

Gambel Oak Management When Using Chemicals

Gambel oak is a native western Colorado shrub that is found between 6,000 to 9,000 feet with other native trees, shrubs, forbs, and grasses.

Gambel oak rarely reproduces from acorns; most reproduction is vegetative with sprouts occurring from a deep, extensive root system. Most oaks grow in clumps or groves and the stems in each clump are growing from the same root system. You can usually tell one clump from another in the fall when the leaves start to turn, each clump will turn the same shade of yellow or red at the same time. They are similar to aspens in this way.

There are certain herbicides that can be used in Gambel oak management, such Glyphosate based products like RoundUp®. These chemicals are broad spectrum, non-selective herbicides that will kill most perennial and annual plants. The other effective chemical is Garlon, a systemic, foliar herbicide, which can help control woody plant species while leaving grasses and conifers unaffected. Both chemicals are normally sprayed or painted onto oak stumps after the stem has been removed. For the greatest effectiveness, the stumps must be treated before the wood dries, usually within **one hour of stem removal**. The purpose of this treatment is for the chemical to make its way into the root system and kill it to prevent the oak root system from re-sprouting. This reduces (but does not eliminate) future Gambel oak management requirements as prolific sprouting will follow any stem cutting.

As previously stated, the root systems of Gambel oak's are connected to the other stems in their clump, any management actions that you do to one stem will most likely affect other stems within the clump. Therefore, you must look to see if the stems you are removing and plan to treat with chemicals are connected to stems that you are not removing and plan to keep. In cases where you are only thinning out a clump but plan on keeping any stems within the clump, chemical treatment is NOT suggested. The potential for the chemical to be taken up by other stems within the clump is very high.

Chemical treatment is only suggested when whole clump removal is planned. The root system of the removed clump will stay in the soil for many years while it decomposes and continue to provide erosion control. In clumps where thinning is planned, not total stem removal, do not use any herbicides on the removed stems. Instead, you must plan for annual maintenance on the clump to remove the sprouts that will grow.

Management is similar for Serviceberry and Chokecherry.