<u>Turfgrass Mowing Investigation</u>. Reel and rotary mowers are being compared at cutting heights of 0.5, 1.0, 1.5 and 2.0 inches. The study was initiated in the fall of 1962 on Merion and Delta Kentucky bluegrass. Visual differences have been observed for four years with the rotary mowed plots having a browned appearance for 3 to 4 days after mowing. The injury is greater when the turf is growing rapidly or during late fall. No density differences have been found between the two types of mowing.

Density counts can be compared among the four cutting heights. Turf density increases as the height of cut is lowered (Table 6). However, the leaf area decreases with lower cutting. A greater leaf area is more desirable than a high density.

## TABLE 6. 1966 MOWING INVESTIGATION

Height of Cut	Density Count			
(Inches)	(shoots per sq. dm.)			
0.5	348			
1.0	291			
1.5	257			
2.0	224			

(Delta Kentucky bluegrass cut with reel)

### STOP 6

#### Prof. Leyton Nelson

<u>Bluegrass Variety Evaluations</u>. Twenty varieties in the fifth year of evaluation. Thinning is still evident on the leafspot susceptible varieties. Newport is showing increased leafspot susceptibility with each successive year. The experimental selection K5(47), continues to rank high (Table 7) as does Merion. Prato which ranked quite high during the initial three years has declined in quality due to an increase in leafspot.

Several Kentucky bluegrasses were damaged by low temperatures during the 1966-67 winter. This was partially due to the extended rainy period in October which increased the crown tissue hydration level. Brabantia was thinned by over 70 percent. K5(47), Prato and Merion have a high density.

# TABLE 7. BLUEGRASS VARIETY PERFORMANCE East Lansing, Michigan

Variety	1966 Quality Rating* (1-Best; 9-Poorest)	Density Counts (Shoots per square dm.) 11/10/65	Leafspot Thinning (1-Least; 9-Most) 5/27/65
K5(47)** Delft** Merion Prato Delta	1.5 2.3 2.4 2.8 3.1	293 223 264 267 225	3.5 4.2 1.8 5.5 4.5
Park Cougar Newport Campus	3.3 3.5 3.6 3.9	241 225 263 234	4.7 3.2 3.0 3.0
Windsor Common Kentucky Brabantia** Common Poa Trivialis	4.1 4.5 5.5 5.7	239 219 208 177	2.5 5.8 7.3

(5 x 9' plots in 3 reps; planted July 26, 1962)

\*Average of monthly quality ratings.

\*\*Experimental selection, not available, commercially.
\*\*\*Planted, July 26, 1962.

<u>Bluegrass Blends</u>. Nine blends under evaluation to determine the value of blending in reducing the incidence of any one disease on any one bluegrass variety contained in the blend. Blends containing Merion have ranked highest (Table 8). There is not any significant difference in turf quality between blends which contain a Merion component. The severity of disease has been reduced by blending.

## TABLE 8. 1966 PERFORMANCE OF NINE BLUEGRASS BLENDS East Lansing, Michigan

Per Cent Composition				Quality Rating*		Density Count (Shoots per	
Merion	Common D	Delta	Park	Newport	9-Poorest)		sq. dm.)
					1966	1965	10/26
50	50				1.4	1.4	275
10	90				1.5	1.4	267
50				50	1.8	1.6	281
76	6	6	6	6	1.9	1.7	253
50		50			2.0	1.6	301
20	20	20	20	20	2.6	1.9	261
33.3		33.3		33.3	2.7	1.6	2 <sup>1</sup> ;7
		50		50	3.4	2.6	224
	33.3	33.3	33.3		4.8	3.9	264

(5 x 9<sup>1</sup> plots in 3 reps; planted June 18, 1962)

\*Average of monthly quality ratings.