

# Forest Research Notes



FOREST SERVICE, U.S. DEPT. OF AGRICULTURE, 102 MOTORS AVENUE, UPPER DARBY, PA.

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## REPORT ON 1958 FOREST TREE SEED CROP IN NEW ENGLAND

Forest tree seed crops in 1958 were considerably better than those in 1957, according to observers.<sup>1</sup> However, heavy and medium seed crops of some species were spotty in occurrence. Late spring frosts were probably responsible for poor or failing crops of some species in Vermont, New Hampshire, and northwestern Connecticut. Cone weevils were reported damaging the white pine crop in southwestern Maine, southern New Hampshire, and central and northwestern Massachusetts. Insects also damaged seed of white spruce in northern Maine, balsam fir in south-central Maine, and hemlock locally in south-central Connecticut.

In general, most conifers produced heavy to medium seed crops (table 1). White pine bore a heavy crop generally over Maine (medium in the southwestern part due to cone weevil). Elsewhere in New England, the white pine crop was spotty. Production was heavy in parts of northern Vermont, Massachusetts, and Rhode Island and light to very light in Connecticut and New Hampshire. Failures were noted in northern New Hampshire and central Vermont. Red pine had a medium crop in parts of Maine and Connecticut and light to a failure in other areas.

White spruce and balsam fir seed production was medium to heavy in Maine. Fir had a medium crop in Vermont and northern Massachusetts. Red spruce was spotty throughout the region, with heavy crops confined to parts of Maine and Massachusetts. Eastern hemlock was heavy in most of Massachusetts, Connecticut, and in northern New Hampshire, but was spotty in the rest of New England.

Tamarack seed crop was reported heavy in Maine and New Hampshire. Northern white-cedar crops were spotty, with medium to heavy crops reported in Connecticut and parts of Maine and Vermont. The crop of eastern redcedar seed was heavy in Connecticut and medium in southern Vermont.

Among hardwood species, the red and sugar maples bore heavy crops in all states, although there were spotty reports of lighter crops. Birch seed crops were also variable.

<sup>1</sup>Based on 38 reports distributed as follows: Maine 14, New Hampshire 6, Vermont 5, Massachusetts 8, Rhode Island 1, Connecticut 4. State service (farm) foresters, forestry school faculty members, industrial foresters, and U.S. Forest Service personnel of the Research and Administrative Branches cooperated in supplying this information. The project was conducted by the Committee on Silviculture, New England Section, Society of American Foresters.

Table 1.--Forest tree seed crops in New England, 1958

| Species              | Seed crop classification* |       |      |       |       |       |
|----------------------|---------------------------|-------|------|-------|-------|-------|
|                      | Maine                     | N. H. | Vt.  | Mass. | Conn. | R. I. |
| White pine           | l-H                       | f-L   | f-h  | vl-h  | vl-l  | M-h   |
| Red pine             | f-m                       | vl    | f-vl | f-l   | l-M   | --    |
| White spruce         | m-H                       | vl    | l    | M-h   | M-h   | --    |
| Red spruce           | vl-h                      | f-vl  | l-m  | M-h   | m     | --    |
| Balsam fir           | m-H                       | vl-m  | l-h  | m     | --    | --    |
| Hemlock              | f-M                       | vl-h  | L-m  | m-H   | l-H   | --    |
| Tamarack             | h                         | h     | --   | --    | --    | --    |
| Northern white-cedar | f-h                       | f     | l-m  | --    | M-h   | --    |
| Eastern redcedar     | --                        | --    | m    | --    | h     | --    |
| Red maple            | vl-H                      | f-H   | l-H  | m-H   | vl-h  | h     |
| Sugar maple          | vl-M                      | f-H   | l-h  | L-h   | l-h   | --    |
| Black birch          | --                        | vl    | M-h  | m     | l-m   | --    |
| Yellow birch         | VL-h                      | l     | M-h  | m     | l     | --    |
| White birch          | vl-m                      | l     | m    | m     | l     | --    |
| Red oak              | vl-L                      | F-vl  | l-m  | l-M   | l-M   | --    |
| White oak            | f-m                       | --    | --   | f-m   | vl-m  | --    |
| Basswood             | --                        | --    | l    | --    | l     | --    |
| Beech                | f-m                       | f-l   | f-m  | m-H   | l-h   | --    |
| White ash            | l-h                       | f-M   | l-H  | L-m   | f-m   | --    |
| Trembling aspen      | vl-m                      | f     | l-h  | h     | m-h   | --    |
| Bigtooth aspen       | vl-m                      | --    | m-h  | m     | m     | --    |
| Elm                  | m-H                       | --    | --   | --    | --    | --    |
| Butternut            | --                        | --    | l    | m     | --    | --    |
| Yellow-poplar        | --                        | --    | --   | --    | l     | --    |
| Black cherry         | --                        | --    | --   | --    | vl    | --    |

\*Seed crops are classified as follows:

- f = Failure: none, or few seeds on occasional trees.  
 vl = Very light: few seeds on 25 percent of the trees.  
 l = Light: few seeds on 75 percent of the trees.  
 m = Medium: some seeds on all trees, many on some trees (up to 75 percent).  
 h = Heavy: some seeds on all trees, many on most trees (over 75 percent).

Where a range of classifications is given, a capital letter indicates the classification given in most of the reports. For example, "m-H" indicates that, though some reports indicated a medium crop, most indicated a heavy crop.

Vermont reported medium to heavy crops of black, yellow, and white birch. Parts of Maine showed medium crops of yellow and white birch. Black birch produced a medium crop in eastern Connecticut.

Medium crops of red oak acorns were reported from Massachusetts, central Vermont, and eastern Connecticut. White oak was spotty, with medium crops reported from south-eastern Massachusetts, eastern Connecticut, and south-central Maine. Heavy crops of white ash seed were produced in south-central Maine, central and northern Vermont.

The poplars produced heavy crops in northern Vermont, northwestern Massachusetts, and eastern Connecticut. The beechnut crop was heavy in Massachusetts and eastern Connecticut but only medium in northern Vermont and northern Maine.

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