

## Going Beyond Pesticides

*Should We Be Taking Back the Term “Integrated Pest Management”?*



**Terry Shistar, Ph.D.**

**W**e are constantly facing the problem that as we try to institute alternatives to “spray and pray” pest management systems in our communities, we find our preferred term “integrated pest management” perverted to mean “more pesticides.” The harder we try to take back the term to mean least toxic pest management, the more valuable it becomes as a label for chemical-intensive pest control. I would like to ask whether we really want it.

At the 1998 Beyond Pesticides/NCAMP National Pesticide Forum, Ken Ogwaro, president of Eco-Care International in Bakersfield, CA, said that if we hope to go “beyond pesticides,” then we need to go “beyond pests.” I think he is absolutely right—as long as our efforts focus on new or improved programs based on the “pest” concept, we will be in the position of generals calling for a “limited war.”

### **The Pest Management Wars**

The whole vocabulary of pest management has striking parallels to that of warfare. Pests are enemies; beneficials are allies; crops, etc. are the resources at stake in the war; there are neutral parties as well. We use chemical warfare (pesticides) and biological warfare (bacteria, viruses, and genetically engineered organisms). Some enemies are deemed so bad that we need to resort to genocide.

Was the world at war before our culture imposed the notion of “pest” on it? Many animals remove parasites from themselves and family members, but they don’t try to make

the world a lethal place for fleas and ticks. Some ants may bite animals that threaten their host plants and even remove competing plants around them, but they don’t kill all animals that might browse on their trees or plants that might compete with them.

Many pre-Columbian native American tribes practiced an agriculture that recognized symbiotic relationships among food crops such as corn, beans, and squash. They also harvested wild plants. But they didn’t kill everything that wasn’t food. They didn’t even harvest all the food that they could, recognizing that native plants know the best places to grow and need to reproduce themselves.

Our culture has the arrogance to think that we can define a “good” or “bad” plant or animal based on its (known) usefulness to us. As we take over virtually all of the landscape (with a nominal exception of areas we’ve decided—for now—to enjoy “wild”), we eventually put virtually all organisms in a position where we think we need to make a decision—friend or foe. If an organism is not at least a potential resource we can exploit or an ally in our war on “pests,” then it is judged to be at best

in the way of our development.

This warfare with the rest of the world is occurring within the context of intraspecies, intracultural competition for resources. Not only is our culture interested in protecting our resources from other species, it is also interested in doing so in a way that “locks up” those resources so that anyone who wants

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them must pay. Earlier inhabitants of my part of Kansas had bountiful selections of native foods—both plants and animals. The prairies weren't just grass and buffalo. They were prairie turnip, hog peanut, Jerusalem artichoke, and many other edible plants, as well as the animals who shared the bounty with the human inhabitants of the plains. Current inhabitants have replaced the native plants with brome and fescue monocultures for grazing and monocultures of corn, wheat, sorghum, and soybeans—much of which will also go to feed domesticated livestock. You can't just go out and find food any more. You have to work for the system and pay cash for your food.

Generals wage limited wars. They bomb only military targets. When that doesn't work, they bomb power stations. When that doesn't work, they bomb civilians who are "assisting the military." When that doesn't work, they send in ground troops. Eventually, there is pressure to use the really big guns.

Similarly our pest managers may start out with a willingness to use only physical exclusion, sanitation, and other "safe" non-chemical methods of pest management. But as long as we feel a need to "control" or "manage" those pests, the pest managers are going to feel like the general who knows he could win if he was only allowed to drop the big one. Furthermore, as the world becomes further sorted into friends and enemies, with fewer stable ecosystems, we acquire more pests who must be "controlled."

### **Going Beyond Pesticides**

We create pests through our system of agriculture and our ignorance and fear of other living things. How can we go "beyond pesticides" if we continue to see most of the world as "pests"? I don't think we can. Going "beyond pesticides" will require large changes in our agricultural system. It will require each of us to form personal relationships with other organisms.

Ants are not bad. They are essential to many biological communities and ecosystems. However, you may be unhappy about ants in your honey jar. If so, you have a personal problem with those particular ants. You don't need to kill ants because ants are bad; you need to find a way to keep a particular colony out of your honey jar.

It is commonplace to call a weed "a plant in the wrong place." What is the proper place of a dandelion? I don't know. I know that dandelions are indicators of compacted soil—that they will grow there, and by growing there loosen the soil. I know that dandelion flowers provide valuable early spring nectar for insects and beautiful yellow patterns in my lawn. I know that dandelion seed heads are great fun for small

children and attract goldfinches to provide more yellow to my lawn. I know that dandelion leaves are valuable as salad greens and a potherb. I know that the roots are used as a coffee substitute and are a valuable medicine for detoxifying the body after chemical exposures. But I can't tell you the proper place for a dandelion. The dandelion itself works that out with its neighbors.

Thus, our educational task is a huge one. It goes in the face of all the lies that our culture tells us—that we are here to rule the world, that the world belongs to us, and that other species that get in our way are just pests. In short, we need to make peace with the world. I have a feeling that we won't learn to make peace among ourselves until we learn how to make peace with the other inhabitants of the world.

Organic agriculture provides a valuable model, but not the organic agriculture of "acceptable inputs." The organic agriculture that should be our model is the old fashioned organic agriculture of small-scale diversified farms that were integrated into the local ecosystem. These organic farmers don't focus on botanical or bacteriological pesticides to "control" pests. They build the soil to grow healthy plants, grow within the limits of the local ecology, and search for a diversified mixture that increases ecological and economic stability. They even incorporate wild plants as valued members of the community.

In the context of homes and workplaces, this means asking, "How can I fit into this ecosystem?" rather than "How can I mold this place to my desires?" If you need a lawn, you shouldn't live in Phoenix. If you can't stand insects, then Florida isn't for you.

So my answer to the question in the title of this piece is this. Don't call it "integrated pest management" anymore. The term has been co-opted, anyway. Call it "dealing with people's problems" or something similar, because the problem is always a particular person's relationship to other members of the ecological community.

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