

Timing a Prescribed Burn

Differences in Burning the Prairie in Spring or in Fall



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With over 40 years of experience in the research and establishment of native plant communities, Neil is an internationally recognized pioneer in the use of North American plants in contemporary landscapes. His designs emphasize sustainability, aesthetics, and ecological compatibility with the land. Neil is a regular keynote speaker on topics such as establishing prairie meadows, designing with native plants, and the benefits of converting resource-intensive landscapes into self-sustaining ecological sanctuaries.

This addresses the main differences between spring and fall burning, and when it might be preferable, depending upon the scope of your objective.

BURNING IN THE FALL

Since fall burns, which are conducted after the growing season has ended (after November 15 in Wisconsin), do no harm to actively growing vegetation, they result in little or no selective damage to any group of plants (i.e. cool season species, warm season species, etc.). *Fall burns are therefore generally “neutral” in that they do not favor one group of plants over another.*



BURNING IN MID TO LATE SPRING

Mid to late spring prairie burns are usually scheduled to inflict maximum damage to cool season weeds and grasses, since they are entering or in the midst of their prime growing season at that time. This sets them back by removing their new green growth, which required expenditure of energy reserves in the roots' "bank account." They receive little or no return on that investment, and have to consume more energy to initiate new growth following the burn. The soil warms up rapidly after a mid-spring burn, favoring the primarily warm season prairie flowers and grasses, over cool season undesirable species. Burning in mid-spring after unwanted woody trees, shrubs and vines have leafed out does proportionally more damage to the cool season plants, compared to burning in early spring before they initiate new growth, or in late fall after they have gone dormant.

TIMING FOR DRY SANDY PRAIRIES

Dry sandy prairies and goat prairie on limestone or dolomitic slopes typically have a number of early blooming, cool-season flowers, such as Pasque Flower, Prairie Smoke, Puccoons, Downy Phlox, Lupine, Blue Eyed Grass, Shootingstar, Pussytoes, etc. There are cool season sedges and grasses that grow in these dry prairies as well, including Junegrass and Needlegrass. Mid-spring burns inflict serious damage to these species, since most are in full bloom at that time. To avoid this problem, dry prairies with early blooming native species can be burned either in early spring before plants emerge from winter dormancy, or in late fall when they are dormant.

Mid to late spring prairie burns tend to favor warm season grasses over many of the prairie flowers, since some warm season prairie flowers do begin growth in early to mid-April, and can be damaged when burned between late April and mid-May. Repeated burning in mid to late spring will push the balance of the prairie plant community away from the flowers in favor of the warm season grasses. Burning in the latter part of fall prevents does little or no damage to the flowers, and tends to favor a more balanced mix of flowers and grasses.