# **DUGOUT - An Inning From Our Past**

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#### The Power Mower Became of Age in the 1920's

Even though Ransomes, an English company, was the first to develop a gasoline powered mower in 1902, it was nearly 20 years later when several U.S. companies began to compete for the sports turf and golf course markets with their innovations in America.

R.S. Kinkead who received his engineering degree in 1909 from Purdue University founded the National Mower Company in 1919. Kinkead who served as an artillery officer developed the rough plans for



the business in France during World War I. After the war he returned to his home in St. Paul, Minnesota and developed the 25" power mower and a friction drive gang mower.

The 25" power mower was originally powered by a 2-cylinder, 2cycle engine, which was designed and built by R.S. Kinkead. After several years he realized it would be more economical to purchase a 4-cycle engine to install on the mower rather than to continue with the 2-cycle version. He decided to investigate a gasoline engine used by Maytag to drive their washing machines and this was used for many years. The 25" power mower was manufactured from 1919 to 1978.

Jacobsen introduced an internal combustion engine in 1921 to drive their new mower known as the 4-acre because it could cut 4 acres of grass in a day. It was developed for sports fields, cemeteries, school grounds and golf courses. Toro followed a couple of years later with its version of a power-driven reel mower. Some companies such as National, Toro and Worthington were also manufacturing tractor-drawn gang mower units to cut large areas of grass. Worthington began producing small tractors in 1918 and later Toro did the same to pull the gang mowers they manufactured. National Mower sold gang mowers during the 1920's and 1930's and sold single cutting units for \$95.00, today single cutting units sell for \$1500.

National Mower Company introduced friction drive gang mowers and these were the first of their kind to be manufactured with Timken tapered roller bearings for the reels. This was an improvement since all other mower manufacturers used bronze bushings, *continued on page 15* 

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which didn't hold up very well with heavy use.

Before the rotary mower became popular in the 1960's and 1970's tall grass and small brush was mowed with sickle mowers. National Mower Company manufactured different models of sickle bar mowers from 1930 to 1970 to fill the void in this market. Toro also sold sickle mowers, which were operated using the small Toro tractors. National was very successful selling sickle mowers by mail order throughout the 1930's. Sickle mowers were replaced by the rotary mower and later by the flail mower on sports fields, playgrounds and along highways in the United States.

By the 1950's the market demand was for reel mowers that could be ridden to increase the efficiency of the mower operation. National introduced one of the first reel mowers, which could be ridden, the 30" Rider. This was a small tractor with a 30" reel-cutting unit mounted under the tractor. National also manufactured the tractor and this was a very successful product through the early 1960's. During this period National's most recognized and successful mower the "84" Triplex was introduced in 1954 and is still manufactured today. The "84" Triplex was designed as a simple, straightforward machine to cut a lot of grass and to cut it fast. This mower also proved to be one of the best slope mowers on the market and is still used by schools, parks and golf courses for this purpose.

National Mower Company is probably the only manufacturer of mowers in the United States still owned and managed by the same family. During the 1970's and 1980's there were three generations of Kinkeads working at National Mower Company. The founder, R.S Kinkead, lived to be 100 years old and worked every day up to his death. His two sons and grandsons followed R.S. Kinkead in the business. In reality, mowers haven't changed much since the early years as far as operation of the cutting units. What has changed is the efficiency and comfort of the mowing operation particularly on sports fields.

