



ASPECTION IN AN ILLINOIS FOREST EDGE COMMUNITY*

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The thickets at the edge of the forests in the Deciduous Forest-Prairie ecotone as represented in Champaign county, Illinois, were found to be an ecological community distinct from the adjoining forest and prairie communities although vitally allied with them. The growth form is one approaching that of forest reproduction except that the large trees are lacking; the dense community structure forms a forest "wall" which serves as a buffering agent for the forest interior from the rigors of the neighboring prairie, much as does the forest canopy. A salient feature of the aspection here is the marked migration on the part of the animal populations which move from the surrounding prairie into the forest edge in the autumn and back again in the spring. Species spending the winter in the woods interior are associated with the forest edge in the summer periods. These migrating forms bind the ecotone communities into a local complex of communities which are thus intimately related in spite of varied growth forms.

Exposure direction with reference to winds, etc., showed no conspicuous effect on the invertebrate population in the selection of hibernation sites, although the dormant period lasted somewhat longer in exposures not facing the late autumn and early spring sun. Birds showed a marked selection of habitat during the winter months being present in far greater numbers on the lee sides of the woods with reference to the prevailing

* Abstract of a paper entitled "Fluctuations in biotic communities, I. Prairie-forest ecotone of central Illinois." *Ecology* vol. 16, Number 2. April, 1935.

west and southwest winds. This selection apparently ceased with the arrival of the late spring conditions and the migratory birds*

The ecological structure of the community may be thus expressed:

PERENNIAL NUCLEUS: *Cercis* - *Cornus* - *Cardinalis* - *Ceratomegilla* associates.

ASPECTIONAL PERIODS: *Aesculus* - *Claytonia* - *Junco* - *Corythuca* **PREVERNAL SOCIES.**

Aesculus - *Arisaema* - *Warbler* - *Blissus* **VERNAL SOCIES.**

Aesculus - *Ostrya* - *Ceresa* - *Ormensis* **AESTIVAL SOCIES.**

Veronia - *Aesculus* - *Dicyphus* - *Apion* **SEROTINAL SOCIES.**

Vernonia - *Warbler* - *Diabrotica* - *Lygus* **AUTUMNAL SOCIES.**

Nuthatch - *Kinglet* - *Xisticus* **HIEMAL PÆSOCIES.**

Ceratomegilla - *Blissus* - *Lygus* **HIBERNAL SOCIES.**

