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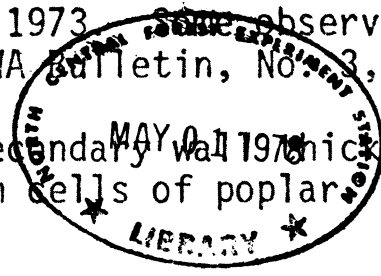
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elm
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cottonwood

forest type
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ELM-ASH-COTTONWOOD FOREST TYPE BIBLIOGRAPHY

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The elm-ash-cottonwood forest type has been defined as the lowland forests where American elm (*Ulmus americana* L.), green ash (*Fraxinus pennsylvanica* Marsh.), eastern cottonwood (*Populus deltoides* Bartr.), or silver maple (*Acer saccharinum* L.) comprise, singly or in any combination, the largest component of stocking. Common associated species include hackberry (*Celtis occidentalis* L.), American sycamore (*Platanus occidentalis* L.), black willow (*Salix nigra* Marsh.), and boxelder (*Acer negundo* L.). The elm-ash-cottonwood type occupies a large but irregular area on the floodplains and bottomlands of the north-central United States. Sites occupied by this type commonly have a high productive potential.

The literature search this bibliography is based on began with an extensive examination of Forestry Abstracts volume 24 (1963) through volume 37 (1976). Thus, this work is contiguous with the *Populus* bibliography of Farmer and McKnight. The bibliographies of major works found in the initial search of Forestry Abstracts were examined and many additional references were obtained. Several references found in this second search and published prior to 1964 were included when they seemed particularly relevant and had not been included in the Farmer and McKnight *Populus* bibliography. Finally, many current journals were searched for work that had not yet been reported in Forestry Abstracts. For addresses of many of the sources cited the reader may consult "Forestry Abstracts Coverage List"¹ or "List of Periodicals and Serials Regularly Scanned for Forestry Abstracts"².

During the initial examination of Forestry Abstracts, the following genera and species were actively searched: *Acer*, *A. saccharinum* L.; *Celtis*, *C. occidentalis* L.; *Fraxinus*, *F. pennsylvanica* Marsh.; *Platanus*, *P. occidentalis* L.; *Populus*, *P. deltoides* Bartr.; *Ulmus*, *U. americana* L. In addition, many references to *Salix nigra* Marsh. are cited.

Publications selected for this bibliography relate to one or more of the following broad subject categories: (1) Biology--includes references to life history, silvical characteristics, taxonomy, physiology, morphology, anatomy, and genetics; (2) Ecology--includes the topics of forest succession, allelopathy, soil site relations, flooding, and gradient analysis; (3) Silviculture--includes stand establishment, cultural treatments, harvesting methods, economics, and protection; (4) Mensuration--includes references to yield studies, mensurational techniques, growth prediction, and volume estimation.

¹Commonwealth Forestry Bureau. 1970. Forestry Abstracts Coverage List, October 1970. 20 p. Commonwealth Agricultural Bureaux, Farnham Royal, United Kingdom.

²Commonwealth Forestry Bureau. 1968. List of periodicals and serials regularly scanned for Forestry Abstracts. 16 p. Commonwealth Agricultural Bureaux, Farnham Royal, United Kingdom.

In all cases interest was primarily in work dealing with natural stands. However, reports on plantations, greenhouse experiments, and other artificial situations were included whenever they were judged to be applicable to future studies of natural stands. Published abstracts have been cited whenever they were judged to contain significant amounts of useful information.

Citations obtained through Forestry Abstracts are followed by the Forestry Abstracts volume and entry number, e.g., FA 32:4773 refers to volume 32, entry 4773 of Forestry Abstracts. Users with access to Forestry Abstracts can thereby quickly locate a synopsis of these references.

A species and subject index and glossary of common insect names is provided for user convenience. Tree species and invertebrate organisms are indexed only by their scientific name. Vertebrate species are indexed only by common name. Cross references are used throughout to add clarity and to indicate categories where additional information may be found.

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Glossary to the Scientific Names of Some Common Insects of Elm, Ash, and Cottonwood

Aphid	<i>Aphididae</i> spp.
Ash bark beetle	<i>Lepersinus aculeatus</i> , <i>Lepersinus californicus</i>
Ash seed weevils	<i>Thysanochemis bischoff</i> , <i>Thysanochemis hevola</i>
Bark beetles	<i>Scolytus</i> spp.
Biting midge	<i>Dasyhelea opressa</i>
Blotch leaf miner	<i>Paraleucoptera albella</i>
Branch borer	<i>Oberea delongi</i> , <i>Oberea schaumii</i>
Bronze poplar borer	<i>Agrilus liragus</i>
Carpenter worm	<i>Prionocystus robinae</i>
Clearwing borer	<i>Paranthrene dollii</i> , <i>Paranthrene tricincta</i>
Columbian timber beetle	<i>Corthylus columbianus</i>
Cottonwood borer	<i>Plectrodera scalator</i>
Cottonwood leaf beetle	<i>Chrysomela scripta</i>
Cottonwood leaf curl mite	<i>Aculus lobulifera</i>
Cottonwood leaf miner	<i>Leucoptera albella</i>
Cottonwood twig borer	<i>Gypsonoma haimbachiana</i>
Double tail caterpillar	<i>Cerura wisei</i>
Eastern ash bark beetle	<i>Lepersinus aculeatus</i>
Epidermal miner	<i>Marmara</i> spp.
Elm bark beetle	<i>Scolytus scolytus</i>
Elm spanworm	<i>Ennomos subsignarius</i>
Elm spanworm parasite	<i>Telonomus alsophilae</i>
Eriophyid mites	<i>Eriophyidae</i> spp.
Fall cankerworm	<i>Alsophila pometaria</i>
Flat-footed ambrosia beetle	<i>Platypus sulcatus</i>
Flower flies	<i>Syrphidae</i> spp.
Fruit fly	<i>Aulacigaster leucopiza</i>
Hackberry butterfly	<i>Astercampa celtis</i>
Hackberry gall maker	<i>Pachypsylla</i> spp.
Hackberry blistergall maker	<i>Pachypsylla vesiculum</i>
Hackberry nipplegall maker	<i>Pachypsylla mamma</i>
Hackberry petiolegall maker	<i>Pachypsylla venusta</i>
Imported willow leaf beetle	<i>Plagioderia versicolor</i>
Lace bug	<i>Corythucha</i> spp.
Leaf curl midge	<i>Prodiptosis morrisi</i>
Leaf hopper	<i>Cicadellidae</i> spp., <i>Cuerna costalis</i> , <i>Erythroneura</i> spp., <i>Erythroneura lawsoni</i> , <i>Homalodisca coagulata</i> , <i>Oncometopia orbona</i>
Leaf-mining sawfly	<i>Messa populifoliella</i>
Leafroller moth	<i>Tortricidae</i> spp.
Native elm bark beetle	<i>Hylurgopinus rufipes</i>
Pin-hole borer	<i>Platypus sulcatus</i>
Poplar-and-willow borer	<i>Cryptorrhynchus lapathi</i>
Poplar borer	<i>Saperda calcarata</i>
Poplar tentmaker	<i>Ichthyura inclusa</i>
Poplar vagabond aphid	<i>Mordvilkoja vagabunda</i>
Red spider mite	<i>Tetranychus telarius</i>
Serpentine leaf miner	<i>Gracillariidae</i> spp.
Shoot borer	<i>Gypsonoma aceriana</i>
Smaller European elm bark beetle	<i>Scolytus multistriatus</i>
Sycamore aphid	<i>Drepanosiphum platanoides</i>
Tent caterpillar	<i>Malacosoma fragile incurva</i>
Viceroy butterfly	<i>Limentis archippus</i>
Wood gnat	<i>Mycetobia divergens</i>
Woodlouse	<i>Tracheoniscus rathkei</i>
Woolly pear aphid	<i>Eriosoma pyricola</i>

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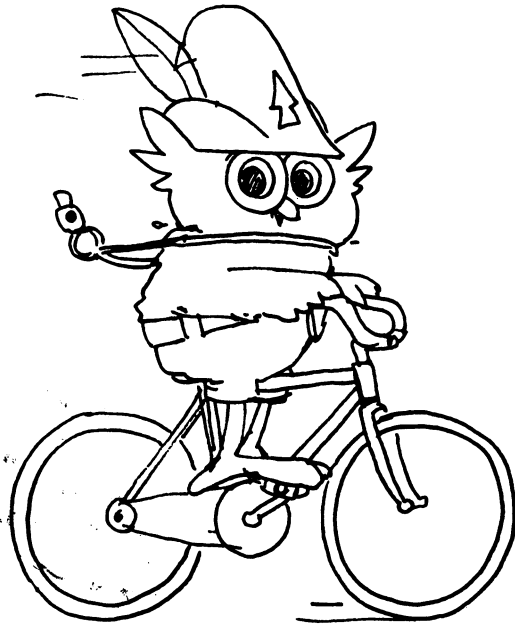
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