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Proper Pruning: Why Removing Diseased Branches May Not Be A Good Gardening Practice

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We've been taught that "proper pruning" involves removing the 3 D?s from our trees: Dead, Damaged and Diseased wood, so our pruning chores tend to revolve around that.

I can definitely see how pruning dead wood that could be a hazard - such as a big branch in a tree that might fall on your house - is a good idea. If that tree is in a place where it doesn?t pose a hazard, pruning out the dead wood is not necessary, but even then it's okay to do if it's unsightly.

But it gets a little hazy when we look at damaged and diseased wood...

Proper Pruning For Damaged Branches

If 2 branches are seriously rubbing together, it makes sense to prune one of them out in order to prevent damage to both of them as they grow. Water sprouts and suckers can be pruned out, too, since they often develop into structurally unsafe branches.

Other damaged branches that still have green leaves, however, are valuable to the plant. The plant may still be photosynthesizing with these leaves and if it is a big branch or series of branches, it could be a big reduction in the plant?s photosynthesizing capacity to prune all of that out.

Or the plant may have abandoned photosynthesis, in which case it will pull many of the nutrients from those leaves back into another part of the plant where they can be used. If we prune too early, even if we?re using proper pruning techniques, we are not only creating an open wound, but we are removing many nutrients that still could be useful to the plant.

This is the case even with small perennials. They may look unsightly when they are dying back, but the longer you leave them, the more nutrients the plant gets to bring back into itself for use in the future.

Proper Pruning For Diseased And Insect-Infested Branches

Just like with damaged branches, even when covered in disease or insects, the leaves are often still photosynthesizing and we definitely don?t want to remove the photosynthesizing capacity of a plant while it?s being eaten by a pest. It needs all of the nutrients it can get.

Conventional thinking is that we can remove the pest by pruning out the infected branches, but this is impossible when you think about it. Billions and billions of the disease-causing organism or thousands of the insects live all over the garden. Removing a few branches does nothing to get rid of them.

But the most important shift in thinking we need to have is realizing the pest is not the problem. The problem is that our plant is unhealthy. If it were healthier, it would easily cope with the pest. If it were optimally healthy, it wouldn?t have any pests. Period. Here's why...

Why Do Diseases (And Insects) Eat Your Plants?

Why do "bad" bacteria, fungi and other protists (I will refer to all of these as diseases from now on) and insects eat plants? It all comes down to the same reason. We tend to think insects and diseases are making our plants unhealthy, but actually, they are there because our plants are unhealthy. This is one of the biggest shifts we need to make in our thinking when moving to organic gardening practices.

While animals prefer healthy plants, insects and diseases prefer the opposite. They choose plants that have either a deficiency of excess - a nutritional imbalance - of one or more nutrients. They literally do not possess the enzymes necessary to digest "healthy" plants.

In fact, they don?t even see healthy plants as a food source at all! Sounds crazy, right?

Well I'm going to explain it, because I think this is one of the most important and exciting concepts to understand. I won't go into too much detail, but here's the gist of it.

How Insects and Diseases Find Our Plants

Animals (like us) see in the visual light spectrum. Insects and diseases do a lot of their ?seeing? in the infrared light spectrum. Insects, for example, do this by using their antennae and tuning into electromagnetic frequencies.

So in your organic garden, your sick plants - those that have a nutritional imbalance - emit a frequency in the infrared light spectrum that a pest "sees" and recognizes it as food.

Healthy plants simply do not emit these frequencies. So insects and diseases do not see healthy plants as a food source.

If our plants are sick and being eaten by pests, pruning out the pest does not give the plant the nutrients it needs to get healthy.

Proper Pruning to Increase Airflow and Light Penetration?

Plants have inhabited the earth for a few hundred million years. They?ve been here perhaps 1000 times longer than we have and in that time, they learned how to grow. Each species learned how big it should grow and exactly how it should arrange its branches.

The idea that we can improve upon that with proper pruning is kind of funny when you think about it, right? We are taught to remove branches, especially in trees, to increase air circulation and light penetration, but the plant knows how much air and light it needs.

All we?re doing is creating more wounds exposed to both the elements and predators, and decreased photosynthesizing capability. What about that branch that seems to go the wrong direction through the tree? The tree must have messed up right? I doubt it. The tree grew the branch that way on purpose, no doubt, in order to find the perfect balance.

We Prune for Weird Reasons

Much of the pruning done in residential gardens is for our aesthetic pleasure. We prune to make tidy shapes that please us. We prune shrubs to keep them nice and small to fit the place we planted them, when simply putting the right plant there in the first place would have been better.

And when it comes to pest-infested leaves and branches, we need to think twice before pruning them out. The plant may still need the photosynthesizing capability and nutrients from those leaves. You won?t remove the pest - you?ll just give it better access.

Organic gardening is about improving the health of the plant to the point where pests have no effect on the plant at all. That's what I teach at http://www.smilinggardener.com/organic-home-gardening [1]

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