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Special Writer

Elm vs. Robin Is Only Part Of Issue on Chemical Sprays

The threat of elm disease to one of our most loved shade trees has been discussed long, loud and heatedly, particularly since the publication of Rachel Carson's controversial book, "Silent Spring."

This publication alerted and aroused the public not only about needless and dangerous chemical destruction of our bird life, but it also brought into sharp focus the more inclusive and very serious threat of pollution of all our natural environment, including that of man.

It has been proven by carefully detailed and scientific tests that heavy and indiscriminate hydraulic spraying with D.D.T. compounds is lethal to some 40 kinds of birds, and in these areas, has almost exterminated such species as the robin which feeds upon infected worms.

Mrs. Frehse

In a more limited sense, many people hold that the immediate issue involves a choice between tree and bird.

Others contend that more carefully controlled spraying with less toxic chemicals such as methoxychlor or the use of certain more natural biological control methods will at least mitigate the problem. In the larger picture, elm vs. robin is only a part of the issue.

IN SPITE OF all that has been said and written, there are yet those who are not conversant with the facts regarding the life-cycle of the so-called Dutch elm disease.

It is caused by a parasitic fungus (Ceratostomella elmi) which is spread through the feeding and breeding habits of the European elm bark beetle (Scolytus multistriatus).

Also present is another imported but less destructive species called the native elm bark beetle. Elms are the favorite host of the above insects, but basswood and ash are also subject to attack by the second species.

THE EUROPEAN elm bark beetle is a small insect about ⅛ of an inch long, which arrived from Holland in 1909 hiding in a shipment of Carpathian elm burl logs imported for making furniture.

The first infected trees in our area were discovered near the Belle Isle Bridge. The disease has now spread rapidly over Southeastern Michigan.

By 1949 it had already ravished thousands of elms throughout the Eastern United States. It now reaches west as far as Colorado.

The destructive beetles live in dead, dying or recently infected elm wood. If you were to peel off the bark of an infected tree in winter, you might see a small curled larva wintering at the end of a tunnel where it had been feeding on the inner or cambium layer of the bark.

THIS LARVA SPINS a cocoon and pupates in the adjoining outer bark. The adults, which begin to appear in May, are small stout reddish-brown beetles which feed upon twigs, often in the crotches of healthy elm branches, especially in trees which contain or are near weak, injured or sickly portions.

The females construct their brood chambers only in the cambium layer of weakened, dying or recently dead wood. Hence, the importance of destroying all such material in your trees, since by so doing you can break the reproductive cycle of the beetle.

THE ABOVE BROOD gallery is one to two inches long, and here the female lays from 80 to 140 eggs. The larvae develop in a few weeks, completing the life cycle. A second generation of adults appears and lays eggs in August and early September.

Since egg-laying extends over a considerable period, adults may be present from May to September.

Let it be understood that the damage to the tree comes from the parasitic fungus whose microscopic spores are carried from tree to tree by the beetle in its feeding and breeding operations.

Early symptoms are wilting leaves which gradually turn yellow and either hang so on the branch or fall.

THE DISEASE causes the ends of the twigs to curl in a peculiar manner; the larger limbs put out numerous trunk suckers; and the dying twigs, when examined in cross section, show a brown discolored ring beneath the cambium layer of the bark.

The microscopic spores of the offending fungus are deposited and carried by the mouth parts and the hairy antennae of the adult beetle as it pierces and eats the tissues of the bark. Thus, they are brought to a healthy tree where the female makes a feeding or breeding cavity. The disease is also disseminated by the transplantation of infected wood.

SINCE THE PROFIT angle is involved, chemical companies have been very active in denying that serious damage results from the use of pesticides.

An alerted public cooperating with unbiased scientists who continue to work toward more effective control measures is our best procedure in conquering the elm disease.

Rachel Carson, in her acceptance of the 1964 Audubon Medal, spoke these prophetic words: "What we fail to do today and what we let go by default, can perhaps never be done."

Lumbering Influenced Cities, Towns in State

Location of Michigan's cities and towns is an important present-day reminder of the great influences lumbering exerted on the state's history.

Dr. Bert Hudgins, professor emeritus of geography at Wayne State University, points out this influence in his book, "Michigan Geographic Backgrounds in the Development of the Commonwealth."

The hardwood forests of the southern counties was the area where settlement was first made, largely because this area of Michigan was most in line with the general movement to the west.

Here, along with grist mills established by settlers for grinding grain, went saw mills for cutting lumber for building. Sometimes the two were at one site, and the same waterwheel did work for both. Towns grew up at the mill sites.

SUCH IS THE case, Dr. Hudgins says, in the location of Grand Rapids, Tecumseh, Paw Paw, Clinton, Albion, Marshall, Allegan, Saline, Milford, Ypsilanti and Hastings.

River mouths along the Great Lakes were natural sites of settlement. Saginaw, one of the largest cities near a river mouth, was the first to ship lumber to points outside Michigan. This was in 1836.

Saginaw and the nearby river-mouth city, now called Bay City, received logs which floated down the Saginaw River's numerous tributaries: the Cass, Flint, Shiawassee, Tittabawassee, and many which were smaller.

Muskegon was the focus of the Muskegon River and its tributaries which rise in Higgins and Houghton Lakes. Oscoda had the timber of the Au Sable; Alpena had the Thunder Bay River which emptied into a well protected harbor.

Menominee was the outlet of Menominee River, Escanaba for the Escanaba River, Manistique for the Manistique River, Cheybogan for the Cheybogan River, Manistee for the Manistee River, and Grand Haven for the Grand River, besides many others.

OTHER IMPORTANT sawmill towns, all on the west side of the state, were Empire, Frankfort, Ludington, Muskegon and St. Joseph.

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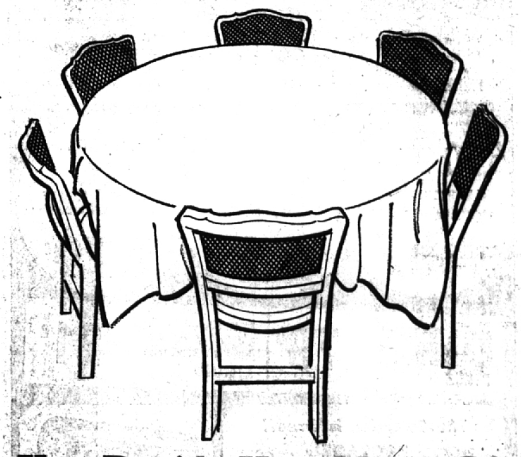

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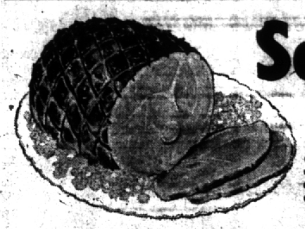

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