

SOD PRODUCTION IN NEW YORK STATE

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Sod production totals about 9,000 acres and is scattered throughout New York State. In the western portion of the state, several sod growers are located between Buffalo and Rochester. One farm is located on the muckland at Batavia, while the other farms are located on sandy, mineral soils. There are two sod farms in the south central portion of the state. One is just west of Elmira, while the other is west of Binghamton. There are several growers in the Albany area, but none farther north in the Adirondacks.

The largest area of sod production is in the mucklands of Orange County, adjacent to the New Jersey border. This large valley of mucklands is also the site of celery, onion, blueberry and other truck farm production. The following report is a discussion of Orange County sod production including ditches, harvesting, irrigation, turf varieties and sod prices.

Because of the early spring floods that occur each year, the muckland is stiped with ditches every 200 to 300 feet. These ditches caused little problems on truck farms years ago. However, they are a problem in modern sod production. The ditches are a potential source of weed infestation, limit movement of machinery in and out of fields, and are a potential area for fertilizer loss. The ditch takes up space, and the adjacent sod production is much poorer than in the center of the field. Certainly, a time will come when that acreage will need to be put into production.

More importantly, to cross ditches means bridges. The bridges are both costly and time consuming to maintain. All equipment crosses the bridges and tends to concentrate traffic in the center of the field. The resulting compaction requires a deep tillage operation prior to establishment. The ditches are not maintenance free. Pesticide applications are required to keep the ditches free of weeds and undesirable grasses. Every two years the ditches are cleaned at the cost of 5 cents per linear foot.

The Wallkill River is a large county "drain" that runs the entire length of the muckland valley. The spring floods unload into the river, and in the summer it becomes a source of irrigation water. Many acres of sod are irrigated, primarily with solid set pipelines. The ditches are a hazard in moving pipeline from one field to the next. Horizontal centrifugal pumps driven by industrial diesel engines are the popular source of power for irrigation.

Most (90%) of the harvesting is done by the Brower Mechanical Harvester and about 10% by Ryans. Sod is cut 18 inches wide and 6 feet, 8 inches long for a total of 10 square feet per roll. Each pallet contains 75 rolls for a total of 750 square feet. The pallets are then loaded on trucks with a tractor mounted forklift.

The delivery trucks are equipped with sliding boom forks that unload pallets at the delivery sites. Most of the sod is delivered rather than picked up by the consumer at the farm. The average delivery is approximately 55 miles.

Because of the large onion industry in the valley, vacuum coolers are available for long deliveries on hot, humid days. Sod at 82°F can be cooled to 33°F in 45 minutes at a cost of \$100 per truck. This is an additional cost of 2/3 to 1 cent per square foot to the consumer, but is often valuable as the vacuum process keeps the sod cool for 12 to 15 hours.

Most of the grasses grown are Kentucky Bluegrass blends. Some fescue blends are available because of the number of extremely dense forested areas that are sodded. Mixtures of Kentucky bluegrass and fescues are also available. To a limited extent, perennial ryegrass and tall fescue mixtures are available for athletic fields.

Sod is sold by the square foot in Orange County. At 10 square feet per roll, cost per unit area can be easily calculated and the number of rolls can be easily ordered by the consumer.

1977 Price of Muckland sod in Orange County, New York

<u>Grass mix or Blend</u>	<u>Price per square foot</u>
1. Bluegrass blends	7 3/4 cents
2. Shade mixture	8 1/2 cents
3. Commercial grade/highway	6 3/4 cents

In addition to the sod price, the delivery charges are all as follows:

1977 Delivery charges for Muckland Sod in Orange County, New York

<u>Amount of Sod in Square Feet</u>	<u>Price</u>
Minimum charge	@ \$35.00
2,000 - 7,000	1 3/4 cents per square foot
7,000 - 10,000	\$125.00
above 10,000	1 1/4 cents per square foot

Some consideration should be given for the Michigan industry to convert to square foot or even square meter. The latter probably is not practical until the consumer learns to think metric. Either way, the consumer will be able to more quickly calculate his needs. Based on the bluegrass blend above, the price of sod is 70 cents per yard in the field.