



How to Recover Fire Damaged Grapevines

Fire-damaged crops must be tended to carefully and consistently, or you risk losing them altogether. This is especially true for very sensitive crops like grapevines. The recovery process for a fire-damaged grapevine should begin as soon as possible after the damage has occurred. The extent of the injuries to the grapevine may not fully manifest for a season, and full recovery may take much longer. So keep tending practices regular, regardless of any positive or negative signs you might see.

Things you'll need and instructions:

- Pruning shears and knife
- Vacuum
- Soil pH testing kit
- Brooms and shovels
- Gloves, safety goggles, respiratory protection

- 1.** Inspect the vineyard to determine the extent of damage. Look at trellis support systems; remember that even if intact, exposure to fire can impact the strength of metal wire. Inspect irrigation systems for fire damage. Remove any burnt or heat damaged plastic tubing and trickle irrigation heads and dispose of them properly.
- 2.** Trim away any scorched vines, leaves and branches. Check underneath the layer of burnt bark to see if the core of the vine is still viable before cutting. Remember that a fresh cut in a live vine will expose white interior tissues inside very thin layers of shreddy bark with very little to no “green” tissue. For “grafted” vines the damaged vine must not be cut below the graft union line (typically about 2 inches above the soil line- but quite variable) or there will be no chance for new shoots of the grafted variety to grow. “Own-rooted” vines can be cut down to a crown of short stubs and will likely re-sprout if fire temperatures were not excessive and proper soil pH is maintained after fire exposure.
- 3.** Remove any burnt leaves, vines and branches from the soil. Search for burnt patches of soil and remove them. If necessary, vacuum the entire burnt area of the vineyard before watering so as not to pH shock crops or leech potentially harmful fire byproducts into the soil. When free of ash and burnt debris, water the grapevine more often than you usually do.
- 4.** Turn and fertilize the soil where removed portions of the grapevine were previously growing. Use a soil pH testing kit to determine if there are any issues with the chemical makeup of your soil. Take the results to a horticulturalist to determine the best fertilizer and soil to use for your damaged grapevine. Water the areas of damaged soil regularly as if the grapevine were still growing there.
- 5.** Fertilize the land around the burnt crops and continue the extra watering sessions for the entire grapevine for two to three weeks following the fire. Protect the remaining grapevines as you normally would through the end of the season. Begin planting more grapevines in the new soil at the beginning of the subsequent growing season. Closely monitor their growth for any residual effects of the fire.

Visit grapes.msu.edu for additional information about growing grapevines.