

Table 3. The evaluation of Cutless and Rubigan applied to creeping bentgrass prior to seed germination.

Material	Rate 1b ai/A	Phytotoxicity <sup>2</sup>	Percent	Height <sup>4</sup> (cm)	Clipping Weights
Cutless	0.5	9.04	42.5b	1.60	12.05
Cutless	0.75	9.0a	17.5c	1.1c	5.4cd
Cutless	1.0	9.0a	11.7cd	1.00	9.2bc
Cutless"	2.0	9.0a	4.04	0.8c	2.24
Rubigan	2.5	2.85	1.7d	3.7b	3.3d
Control		9.0a	100.0a	9.4a	40.8a
LSD0.05		0.5	13.3	0.9	5.4

Table 4. The evaluation of Cutless and Rubigsn applied to creeping bentgrass when seedlings are 1 inch in height.

Material	Rate 1b ai/A	Phytotoxicity <sup>2</sup>	Percent Cover	Height 4 (cm)	Clipping Weights
Cutless	0.5	8.84	93.34	2.20	34.3bc
Cutless"	0.75	8.3a	90.8a	1.8cd	44.1b
Cutless	1.0	7.25	51.7b	1.5cd	25.0c
Cutless	2.0	1.84	7.3c	6.8d	6.5d
Rubigan	2.5	3.3c	39.2h	7.4b	35.4bc
Control		8.7a	100.0a	10.4a	58.2a
LSD 05		0.6	13.3	1.1	13.1

<sup>1</sup>All values represent the mean of 6 replications. Means in the same column with the same letter are not significantly different at the 0.05 level as determined by Fisher's Least Significant Difference test.

<sup>2</sup>Phytotoxicity evaluations are made on a 1 to 9 scale, where 9 = no visible damage to the turf and 1 = complete necrosis.

<sup>3</sup>Percent cover indicates the percent of the pot area covered by turfgrass plants.

<sup>4</sup>Height measurements represent the average height in cm of the turf canopy.

 $^5 {\rm Clipping}$  weights represent the dried weight in  ${\rm grams/m}^2$  of the turf plants harvested at soil level.

CLIPPING WEIGHTS OF TURF TREATED WITH CUTLESS (PREEMERGENCE)



# ASGCA President Cites Reasons Behind Demand for Golf Courses

Why is the demand for municipal golf courses so strong? Ken Killian, president of the American Society of Golf Course Architects, pinpointed several reasons why more communities are building new golf courses and predicted that this boom will continue for the next decade.

He noted that there is a pentup demand for golf facilities generally, since high interest rates choked development for several years and that "we now are playing catchup during this period of lower interest and bond rates."

Even more importantly, is the fact that about one-third of the nation's golfers are now women, according to the National Golf Foundation. "We certainly haven't lost the men, but with the influx of women, existing facilities are hard-pressed to accommodate the demand. In areas without a municipal course, municipalities are finding that new facilities are an immediate profit generator that can be used to fund a second course or other recreational programs," Killian stated.

The ASGCA president also feels that the general trend toward better conditioning and more exercise has helped contribute to the demand for more high-quality golfing facilities. "Also", Killian added, "there are more people in retirement than ever before, and many of them are avid golfers."

As communities compete for new industry, they often find that the amenities of the area may well be the deciding factor in a company's decision to relocate. "Studies show," Killian pointed out, "that a good golf course is very important to executives who must relocate a substantial number of managers into a new area."

The ASGCA president said that golf courses can serve as a catalyst for community improvement in addition to providing an aesthetically-pleasing green belt.

- A residential developer donating land for a park site adjacent to another parcel owned by the community could provide enough additional land for a golf course. Or, a developer might be granted a variation for higher-than-normal density housing in return for donating land for a community golf course.
- A landfill, rather than being used for a non-revenue park, can be transformed into a profitable municipal golf course, as has been done in many communities across the country.
- In a similar vein, if a golf course is located adjacent to the water treatment plant, it not only will put that land to profitable use, but serve as an outlet for effluent that does not require expensive treatment.
- Some developers are planning to incorporate a municipal golf course into a combination office park and residential community.

Killian noted that communities considering a municipal golf course may obtain a free planning brochure by writing the American Society of Golf Course Architects, 221 N. LaSalle St., Chicago, IL, 60601.

He added that municipal golf courses no longer are "second class citizens in the world of golf. Some of the best new courses being designed are municipal layouts and that trend will continue as city and recreation department personnel recognize that courses are appreciated by the general public and generate substantial income."

# "Operating Figures for a Typical Municipal Golf Course"

3,629 Associate Rounds (18-hole weekday fee: \$10)

27,294 Non-Associate Rounds (18-hole weekday fee: \$15)

32,453 Season Rounds (Unlimited play season ticket: \$320) 63,376 Total Rounds

#### **Operating Revenues**

Green Fees \$511,879
Reservation Fees
Pro Shop Sales
Food Service
Instruction Services
Rental Services
Club Repairs
Total Operating Revenues\$1,003,541

#### **Operating Expenses**

Salaries & Wages\$218,300
Contractual Services
Commodities
Fixed Charges & Obligations 51,086
Overhead Debt
Pro Shop
Food Service
Instruction Service
Rental Service 12,221
Club Repair 2,135
Miscellaneous
Total Operating Expenses
Net Income for Year (Profit) \$108 783



# **Proper Care and Planting of Trees**

# The Real Cause of Many Tree Problems

Insects and microorganisms are not the real cause or starting point of many tree problems. These organisms are often secondary agents that attack weakened, wounded, improperly treated, neglected, and generally unhealthy trees. Poor tree health is a major worldwide problem. Fighting the secondary agents that are often very obvious, or the symptoms of poor health, will not solve the basic problem. We must start now to attack the real causes: the starting points of poor health. The major organisms responsible are PEOPLE!

Once we recognize that we are often the problem, we can do much to solve it. Here are some brief guidelines for you, the homeowner, that will help you keep your trees beautiful, safe, and healthy.

Give Trees a Good Start

Plant the right tree in the right place.

Do not plant:

•pin oaks in alkaline soils

•trees in old alkaline building rubble

•willows in dry soils, pines in wet soils

•birches in shade, dogwoods in unprotected open sites

Learn the biological requirements of your trees.

Do not plant unless you plan to maintain.

#### Plant properly

Do not:

•crowd trees in small holes with compacted soil

•over-amend the soil with humus

•fertilize at planting time

Do prune dead and dying branches and roots.

## Keep grass away

Do not:

water grass heavily near trees that normally grow on dry sites
lime grass heavily near trees that grow best in acid soils
wound trees with lawnmowers and other machines
Heavy use of herbicides may harm trees.

## Brace, but not too tightly.

Do not:

- •tie young trees so tightly that they do not move
- •leave braces on after tree is established
- •kill bark with cords, wires, bands, etc.

#### **Prevent wounds**

Do not:

- •allow anyone to climb your tree with spikes
- •allow heavy construction machines near your tree
- •park cars near trees

## Prune correctly

Correct pruning is the best thing you can do for your tree. Here are the guidelines:

#### Natural target pruning

- 1. Locate the branck bark ridge (BBR). (see Figure 1.)
- 2. Find target A outside BBR.
- 3. Find target B where branch meets collar.
- If B cannot be found, drop an imaginary line at AX. Angle XAC equals XAB.
- 5. Stub cut the branch.
- 6. Make final cut at line AB (with powersaws make final cut on upstroke).