## A Measure of 1951 Mechanical Thinning

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The Beet Sugar Development Foundation in 1951 measured the progress of mechanical thinning methods in our many beet-growing areas. Reports were received on a total of 564,000 acres. In this summary, it is assumed that the balance of the 1951 acreage not reported received no machine thinning whatsoever.

Survey forms in a quantity sufficient to supply each factory district were forwarded to the sugar companies. The form requested tabulation of acreage worked by the various types of positive machine thinning tools and the many types of flexible timed weeders. The total acreage worked with such machines as the Silver (Great Western) down-the-row machine, the Dixie two-row converted, the Dixie 1950-51 model, the B. 8c P., the Eversman with discs and the Eversman with small hoes totalled 88,556 acres. In addition to the above figure, 29,079 acres were cross-blocked and 46,475 acres were cross-collivated.

Applying the term "positive stand reduction tool" to the units listed above, it can be said that 164,100 acres had some type of positive stand reduction tool used on the 1951 sugar beet crop.

It is a known fact that tools of spring tine or harrow design are advantageous to stand reduction as well as weed elimination. This report indicates that such tools were used on 89,768 acres. Assuming that springtined and harrow tools were used on approximately 25 percent of the acreage worked with a down-the-row or across-the-row thinning unit, it is safe to assume that 231,000 acres have had some kind of mechanical spring tool used on the 1951 crop. This figure represents 40 percent of the reported acreage or within the neighborhood of one-third of our total 1951 crop.

It is encouraging to note the large number of growers who are now using a positive stand reduction tool. It has been proven over and over that such an operation will reduce the time requirement of spring labor by one-third. This time reduction has not been effectively felt in a dollars and cents value by the growers but has definitely improved labor attitude and improved the hourly wage rate. Further developments will undoubtedly result in a reduction of spring costs to the sugar beet grower.