GROUND COVERS FULL SUN

Cerastium tomemtosum Hemerocallis ssp.

Waltsteinia ternata

Daylily Barren Strawberry

Cerastium

GROUND COVERS PART SHADE

Astilbe chinensis 'Pumila'Dwarf Chinese AstilbeEpimedium x rurbrumRed Alpine EpimediumGalium odoratumSweet WoodruffLamium maculatumSilver Beacon

PERENNIAL SOURCES

Bluestone Perennials Inc. 7211 Middle Ridge Road Madison, OH 44057 (216) 428-7535

Iverson's Perennial Gardens Box 2787 RFD Hicks Road (Old Route 53) at Lake-Cook Road Long Grove, IL 60047

Milaeger's Gardens 4838 Douglas Avenue Racine, WI 53402 (414) 639-2371

Spring Hill Nurseries 110 West Elm Street Tipp City, OH 45371

T and Z Nursery, Inc. (The Planter's Palette) 28 West 521 Roosevelt Road Winfield, IL 60190 (312) 293-1040

K. Van Bourgondien and Sons Inc.245 Farmingdale RoadBabylon, NY 11702(800) 832-5860

Wayside Gardens Hodges, SC 29695 (800) 845-1124

The Natural Garden 38W443 Highway 64 St. Charles, IL 60174 (312) 584-0150

Flowerbed Preparation and Maintenance

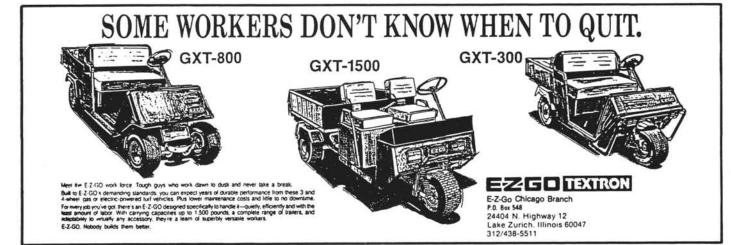
by David Ward Ravisloe Country Club

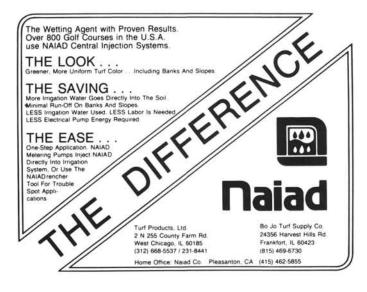
Most Golf Course Superintendents are hired because of their knowledge and ability to grow grass and provide excellent playing conditions. Today, however, flowers on the golf course and in the clubhouse landscape have become an important criterion for judging a Superintendents abilities. Unfortunately, most of our training and experience does not prepare us to deal effectively with flowers. The selection and combination of flowers used is a matter of taste but the success of the flowers selected depends on the preparation and maintenance of the flowerbed. The following procedures have evolved through several years of trial and error and failures and successes here at Ravisloe and might serve as a guide to make your flowerbeds easier to maintain.

The crucial aspect of any flower program is soil preparation. The most important component of the soil for growing flowers is organic matter. Any type of horticultural organic matter, mushroom compost, leaf mold, rotted manure, peat moss, etc., should be added yearly to improve the soil in flowerbeds.

At Ravisloe Country Club, the source of organic matter is leaf compost. All organic material including grass clippings, leaves, last years flowers, and residue from aerification is collection and composted. The collection site is an area large enough to allow for monthly turning of the pile with a frontend loader. The material is composted for a year before use so that a new pile is building while an old pile is used. The compost is ready for use when it no longer heats up after turning and it has the consistency of loose soil. The process can be (continued page 8)













(Flowerbed Prep. cont'd.)

hastened with the addition of lime, nitrogen, and a little soil.

Flowerbed preparation begins in the fall after the first killing frost and the removal of all the previous year's annuals. A six inch layer of compost is applied over all of the flowerbeds along with about one pound per thousand square feet of a 10-10-10 or a 12-12-12 fertilizer. The beds are then rototilled to a depth of ten inches which allows the compost to break down further over the winter. The beds are then raked smooth and edged for a neat appearance through the winter.

In the spring, the beds are rototilled as soon as the soil is workable. Then, one week before planting, (planting usually occurs the last week in May), the beds receive the following nutrient formula:

5 lbs./1,000 sq. ft.	Dispersal
2 lbs./1,000 sq. ft.	Iron Sulfate
40 lbs./1,000 sq. ft.	Milorganite
10 lbs./1,000 sq. ft.	0-46-0
10 lbs./1,000 sq. ft.	0-0-50
.5 lbs./1,000 sq. ft.	Subdue 5G
10 lbs./1,000 sq. ft.	Aqua Gros S

All beds are measured, the amount of material needed calculated, the material is weighed on a small scale, and is applied to the bed by hand or with a small push spreader. This formula may seem high in nitrogen, (2.4 lbs./1,000 sq. ft. plus the nitrogen released from organic matter breakdown) however, with the slow release of a organic nitrogen and the genetic predisposition of today's annuals to bloom, no excessive foliage or lack of flowers has been observed. After all the material has been added, the beds are again rototilled to a depth of ten inches, raked smooth and edged.

The flowerbeds, which were actually designed the previous winter, are laid out and planted. The spacing is usually closer than specified on the plant label so that the foliage will grow together faster, shading the soil which helps control weeds and evaporation. Also the beds look more mature earlier when plants are spaced closer. The rule of thumb is to reduce planting space about 30% so if a plant calls for 12" spacing, the actual spacing is about 8".

Growing season maintenance includes weed and disease control. Beds are checked daily for obvious weeds and a thorough weeding is scheduled every two weeks. The beds are sprayed about every two weeks in the heat and humidity of the summer with Tersan 1991 and Manzate 200 or Duosan. Annuals like Snapdragons, which are susceptible to root diseases, are retreated with Subdue about mid summer. Deadheading, or removing spent flowers from the plants, is also scheduled every two weeks. Due to the large organic matter content of the soil, plants only need to be watered once a week if no natural rainfall occurs. Some plants, such as Begonias or Impatiens may need more frequent irrigation if not grown in total shade. All beds are edged on Fridays throughout the growing season.

Labor requirements at Ravisloe for maintenance of the clubhouse area, annual and perennial flowerbeds, and landscape areas includes a full time head gardener, a seasonal full time assistant gardener, and a seasonal full time laborer. The budget for purchase of plant material and related garden items is \$3,300 per year.

After the first killing frost, all of the annuals are removed to the compost pile and the process begins again.

