WOOD USE

EFFECTS OF NON-WOOD FIBER USE ON LAND >KA TLLA USE

Habitat Effects

Row crop agriculture spanning large fields of commodity crops provides hospitable habitat for a significant number and diversity of species, particularly those that are open-habitat and grassland species. However, forested areas beyond the minimum seral stages provide significantly more environmental volume than does low-stature vegetation. When that volume contains trees and shrubs of diverse heights and stratifications, more niches are available for species use (MacArthur and MacArthur 1961; Moss 1978; Southwood et al. 1979; August 1983). This relationship can be demonstrated in the percentage of native biodiversity that is forest-dwelling in North America (Bunnell 1992). The expansion of more intensively managed cropland relative to hay and pasture, when accompanied by a reduction in field borders and unique habitat areas, may exacerbate this difference.

The harvesting of a timber stand does result in localized habitat alteration. This alteration is transitory and takes place concurrently with regrowth in other areas within the overall forested landscape. Managed forestlands are comprised of multiple age classes such that the landscape overall contains different habitat types. It may be viewed as a patchwork of uncut stands, clearcuts, and partial cuts. Different habitat structure is produced within individual stands based on differing silvicultural treatments. All of these standard silvicultural techniques, conducted in different aged plantations across landscapes, provide habitat diversity, which generally equates to overall biodiversity (NCASI 2006).

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