### CORNELL UNIVERSITY TURFGRASS TIMES



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## Selecting Turfgrass For Low Maintenance Sites

conomic and environmental concerns have convinced many turf professionals of the need to reduce turf management inputs. While high maintenance is often necessary on sports turf and highly visible residential, commercial and institutional lawns, there are many other sites that could require as much as 50 percent less fertilizer, water and mowing if the proper species and cultivars were established.

#### **Demonstration Trial**

In 1992, Cornell Cooperative Extension of Monroe County began a demonstration trial that included readily available seed mixes and blends for low maintenance qualities. Local seed dealers were requested to submit low maintenance grass seed mixes or blends for evaluation. A total of eight were submitted, as listed in Table 1. Planting was done in late May. Standard seedbed preparation procedures were followed. Phosphorous was incorporated at a rate of 4 lbs. per 1000 sq. ft. A starter fertilizer was applied at seeding and again at six weeks after germination at a rate of 1 lb. of N per 1000 sq. ft. A portion of each plot was not treated with the second application of starter fertilizer. This was done to demonstrate the impact of a second application on seedling establishment.

Areas receiving only the first fertilizer application established at a much slower rate. This resulted in reduced turf densities and increased weed infestations which were clearly evident 15 months after seeding. Optimal seedbed fertility levels, provided that other site conditions are favorable, are critical to successfully establish turfgrasses. While low maintenance grasses may require fewer inputs once they are established, they should not be neglected in the seedling stage.

#### **Reducing Costs**

During the first season of growth, precipitation was abundant and temperatures were ideal for sustaining prolific growth. While it was not a good year to evaluate for drought tolerance, conditions were excellent to assess mowing needs. Of all management inputs, mowing can be the most expensive: costs can account for as much as 60% of a seasonal turf maintenance budget. If conditions are warm and wet, figures may range from \$150 per acre (72" mower, 3 mph, labor cost \$7.00 per hr.) to \$462 per acre (22" mower, 3 mph, labor cost \$7.00per hr.). Large commercial, institutional or municipal grounds represent the lowest costs relative to higher cost sites like residential lawns and golf course greens. So besides mowing faster and using bigger mowing equipment, how can one reduce costs?

Slower growing species and cultivars are the best answer. When maintained properly, that is with reduced levels of nitrogen and irrigation, they will free up money in a turf management budget. In recent years, there have been tremendous improvements in some of the slower growing species including: chewings, sheeps and hard fescues.



# This Times

#### 1. Selecting Turfgrasses for Low Maintenance Sites James Willmott, Monroe County Coop. Ext.

#### 2. Short Cutts

- Cornell Programs Succeed
- Turf & Landscape Expo

#### 3. Scanning the Journals

- Drought Tolerance
- Urease Inhibitors
- Preemergence Control

#### 6. Late Season Fertilization

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#### 7. Turfgrass Short Course

#### 8. Pest Watch

- Snow Mold Diseases
- Pythium Root Rot