

Evaluating Plant Health Before Planting

Plants have been delivered to your restoration site and it's your job to inspect them before acceptance—what do you look for to judge the plants' health? If you find problems, are they severe or numerous enough to reject the plants? If you aren't sure, contact your local Cooperative Extension office for help with diagnosis.

You'll have to get down and dirty to properly inspect plants

Looking over a block of plants is only the first step. As a whole, do the plants look healthy to you? Do they look wilted or fat and happy, despite their autumn die-back? Next, get in close and start poking and prying, peering and prodding.

Examine the leaves, stems, and trunks

Starting at the top of the plant, look at the leaves or needles and work your way down. If the leaves of deciduous species look bad in the fall, don't worry. It's normal for deciduous leaves to get opportunistic infections, such as leaf spots, as they wither and die in autumn. These same infections **are** a concern in the spring or mid-summer or if they occur on evergreen species. Turn the leaves over and examine them, preferably with a magnifying glass or hand lens, for insects. A few aphids are no big deal but an infestation may be a concern.

Now examine the stems and the main trunk. Broken branches can be cut off cleanly but broken trunks on a single stem tree may be cause for rejection, especially on conifers. Look for wounds, soft spots or depressions that could indicate canker or mechanical damage. Plants have the ability to wall off injuries, but until they do, damaged bark can invite infection and should be avoided.

Examine the roots

Open a bundle of bareroot plants and look at the roots. Are they firm and moist, with pale growing tips? Dried-up, mushy, or totally brown roots are dead. Pull a random selection of containerized plants out of their pots and look at the roots. Are they rootbound, with roots that circle around the bottom of the pot? These roots **must** be cut and straightened before planting. Plants that pull out of the pot leaving a pile of soil behind have been sold before they are ready. Roots that are brown, dried, slimy, or soft are not healthy. Some brown roots are normal for a container plant, but there must also be live, growing roots. This step in inspection is critical: healthy roots are vital to a plant's growth.