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# Fire Breaks

## Preparing Land for Controlled Burns

BY BILL KLEIMAN, *Nachusa Grasslands Project Director*

We use controlled burns in all of our habitats: prairies, wetlands and woodlands. In our woodlands, the repeated use of fire favors sun-loving oaks and hickories over other trees—oaks in particular need abundant sunlight. Thanks to fire, acorns fall onto soils with more sunlight, better able to grow to be shrubs and then small trees, with some becoming behemoths that support a diverse set of animals. The fires tamp down the brush layer, which allows wildflowers to flourish. A diversity of plants supports a cornucopia of animals, from the little insects that make the world go, to the songbirds, turkeys, deer, and other wildlife that fill our hearts.

This is not 1822, so we need fire breaks to keep fires where we need them to be. We have tens of miles of fire breaks that we mow in autumn, and we burn some areas and not others. For example, we burn our best remnants every few years. Our stewardship lane system is also used for fire breaks, and we create fire breaks through open prairies.



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**Stump Removal.** Grinding stumps flush on the fire break keeps our equipment from breaking.



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**Brush Mulcher.** In the photo to the right there is no existing fire break, so we have to create one. The landscape is degraded and choked with non-native brush and trees, and therefore we use a forestry mulcher to help us carve out the fire break.



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**Mowing.** We use a batwing mower to create a fire break through an open prairie.



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**Raking.** The hay rake moves the recently mowed prairie grasses off to the side of the fire break. This ensures that the fire break is only able to support, at most, a small creeping fire. The windrow of vegetation is later blown off the edge of the break with a powerful leaf blower.



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A flail mower cuts low and shreds what it cuts. The left side is the result of our batwing rotary mower at its lowest setting. On the right is the result from the flail mower. The fresh snow shows how the flail mower cuts extra short and shreds the plant material.



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**Woodland Fire Break Prep.** We burn our oak woods too. After mowing, this blower will easily remove the leaves and cut material from the break.



**WATCH A VIDEO!**  
Scan the QR code to view the leaf blower.



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**Fire Breaks in Action.** Susan Kleiman sprays water along the edge to keep the fire from creeping past the fire break, while Elizabeth Bach walks back to check whether the break is holding the fire.