

# The Diagnostic Process

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## The Call:

Answering questions by telephone is not always easy. Most questions will be common questions and the answers will come quickly. Be careful that you don't assume the question is just one of the common, simple ones. Listen carefully to the person calling, hear what they say and listen for what they don't say. You can often determine what they don't know but need to know. The telephone can be an excellent medium through which to teach gardening.

Read the phone call and answer log from the previous week or two to get an idea of what questions to expect. If you aren't sure about the answers written there, check with the library, your Master Gardener notes, or the Extension Service. Be sure to identify yourself as a Master Gardener at the hot line. Feel free to call the county Extension office when you need help with a question. If no one can help you, leave your name and phone number and ask for someone to call you back. Leave your home number, too, in case we can't get back to you before your hot line stint is over.

As Master Gardeners, you also have direct access to NMSU Extension specialists. **PLEASE DON'T GIVE THE SPECIALISTS' PHONE NUMBERS TO THE PUBLIC.** They are frequently on the road and may not be immediately available; when they are, they can be a great help. The specialists are available to help in your serving as a Master Gardener. If you give their number to the public, they will be less able to respond to you. The public often prefers to "go to the top" and will always call the specialists instead of you. Identify yourself as a Master Gardener when you call the specialists' office.

Some people will want you to suggest "the best" nursery, tree trimmer, pest control company, or some other business. The Extension Service does not

recommend one business over another. As part of the Extension Service, Master Gardeners should not either. You can help them find certain businesses in the Yellow Pages. You may suggest a list of potential companies. Do not favor one company over the other. This is for your protection and to protect the Extension Service. Making recommendations can be risky. A company you like might be considered horrible by someone else. A company that is never recommended can claim discrimination. Remember, we provide scientifically based research information, but we do not make decisions for people. They must take the information and make their own informed decision. Then if they are unhappy, they can't blame you.

Be polite to people who call, even if they aren't polite to you. Some people may seem rude when they don't intend to be. It may just be their way of communicating. However, some people are just plain rude, some trying to test you or to anger you. Be professional, firm and polite. You don't have to tolerate abuse, in particular, foul language. When confronted with this, hang up and call the Extension office. There is a good chance that the abusive caller will call the Extension office and the Extension staff will be better able to deal with the caller and support you if they know what has transpired.

## Don't Get Angry

You are in control of the information the caller wants. In all cases, give the correct information to the best of your ability. Whenever possible, use the information taught in the Master Gardener classes. Some people call the hot line just because they are lonely and want to talk. These are often enjoyable people. After visiting for a reasonable time, explain that you have other calls and must answer them. Be firm and allow the caller to ask any last question, but then move on to other calls.

### The Diagnosis:

It helps to know which questions to ask when diagnosing a problem. The following are suggested questions to ask:

1. **Determine if the caller is calling about a commercial landscape or orchard they manage for money.** If so, refer them to their county Extension office. Master Gardeners are not required to put themselves at risk by answering questions that could affect someone's livelihood.
2. **Where is the problem located geographically?** New Mexico counties have very diverse microclimates and soils. It helps to know where the problem occurred.
3. **What is the name of the plant?** Diagnosing problems often depends on knowing which plant has the problem. Whenever possible a scientific name should be used.
4. **What are the common pests that affect this plant?** (Key plants have key pests. Some plants have certain commonly associated insects or diseases.)
5. **How long has the plant been established on this site?** The establishment phase is a critical time. If it is a new plant, look for different problems than for a plant that has been there for a longer time. Many trees (especially pines) die at or near 10 years after planting due to improper planting—the chicken-wire and burlap were left on the root ball at planting. Carolina poplars (a common form of hybrid cottonwood) live about 30 years in New Mexico.
6. **Does the plant have specific site requirements or intolerance?** Rhododendrons and blueberries will always have problems in New Mexico, because they need acid soils. Birch will grow and prosper for a while, but don't do well in our hot, dry climate. Most maples don't do well in New Mexico.
7. **What's happening where the plant stem meets the soil?** Look for twine tied around the base of the tree or a swelling indicating that the tree has tried to overgrow the twine—it will girdle the tree (or a branch). Where a tree enters the soil, the trunk should flair. Branches, especially from pine trees, should not come from below or ground level (especially in pines). These are signs of planting too deeply, which can be a death sentence for the trees.
8. **Has there been recent construction, paving, a grade change or other disturbance on the site?** Look for patched sidewalks, indicating recent trenching or ditching. Look for signs of a new irrigation system that was installed by cutting tree roots when trenching. Has soil been backfilled over the root system of an existing tree changing water and aeration at the roots? Has nearby paving been added or recently sealed. Changing the movement of water and air to the roots can be disastrous. Sealing operations in parking lots and streets release fumes that can burn leaves (the plant will resume growth normally later in the season, or next year).
9. **Is there really any soil under the root ball?** Knowing the soil characteristics of the area, or asking about the last time a tree was planted often will provide this information. Inadequate soil depth means there is inadequate water reserves in the soil.
10. **Were herbicides applied recently?** Weed-and-feed damage is common. Look for misshapen leaves with thick veins and lighter coloration. Other herbicides, especially pramitol (permitol, triox) can suddenly kill a tree or a side, as the roots reach the treated area and translocate the herbicide to the plant. Herbicides applied on a hot day may volatilize and damage leaves. There are many ways that herbicides can make their presence known and many different symptoms. Used properly, postemergence herbicides, don't cause symptoms in established plantings.
11. **Is the site extremely wet for extended periods during the year?** If holes are dug part way through caliche and then the plants are planted in soil used to fill the hole, the "bowl" may water log and the roots will rot. Look for leaks in pipes indicated by extra green spots in the lawn, especially in the early growing season.
12. **Have there been unusual weather conditions recently?** Lightning strikes trees frequently. Sometimes splitting bark makes the source of the problem obvious. In other cases, no damage is apparent, but lightning has damaged trees

underground or in other, less visible ways. Hail damage is common. Look for lesions on the upper surface of branches and twigs, shredded leaves, or other signs.

13. **Has there been any other unusual activity that has affected plant health? A fertilizer spill, or burning roots?** Has a change been made in management practices, such as a change to xeriscape or another water conservation method? Has the neighbor changed to a low-water consuming landscape?

Ask about these things, but be tactful. Be especially tactful if you ask about things that they might have done wrong. They will resent it, if they think you are accusing them or consider them stupid. If they are on the defensive, you may not get answers as freely or as accurately.

You may have noticed that many of these questions require an on-site visit. This is sometimes necessary, but not always. If you listen carefully, the caller may end up revealing something that they didn't want to admit. Perhaps they were hoping that you would discover some other cause.

If a home visit is needed, contact the home visit coordinator with the nature of the problem; the caller's name, phone number and address; and a fairly specific description of the area where he/she lives. It is usually better not to give out Master Gardener phone numbers to the caller.

If is a good idea to get the first name and phone number of a caller in case you discover new information later and wish to call them back and correct or add to your answer.

