

IOWA

John Fleckenstein of the Iowa Bureau of Preserves and Ecological Services wrote in 1990 that, to his knowledge, there has been no inventory of uncut woodlands in Iowa. Because of the extent to which wood has been used in the state, from white settlement down to the present, and because of the fact that wooded areas in this prairie region were relatively small when Euro-Americans arrived, the state has "little if any acreage" that has not been subjected to selective cutting "at least once."

Fleckenstein pointed out also that in Iowa an uncut woodland is not necessarily a good woodland. Much of the wooded area is grazed by livestock, some of it very heavily. Some of these tracts with "big, old oaks" and that apparently have been cut very little have thick undergrowth comprised mostly of "weedy species."

Furthermore, he reported that Iowa has much uncut forest that is only 100-150 years old. It is the result of trees having taken over prairie or savanna. Very little good savanna remains, although it was quite an abundant community prior to white settlement. John Pearson, plant ecologist for the Iowa Department of Natural Resources, confirmed Fleckenstein's views (Pearson 1992).

Recently researchers have documented the fact that Iowa has uncut woodland on cliffs similar to the well-known ancient woodlands on the Niagara Escarpment in southern Ontario. The dominant tree species in these Iowa woodlands is the Eastern Red-cedar. Like the Northern White-cedars in Ontario, the trees are generally "small, slow-growing, and widely spaced."

D. W. Larson et al. characterized "ancient" woodland on eight cliff sites in Iowa (2000). Pearson indicates that of the eight sites, those with the longest stretches of ancient cliff woodland are **Turkey River Mounds Preserve** (Clayton County), a 62-acre preserve above the Mississippi and Turkey Rivers, owned by the State of Iowa; **Palisades-Kepler State Park** (Linn County), an 840-acre park along the Cedar River; and **Palisades-Dows Preserve** (Linn County), a 330-acre preserve across the Cedar River from Palisades-Kepler, and owned by the State of Iowa and the Linn County Conservation Board. **Backbone State Park** (Delaware County), a 1780-acre park on the Maquoketa River, has ancient woodland on scattered outcrops. Turkey River and Backbone State Park (see below also) are part of the Niagara Escarpment; Palisades-Kepler and Palisades-Dows are on an outlier of the Niagara Escarpment (Pearson 2002; Iowa 2002).

Dendrochronologists have determined that certain White Oak at a number of Iowa sites date back to the sixteenth and seventeenth centuries (Stahle 1996). At several sites the old White Oak are scattered or very scattered. Each of three sites, however, supports a cluster of about ten acres of ancient White Oak intermingled with younger trees. The three sites are Backbone State Park (see above); **Pammel Park** (Madison County), a 350-acre park formally part of the state park system but managed by the Madison County Conservation Board since 1989 (Madison 2002); and White Pine Hollow (see below). Younger trees, mostly maple, basswood, Hackberry, and elm, are mixed in with the White Oak, which appear to have grown in a more open forest than the forest in these areas today (Pearson 2002). At Backbone State Park, trees less than six inches in

diameter have been removed and the site burned (Pearson 1995). At Pammel the oak grow on the park's backbone, a limestone ridge that is more than one hundred feet high (Madison 2002).

Other sites with small areas of uncut woodland include **Merritt Forest State Preserve** (Clayton County), 20 acres in which Northern Red Oak and White Oak, some of them "ancient," dominate, surrounded by roads and fields (Stahle 1996, Blair 2002); an **unnamed 15-acre site** adjacent to the Mississippi River (Clayton County), probably never logged or grazed by livestock, dominated by Northern Red Oak, accessible only through private land or by boat, and owned by the State of Iowa (Blair 2002, Farlinger 2002); **Brushy Creek Preserve** (Webster County), 6 acres of maple/basswood amidst a 260-acre tract dominated by second-growth oak/hickory (Fleckenstein 1990).

The following two more extensive sites of uncut woodland have probably (like Merritt Forest and Brushy Creek) undergone some grazing by livestock but do not have thick, weedy undergrowth.

White Pine Hollow (Dubuque County)

A 712-acre site of which "Much . . . has not been cut" (Fleckenstein 1990). Blair reports that the 400 acres that initially comprised the preserve are all old growth, but that only about half of those acres are considered high quality, with big trees (Blair 2002). Spetich et al. describe the site as "the only existing old-growth site of substantial size in Iowa" (1999). Oak/hickory is the dominant vegetation with "some areas of maple/basswood," plus "small areas" of Eastern White Pine (Fleckenstein 1990). The preserve includes about ten acres of ancient White Oak. White Pine Hollow is owned by the Iowa Department of Natural Resources and managed by the Parks Department.

Bluffton Fir Stand Preserve (Winneshiek County)

A 94-acre preserve dominated by a disjunct population of Balsam Fir. The half of the fir that grows on a steep bluff has probably never been logged, although the trees now on the bluff are young. Widely scattered Eastern Red-cedar among the fir on the bluff are likely to be very old. The preserve is owned the State of Iowa and managed by the Parks Department (Pearson 2002).

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