GRADES AND SOURCES OF HARDWOODS
USED IN THE TWIN CITIES CONTAINER INDUSTRY

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In connection with a study of the marketing of Minnesota hardwoods, container manufacturers and assemblers in the Twin Cities area (2) were interviewed to determine: a. the species of hardwoods they used, b. the grades of hardwoods used, and c. the sources of hardwoods used. Data were collected for 1953 by personal interview.

Fifteen companies were found to be using hardwoods in the manufacture or assembly of containers. Two companies assemble cooperage; seven companies manufacture nailed wooden boxes; and four companies manufacture or assemble veneer containers. Two of the nailed box manufacturers also make wire-bound boxes. Two lumber companies use a portion of their resources to manufacture nailed boxes and crates. Those manufacturing companies who make wooden shipping containers for their own products were not included in this study.

Cooperage

Cooperage shooks are assembled but not manufactured in Minnesota at the present time. They are shipped in from outside the state. Species used for cooperage shooks are Douglas fir, oak, gum, and minor amounts of other hardwoods. In the last several years basswood and cottonwood, the only Minnesota woods being used in cooperage, have been driven out of the market by Douglas fir. Price competition has been the reason for the failure of Minnesota wood to hold this market. When Minnesota wood was being used, "woods run" basswood and cottonwood logs were used for cooperage shooks. The solid lines in the figure show the South and the West Coast as the source of cooperage shooks.

Nailed Boxes

In the segment of the industry manufacturing nailed wooden boxes, aspen and cottonwood were the primary species used. Approximately 10.5 million board feet of lumber were used in 1953. Of this 8.6 million board feet were known to be aspen and cottonwood. Unspecified volumes of aspen, basswood, ash, elm, maple, birch, and red oak made up the balance.

None of the companies manufacturing nailed boxes use standard hardwood grading rules when buying aspen lumber. "No. 4 and better" or "mill run" are the usual grade descriptions, when any are given. Aspen is bought in 100 inch lengths and random widths and thicknesses. Other hardwoods are purchased on the basis of standard hardwood grades.

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(2) Includes plants in Ramsey and Hennepin Counties.

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Although a standard grading system is not in use in purchasing aspen lumber, quality of lumber is important to the box manufacturer. This is evidenced by the fact that some of them stated, in effect, that they had very little cull because they would not buy from suppliers who provided low-quality lumber. Another spoke of agreements with suppliers on "proper" manufacturing, constant size, and absence of "fishtails". Still another stated that cull was not permitted in the wood they bought.

The dashed lines in the figure indicate the sources of lumber flowing into the Twin Cities for use in nailed wooden boxes. Although Minnesota sources were most important numerically, between 50 and 60 per cent of the volume used in 1953 came from outside the state.

There was some indication that aspen comes into the Twin Cities unordered. That is, the trucker carrying the wood has to "shop around" for a buyer. This practice is reportedly less prevalent now than it was during World War II.

Veneer Containers
Basswood, soft maple, and cottonwood were the principal species used in veneer containers. In the Twin Cities the industry engages primarily in the assembly of such items as fruit boxes. One company also turns veneer which it then uses in making containers. Data were not collected on the volume of veneer used by this segment of the container industry.

The dotted lines in the figure show the sources of veneer and veneer logs coming into the Twin Cities. With one exception they originate in Minnesota.

Conclusions

From this presentation one can deduce the existence of two market inefficiencies of primary importance. First there is the lack of definite grades, for aspen lumber as well as for veneer logs. For the nailed box companies, a total of at least 18 suppliers provided seven of them with lumber. That is, on the average, a box manufacturer had to come to agreement with between two and three suppliers, at least, on grade specifications for the lumber that he wanted to buy. Establishment and use of a definite grade or grades for aspen box lumber would make unnecessary the many individual agreements as to what constitutes saleable lumber.

The fact that there are numerous sellers and buyers in the aspen box lumber market, raises the question of the desirability of a central market or marketing agencies which would effectuate "buy" and "sell" orders for aspen lumber. The purpose of such a marketing agency would be to reduce to a minimum the number of contacts that a seller or buyer would have to make in order to buy or sell. In view of the distances involved, as shown in the figure, this would constitute a considerable increase in efficiency.