

The success of a planting project depends on the health and structure of the soil. If you have less than ideal soil conditions, what treatment best fits your needs?

Fertilizers

Most native transplants are best not fertilized. Weeds tend to gain more than natives from fertilizer. Also, fertilized plants put on vigorous top growth in the spring that is susceptible to drought stress and disease. Underfertilized plants will have more conservative top growth and more root growth (roots extend further to find nutrients)—exactly what you want for low maintenance! We suggest you have your soil tested before adding fertilizers. Native Douglas-fir forest soils in our area typically have 0.4–0.6 PPM of nitrogen. If adding nutrients is really important, use slow-release tablets or pellets or, as we recommend, an organic mulch (see below).

Soil amendments

We have found that amendments are difficult and expensive to apply effectively. To significantly improve the soil, several inches of material must be added and tilled in over the entire planting site, not just the planting hole. This improves the soil in a way that encourages roots to spread out. Most of the benefits of soil amendment occur in the upper 6" of the soil. Frequently, spreading a top dressing may be as effective as amending the soil (see below).

This amendment material must be completely composted; otherwise, the material will shrink as it breaks down (imagine roots exposed) and nitrogen will be tied up (unavailable to the plants you intended to feed). The amendment also must be well mixed into the soil since lumps can create serious drainage problems. Note: make sure that you use compost certified free of herbicides and other harmful chemicals.

Mulches/Top dressing

All mulches help retain soil moisture and improve soil conditions. You can select your mulch material to enhance specific functions: to improve soil structure and nutrients, choose an organic mulch; for weed suppression, choose a thick layer of bark, wood chips or a manufactured weed barrier; for reduced surface erosion, choose a thinner layer of coarse material (straw or wood product) or a manufactured erosion control fabric.

As with amendments, mulch is best applied to the whole planting site, not individual plants. At the least, apply mulch 2' beyond planted root balls. If soil is compacted, till the site first and then spread mulch on top—this treatment works as well as tilling in an amendment, but requires much less material. Mulches are our favorite way to go.