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**VEGETATION MANAGEMENT  
GUIDELINE: Smooth Sumac (*Rhus  
glabra* L.)**

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Smooth sumac (*Rhus glabra* L.), a native shrub, is found on disturbed sites such as abandoned fields, railroad edges, fence-rows, and rights-of-way. It also occurs in prairies and glades. In presettlement times smooth sumac occurred in barrens, open woods, and prairie edges. Smooth sumac is known to shade and replace prairie plants and rare plant species. It is one of the primary woody invaders of hill prairies in much of Illinois, where its dense clones eliminate other native species. It is also unnaturally abundant in some glades.

This native but sometimes aggressive shrub occurs in clumps and spreads by seeds as well as rootstocks. It flowers from late May through mid-August. Seeds are formed by September. It sprouts easily and grows rapidly. The aboveground stems are relatively short-lived, but the roots persist and continually produce new stems.

When considering control of smooth sumac, managers first must decide what part of the

population to remove. In general, sumac should be left in ravines and draws within prairie communities. It should not be eliminated totally from communities where it probably occurred in presettlement times, but should be controlled where it has invaded or spread to the detriment of other native vegetation.

To control smooth sumac in natural areas, stems should be cut with an ax, lopper, or sharp blade in July or shortly after flowering. Sprouts then should be cut in August. Spot-treating cut stumps with Roundup (a formulation of glyphosate) will minimize resprouting. While the Roundup label recommends a 50–100% concentration of Roundup for stump treatment, a 10–20% concentration has proven effective. Roundup can be applied to cut stumps either by spraying with a low-pressure hand-held sprayer or by wiping the stump with a sponge applicator (similar to paint applicators). One must avoid contacting nontarget species with Roundup, since this herbicide is nonselective and will kill most photosynthetically active plants when applied in July or August. By law, herbicides may be applied on public properties only according to label directions and by licensed herbicide applicators or operators.

If sumac is intermingled with other native plants, Roundup should not be used, and the sumac should be cut twice — once in July and once in August. Cutting at the appropriate time is crucial for effective control; fall or winter cutting will have little effect. Double-cutting (once in July and once in August) may need to be repeated for several consecutive years in dense populations.

Where fire will carry through a stand, burning in August will often kill mature plants, but sprouts must then be cut. In glades and prairies, an occasional August burn may be sufficient. As with cutting, the timing of prescribed burns is crucial. Dormant season (late fall, winter) fires do not control sumac. Early spring fires can actually increase sprouting and encourage the spread of smooth sumac.

For maintenance control, individuals on the edge of an area that provide the source

of young plants invading high-quality prairie or glade communities should be cut and the stumps spot-treated with Roundup as described above. An occasional August fire should be sufficient to keep the sumac population in check. Midsummer (July or August) mowing or cutting of sumac can reduce its vigor.

On buffer and severely disturbed sites, foliar applications of Garlon 3A (a selective translocated herbicide that is a formulation of triclopyr) or 1–2% Roundup applied according to label instructions also are effective. If herbicides are used, great care should be taken to avoid contacting nontarget plants with herbicide. In addition, do not spray so heavily that herbicide drips off the target species. The chemical should be applied while backing away from the treated area to avoid walking through the wet herbicide. Large smooth sumac clones should not be allowed to develop next to naturally open communities. Grazing is not an effective control method on buffer areas, as it encourages sumac growth and spread.

## REFERENCES

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