community gardens where plantings of anything but annual crops by individuals would be unwise.

Permaculture design addresses human habitation, site by site, with a whole systems approach. The phrase itself, 'permaculture design,' is a deliberate redundancy that underscores that permaculture is always design, not gardening, not tree crops, not anything other than design. The goal of permaculture design, inspired by a response to widespread environmental destruction, is to serve a three part ethical platform: care of people, care of Earth, give away surplus. (We have additional ethical injunctions for people practicing permaculture for hire.) Unlike many approaches to 'development' or 'environmentalism,' we do not prioritize between Earth and people. People must have what they need for themselves and their families before they can be asked to invest in ecological restitution. If we ignore the environment, we ignore the resource base for enabling the many people on the planet with inadequate water, food, shelter, etc. to improve their lot. The injunction to give away surplus is often misunderstood, and was presented as optional when I took the course. The underlying intent of our ethics is to take **responsibility** for the effects of our lives to people, the ecosystems and other cyclical phenomena of the planet, and the distribution of resources. One can be irresponsible in giving away surplus resources, for example, paying no heed as to the effects,

either immediate and/or long term, or to the efficiency with which the resource is used.

We design human habitats: homes, homesteads, urban settings, etc., to enable a *transition toward sustainability*. We try to match people's needs and goals with what the environment around them can be induced to supply. (I have on the verge of publication 20 pages of questions to ask residents in an *initial* survey.) We do not consider food separate from water (an even more crucial resource), shelter, economic activity, community, etc. Some of us such as myself consider aesthetics to be part of the things our designs should supply. Other permaculturists separate aesthetics from function. It is an ongoing discussion that I predict will not be resolved.

A lot of people call themselves permaculturists who have little understanding of the actual nature and methodology of permaculture. This is not remarkable. A lot of people subscribe to one religion or another each founded first and foremost, on kindness and gentleness, and then commit mayhem in the name of that religion. For that matter, a lot of people call themselves scientists and proceed to address topics with a closed mind and no a spirit of inquiry and self-discipline. Yes, there are people *calling themselves* permaculturists who make extravagant and distorted claims ... as do a lot of people in the field of horticulture. Yet you take a constructive approach to horticulture, one that has kept me as a reader of your publication for decades, but in your permaculture article focus on irresponsible actions and claims, saying that they are *some* permaculturists, but exhibiting no awareness that every point you make in your article is actually one we make in teaching permaculture.

For example, I do advocate that my students seek to learn from nature. Is this not what science does? If some wild-looking German claims that gravity bends light, scientists in relevant fields look for bent light passing massive objects. They look to nature.

What I urge my students to do is to seek to understand the *principles* that underlie what they observe. In much of the vegetated portion of the planet, plants co-exist in a variety of species. But in some places we can observe a monoculture, or a situation so nearly one that we wonder: how this can be? How useful it would be to understand *why* these conditions differ. I can make a few guesses in some cases, I read publications such as yours in case I find enlightenment, and I proceed with caution, especially in teaching.

I think your confusion stems from two facts. First, so far as anyone can now determine, the initial naming of permaculture was a contraction of permanent and agriculture, a common term in somewhat earlier efforts at reform of food systems. For example, there is *Tree Crops: A Permanent Agriculture*, a book with which I am sure you are familiar. It quickly became apparent to the early permaculturists, we are told, that food systems cannot be considered separate from the totality of our interactions with the environment. So security, water, shelter, etc., were included. Secondly, most people come to permaculture from a background in food production, including myself. We have been slow to attract people in other fields, such as engineering, but we are progressing. So now it is said that the word is a contraction of *permanent* and *culture*, slightly better. It is a poor word for the job, in my opinion, but that does not mean that its concepts and precepts are impoverished.

Your report on “Designing Cropping Systems from Nature” by Eric

Malézieux and your analyses of the suitability of perennials as a mainstay of temperate food production are exceedingly in line with what I tell my students. We make no insistence on perennial food plants, and especially not on herbaceous perennial food plants for temperate regions. There is a great deal of emphasis on *informed* polyculture and animal interactions. For example, there are (unmeasured, to my knowledge) benefits in running poultry in asparagus after the fronds have matured, or alternately, interplanting tomatoes. If you can get two or more yields from the same area, you do not need the National Academy of Sciences to tell you that your *total* yields are higher. There will be exceptions, and we point these out. There are always exceptions. Nature is hardly constrained by consistency. Above all, I insist that my students do not recommend in their designs for others any measure that they do not know will be useful and in no way harmful. Six months is not enough as full training, but it seems to suffice as a sort of permaculture 101.

People tend to use words casually nowadays; maybe they always did. So you can be sure that I jump on anyone who calls permaculture a science particularly any actually associated with permaculture. I recently had a few exchanges with other permaculturists on just that point. Design is closer to art than science. You can also be sure that I carefully scrutinize student reports to drive home the requirement to be accurate in all details, to make no unsubstantiated claims, *and to be utterly practical*. While the goal is to invest less work and less money in achieving a good life that is increasingly responsible to the planet and to other people, we make no claims that there will be no work. (BTW, I have the same experience with blackberries that you report. In my view, if you spread the labor of harvesting over the same time that you would take to grow an annual crop, the blackberries are a good deal. I've not done this; it doesn't matter. Blackberries are too tasty

to pass up. We find peaches low-input, as we can grow more than we need with little work. We would have to work much harder if we wanted to squeeze every peach possible from each tree. We have no reason to do that. We just plant more peach trees if we want more. It is easier and we have space. People who have less space have to work harder per peach.)

When we look at food systems in permaculture, as in every aspect of the design, we look at alternatives. We try to match types of crops and methods of gardening, though we leave large latitude in the design to the residents' preferences. We have no book for perennials over annuals over tree crops. Everything has a place in one design or another – the goal is to effect an increasingly productive marriage between the 'client' and the site. Personally, I feel it is far better to train people to design their own home sites than to try to create yet another army of experts. This takes less time, and hopefully has greater long-term benefits, as people adapt to changes with an understanding of their site design.

My course, as an example of permaculture design training, includes 21 modules plus added time reviewing and discussing student designs. Of those 21 modules, 3 involve food systems, one strictly on methods of managing soil fertility, one on miscellaneous issues relating to food production and use (storage, pest control, domestic animals, etc,) and one on cultivated systems which is less structured, allowing for discussion specific to the students *du jour*. The fixed material in that section has heavy stress on bamboo, especially for temperate conditions, but we can also discuss agroforestry, forest gardens, mixed production schemes in individual student designs, and any other integration of various elements into a larger cultivated system. As always in permaculture, and this may be part of your misconception, yields are not strictly measured as food. As you yourself have reported,

for example, trees near a home reduce energy demand for space comfort, especially cooling, for example. These trees can be food producing or forage producing or may be managed for fuel, or all of the above, such as the mulberry trees that cool my Florida chicken coop. They also provide seasonal forage for the chickens and food for us, encourage songbirds, which are a quality-of-life *yield* for me, and provide a small but significant component of our winter heating and cooking fuel through pruning. They also have a negative yield, attracting squirrels that can completely devour our peach crop, immediately following mulberries, in some years. (Nesting hawks nearby, which would be discouraged by most chicken owners, are the only effective control we've 'found'). The mulberries are adjacent to the outdoor chicken water supply and benefit when dirty water is discarded. Weeds that would compete for soil nutrients and water are eliminated by chickens, which fertilize lightly but regularly with dung. This is an example of *integration* in permaculture design that I've given short shrift here.

I am at a loss to understand how anything you've said in this report that is based on facts, and not your apparently uninformed opinions about permaculture, is at odds with what I teach. Indeed, even before I read as far as the anti-permaculture article I dashed off an assignment to my current class to read the article (in the same issue) about *Designing Windbreaks to Favor Pollinators*, which, though incomplete, brings together a number of important design considerations. I have a standard reading in my course about CSA's, another topic in the same issue. We are strong promoters of John Jeavons' techniques, whose latest edition on intensive bed gardening you reviewed in this issue. And you've found most my contributions to *HortIdeas* worth publishing in the past.

Your beef is with irresponsible people, or people who are sometimes irresponsible, which it seems to me cuts across all

fields. To characterize permaculture in this manner might also be less responsible than is your wont. It certainly makes my work harder and less effective.

You seem in particularly in love with science, but well-meaning scientists can be as foolish, and in effect as irresponsible, as anyone. For example, a Mexican research and demonstration center called INEREB, located in Jalapa until defunded, decided to test chinampas for 'transfer of technology'. They faithfully noted every detail of chinampa construction, cropping, crop species and varieties, and then set about to transfer the whole assembly, exactly, in the lowlands of the Yucatan. They made no adjustments for climatic differences between a valley in an arid climate high in the interior mountains with steamy tropical lowlands. So the project failed and the scientists pronounced to the world that technology transfer of chinampas does not work. If they had instead sought principles, why were chinampas so successful in the valley of Mexico, instead of details, they could have designed some experimental models that might succeed, particularly if that design involved consultation with the people who were expected to adopt the technology. This extraordinary failure to account for differences in ecology and culture, and to understand the technology that they were trying to move, is astonishing, and may have, in net result, deprived people areas of low marshy conditions with places and practices to produce food that is much needed. We do not pillory science, or even INEREB, which did a great deal of good in the final accounting, because of this one failure of imagination and insight.

People in many fields make irresponsible statements and claims. I am presently receiving regular medical treatment. Yet I do not have to look far to encounter irresponsible medical claims. Permaculture is no different. We are not a science. A permaculturist can perform an experiment and a physicist can grow a tomato or catch

rainwater. We look at the results of research, such as are often reported in *HortIdeas*, and apply them with relevance to the specifics of people and place. We do not define 'yield' or 'efficiency' narrowly, but specific to the values and needs of real individuals. Birdsong, butterflies, lizards, frog calls, and food are all yields for me. We are two people living on 16 acres. We do not have to count our carrots, and so yield per square foot means little to us. Efficiency of labor is important; we are old and medically challenged. But even a measurement of yield as a function of labor is a fuzzy concept. Some tasks require exertion close to my limits. Some, such as splitting wood, I can enjoy if I take my time. Is not the relevant yield getting the job done enjoyably (and still breathing)? If I do that well, I've been 100 percent efficient. A family in Africa seeking subsistence on 1/10 the land we occupy in Florida will have very different sorts of yield and efficiency needs. I have a seedling fruit tree that produces some of the best tasting fruit I've ever encountered. Last year, it bore maybe 10 fruit, all somewhat small. Who cares? Permaculture is as much about enjoying life as anything. Our designs for that family in Africa are going to be vastly different from our designs for two aging people, one retired and one disabled, who only need manage a fraction of their land base. (The balance is not wasted – it supports wildlife and plant species and part we've planted to baldcypress because our house was made of baldcypress and we have a debt there.)

Again, to learn from nature is not to emulate nature inappropriately. Nature has rules and if we infer the rules we can test our hoped-for insights on a small, appropriate scale and, if we got it right, pass them on as design recommendations where appropriate. That is not all permaculture designs do, but that is as central as anything else.

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For a quick overview of what permaculture really is, go to:
<http://www.barkingfrogspermaculture.org/whatispermaculture.pdf>