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## LETTER TO THE EDITOR

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19 November 1993

Dear Mr. Wright:

I found myself agreeing with just about everything in Guy Sternberg's enjoyable and informative piece on the bur oak (Issue #3), especially his concern for the fate of oaks under current Midwestern savanna management practices. Savannas could, as Sternberg points out, have as easily arisen from bur oaks and other woody plants invading prairies as from the reverse. If this is true, might we not as realistically achieve our restoration goals by planting bur oaks on the prairie as by burning, cutting and herbiciding our existing woodlands, the current restoration strategy?

I worry, too, about another point that Sternberg raises: the potential for long term decline of mature oaks which have been subjected to repeated fires. I have been examining an area in Thorn Creek Woods (Will Co., IL) which experienced a wild-fire, portions quite intense, in Spring, 1986. I was surprised and dismayed to see extensive basal scarring, not only on 100 - 150 year old black and red oaks, but on swamp white oaks as well. I had expected this species, so like bur oak, to be equally fire resistant. There is no doubt that this will have long term effects. Much of the mortality of Thorn Creek oaks is due to wind -- not uprooting trees, but snapping them off. Such trees invariably show heartwood damage, frequently due, it appears, to the work of carpenter ants. Basal wounds that destroy the bark are an open invitation to ants and other wood-weakening species.

It would be worthwhile, I think, to explore in more detail, the role that trees play in savanna assemblages, especially since, as Sternberg notes, savanna restorationists tend too often to view trees as "static, lifeless structures." A recent article in *The New York Times* science section (26 Oct. 1993) has some provocative implications in this regard. Using labelled isotopes, Dr. Todd Dawson of Cornell University found that deep ground water absorbed by sugar maple sap roots was not all drawn up to the leaves and transpired. Instead a portion was redistributed by surficial roots to upper soil horizons where it was utilized by variety of nearby herbs and shrubs. Could bur oak have played the same role in savannas, providing not only the frequently mentioned "dappled shade," but a more even soil moisture regime as well?

I have been enjoying your journal very much and look forward to future issues.

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