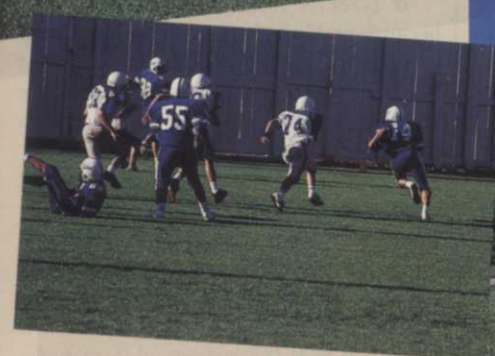
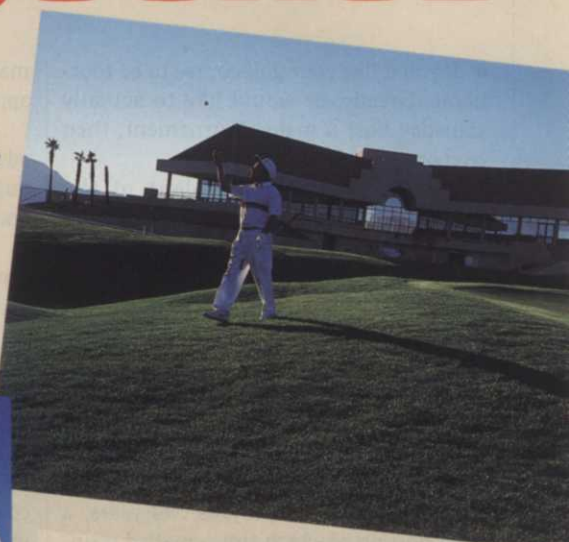
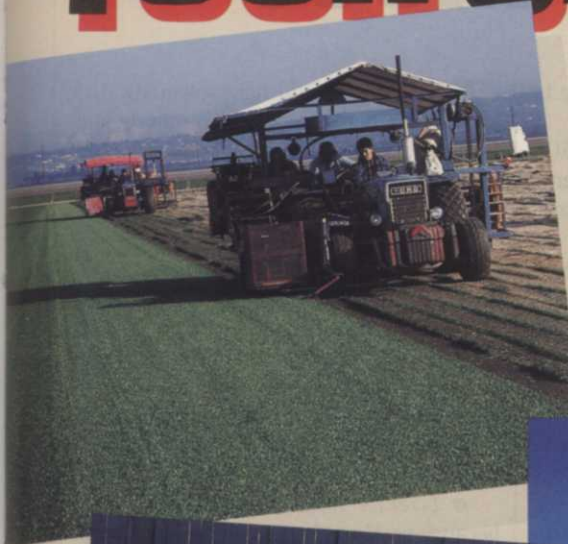


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Tournament conditions are tough to meet

■ If you'd like your golf course to be tournament-ready, or would like to actually someday host a major tournament, then read on.

Ed Walsh, superintendent of the Ridgewood Country Club, Paramus, New Jersey, hosted the 1990 U.S. Senior's Open, and learned first-hand what sort of course conditions the USGA requires for tournament play.

Ridgewood—which is featured on this month's cover—was chosen to host the tournament nine months after the course was offered to USGA officials.

Tournament preparation took Walsh and his 15 extra employees two years, a great portion of which time entailed training for new crew members, bunker renovation and intensified maintenance.

Do members of private clubs welcome tournaments?

"They do, in almost every instance I'm aware of," says Walsh, "but they have to be sold on the idea. In most cases, I think the decision is made by the board of directors, with input from membership or it's put to a membership vote. There's so much responsibility, so much of the golf course is going to be changed relative to the people on the course. (Members) should be

made aware, and have an opportunity to approve or disapprove."

Tim Moraghan, a member of the USGA advance team, reminds that tournaments put an inordinate strain on a golf course, and the people who work it

"There's a big misconception that you can maintain these conditions year round," says Moraghan. "I try to tell people that we're peaking for one week in June. When it's over, the club cannot maintain that level of intensity throughout the year."

Moraghan says a prospective host city must first meet logistical requirements before the USGA even agrees to visit the course. Those include: office space; parking; room for gallery seating; nearby airport facilities and adequate hotel accommodations; communications and first aid.

If these requirements all pass muster, the USGA then will walk the course.

● Tee areas must be roomy, on firm and stable ground and point toward the prime landing zone.

Moraghan says the USGA puts a premium on driving accuracy.

"We don't want to have a player hit it anywhere and be able to wedge it back towards the green, if he's hit it 50 yards left or right."

● Bunkers should have adequate turf around the perimeter, drain properly and be free of rocks or other debris; neither too deep or too shallow;

● Roughs should be at least 20 yards from the edge of the fairway, and of adequate density and uniform height. Moraghan advises that roughs should allow a half-shot penalty; "you don't want to embarrass the player and have him need to hit the ball 50 yards to the side to get it back into play. You want to give him the opportunity to advance the ball about 100 to 150 yards."

● Greens must be firm and fast, because as Moraghan says, "putting is 50 percent of the game." Moraghan adds that the USGA selects green speeds based on: 1.) the event being played; 2.) green contours; and 3.) turf type.

According to Moraghan, extremely fast greens for a junior amateur or senior women's amateur would not be sporting.

Contours must be reasonable and can't resemble your local putt-putt.

It's in the category of turf speed that Moraghan says the average club management tries to emulate U.S. Open conditions. It's Moraghan's philosophy that "slow grass is better than no grass or fast dirt.

"I think an 8-1/2-foot (stimp meter reading) is ideal," says Moraghan. "I would rather play a club that has 8 to 8 1/2-foot (green speed) and has turf on it."

Moraghan also advocates lightweight mowing.

"Lightweight mowing and clipping removal helps in *Poa annua* reduction and eliminates compaction," advises Moraghan. "We want to encourage bentgrass, which in turn decreases water use because bentgrass uses less water."

Moraghan recommends hand-raking of bunkers during tournaments, and rotary mowers in roughs for heights above 2-1/2 inches.

Use a turf groomer to achieve faster green speed without a lower cut, but only in spring or fall, when bentgrass is growing well and the weather and soil temperature promotes good growth without heat stress.



Ridgewood Country Club's 4-West.

—Terry McIver

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Pre-emergence weed control

by W.M. Lewis, Ph.D.

■ Pre-emergence herbicides are just part of an integrated turfgrass weed management program.

A successful program begins with cultural practices: proper mowing height and frequency, amount and frequency of fertilization, needed irrigation, and insect and disease control.

What's available—Pre-emergence herbicides are primarily applied in the spring for controlling smooth and large crabgrass and goosegrass. Many, however, will control other summer annual weedy grasses such as foxtails, barnyardgrass, crowsfoot and fall panicum. They also provide pre-emergence control of annual bluegrass when applied in the fall or spring, depending on location.

Several herbicides or herbicide combinations are registered for pre-emergence application in well-established grasses (Table 1). Grassy weeds are the target weeds for all, except isoxaben (Gallery).

Many herbicides are formulated on fertilizer carriers.

Some herbicides are limited to use by certified pesticide applicators.

Oxadiazon (Ronstar) is not registered for use on home lawns.

Herbicide selection—Know turfgrass tolerance for cool-season grasses (Table 2) or warm-season grasses (Table 3), and the grassy weeds expected on the site. Then check herbicide effectiveness on those weeds (Table 4).

Method or ease of application, granular or spray, safety and cost may also influence the choice.

Perhaps one overlooked factor in selecting a herbicide is the tolerance of trees and ornamentals. Most labels list tol-

continued on page 60

TABLE 1

EXAMPLES OF COMMON AND TRADE NAMES OF PRE-EMERGENCE HERBICIDES

Common name	Company	Trade name and formulation
Atrazine	Ciba-Geigy Security	AAtrex 80W, 4L, 90DG Purge II 2L
Benefin	DowElanco Lesco	Balan 2.5G, 60DF 2.5 Benefin Granular
Benefin + oryzalin	DowElanco	XL 2G
Benefin + trifluralin	DowElanco	Team 2G
Bensulide	ICI Lesco PBI/Gordon	Betasan 4E LF, 3.6G, 7G, 12.5G Lescosan 4E, 7G Bensumec 4LF
Bensulide + oxadiazon	Scotts	Goosegrass/Crabgrass Control 6.5G
Dithiopyr	Monsanto	Dimension 1EC
DCPA	ISK Biotech	Dacthal 75W, 6F
Isoxaben	DowElanco	Gallery 75DF
Metolachlor	Ciba-Geigy	Pennant 7.8E
Napropamide	ICI Lesco	Devrinol 50WP, 2G, 5G Devrinol 5G Ornamental
Oryzalin	DowElanco	Surflan 4AS
Oxadiazon	Rhone-Poulenc	Chipco Ronstar 2G, 50WP
Oxadiazon + benefin	Regal	Regalstar 1.5G
Pendimethalin	Lesco Scotts	Pre-M 60DG Halts 1.71G Southern Weedgrass Control 2.45G Turf Weedgrass Control 1.71G Weedgrass Control 60WP
Siduron	Du Pont	Tupersan 50W
Simazine	Ciba-Geigy	Princep 80W, 4L, 90DG, 4G

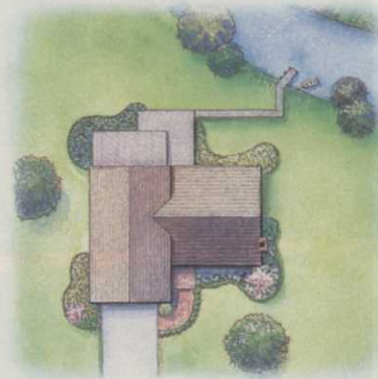
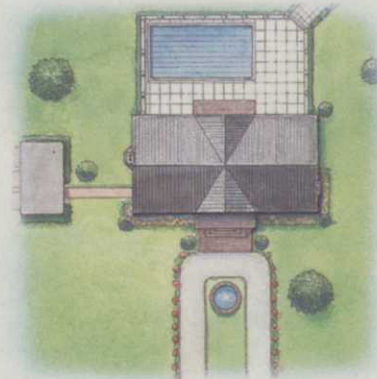
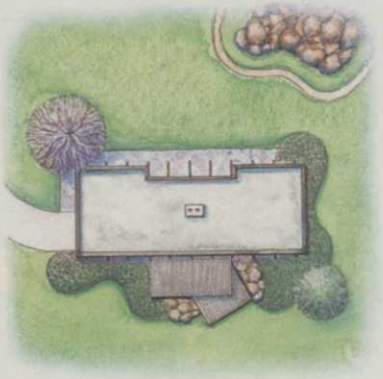
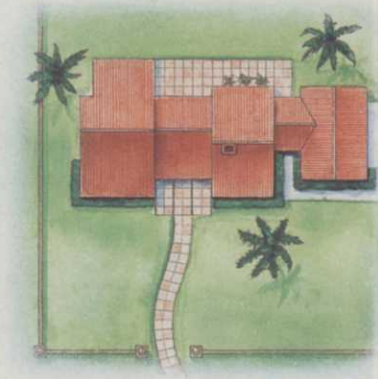
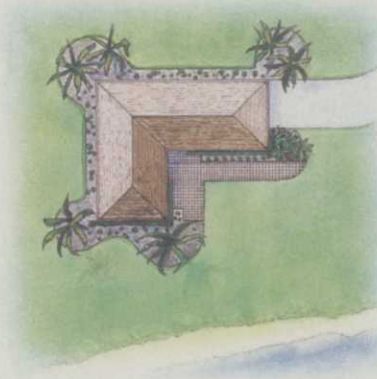
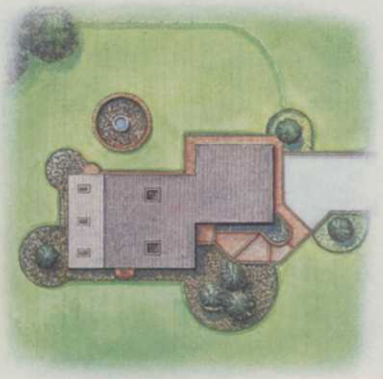
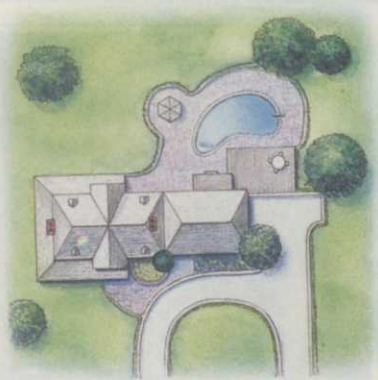
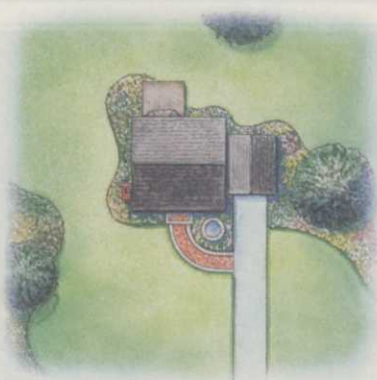
AS = aqueous suspension, DF = dry flowable granule, DG = dispersible granule, E or EC = emulsifiable concentrate, F = flowable, G = granular, SL = soluble liquid, W or WP = wettable powder. Check tolerance tables and product labels for tolerance of specific turfgrasses. Several of the above herbicides are formulated on a fertilizer carrier. These products are not included in the listing.

Source for all tables: Dr. Lewis

ELSEWHERE

**Potassium
and grass,
p. 64**

**On Poa
trivialis,
p. 68**



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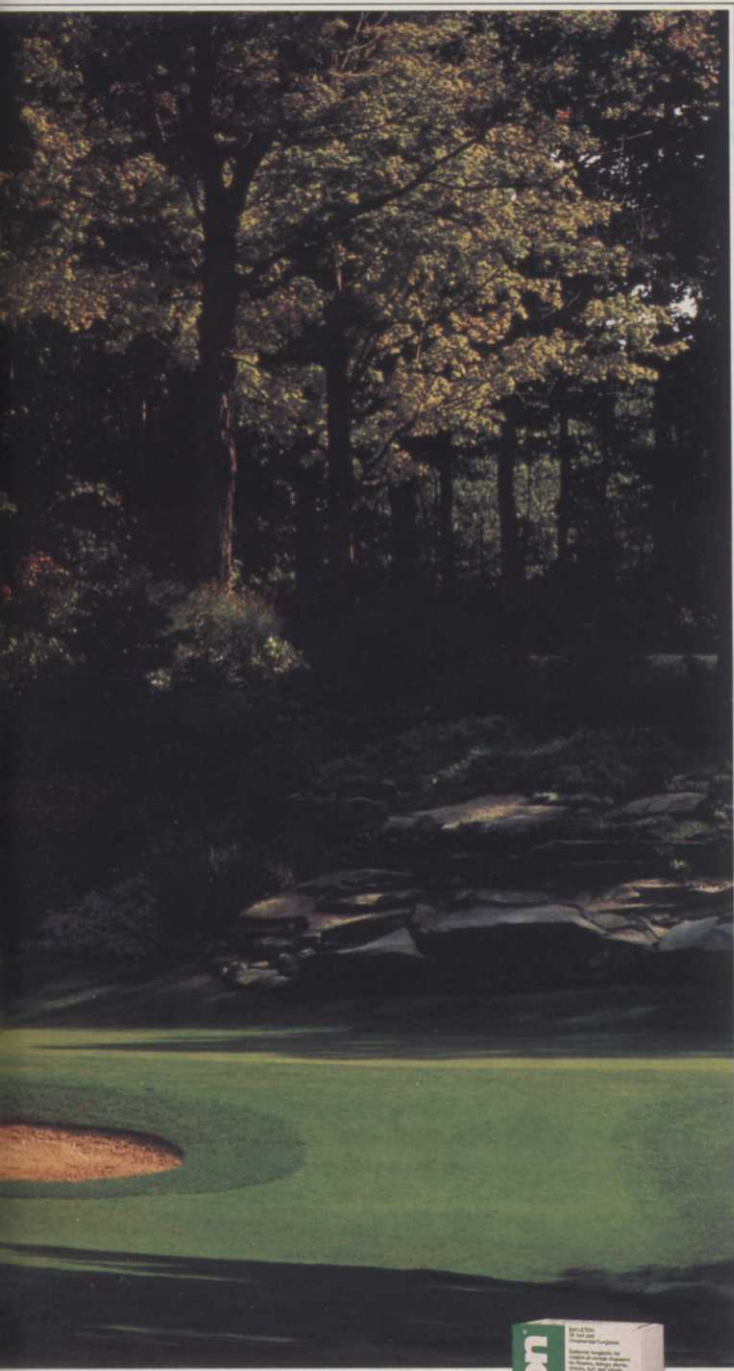


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TABLE 2

TOLERANCE OF ESTABLISHED COOL-SEASON TURFGRASSES TO PRE-EMERGENCE HERBICIDES

Herbicide	Kentucky Bluegrass	Tall Fescue	Fine Fescue	Perennial Ryegrass
Benefin	T	T	M	T
Benefin + oryzalin	NR	T	NR	NR
Benefin + trifluralin	T	T	M	T
Bensulide	T	T	T	T
Bensulide + oxadiazon	T	T	NR	T
DCPA	T	T	M	T
Dithiopyr	T	T	T-M*	T
Napropamide	NR	T	T	NR
Oryzalin	NR	T	NR	NR
Oxadiazon	T	T	NR	T
Pendimethalin	T	T	T	T
Siduron	T	T	T	T

T = tolerant when used properly according to the label; M = marginally tolerant, may cause injury or thinning of the turf; NR = not registered for use on this turfgrass.

* Dithiopyr may cause injury to certain varieties of chewing fescue.

TABLE 3

TOLERANCE OF ESTABLISHED WARM-SEASON TURFGRASSES TO PRE-EMERGENCE HERBICIDES

Herbicide	Bahia-grass	Burmuda-grass	Centipede-grass	St. August-inegrass	Zoysia-grass
Atrazine	NR	T	T	T	T
Benefin	T	T	T	T	T
Benefin + oryzalin	T	T	T	T	T
Benefin + trifluralin	T	T	T	T	T
Bensulide	T	T	T	T	T
Bensulide + oxadiazon	NR	T	NR	NR	T
DCPA	T	T	T	T	T
Dithiopyr	T	T	T	T	T
Metolachlor	T	T	T	T	NR
Napropamide	T	T	T	T	NR
Oryzalin	T	T	T	T	T
Oxadiazon	NR	T	NR	T	T
Pendimethalin	T	T	T	T	T
Siduron	NR	NR	NR	NR	T
Simazine	NR	T	T	T	T

T = tolerant when used properly according to the label; NR = not registered for use on this turfgrass.

erant ornamental species. This opens up another possibility of selecting a single herbicide for grassy weed control in the turf and in ornamental plant beds.

Caution should be followed where fine fescues are growing. Certain pre-emergence herbicides, if applied, will thin stands of fine fescues.

A few herbicides—for example, Balan 60 DF, Betasan and Dimension—may be applied to bentgrass maintained as a lawn.

If bermudagrass areas have been overseeded with annual or perennial ryegrasses, a spring application of Pre-M, Surfian, Team or XL will thin the overseeded grasses. Do not apply these herbicides unless the thinning can be tolerated.

Atrazine and simazine are applied in warm-season grasses for winter annual broadleaf and annual bluegrass control.

Herbicide labels emphasize application to healthy well-established turf, and caution about application to turf weakened due to winter climatic conditions, drought or other stress factors.

Certain pre-emergence herbicides may be applied for grassy weed control when seeding or sprigging turfgrasses, or during establishment following emergence (Table 5).

Herbicide rates may vary with geographic region. Labels will give specific information on rates for the turfgrass, for the weeds to be controlled, for sequential or split applications, for the site of application, and for any regional restrictions or precautions.

Timing—Pre-emergence herbicides are best applied at least two weeks before expected weed seed germination. In areas with a crabgrass history, pre-emergence herbicides are applied in the spring when soil temperatures approach 53° F. Goosegrass germination is usually two or more weeks later than crabgrass.

Crabgrass and goosegrass germinate first in thin, open stands of turfgrasses. Germination is delayed and/or reduced in dense stands. Moving from the South to the North, crabgrass may initially germinate from late January into May and continue through the season.

Since all summer annual weedy grasses do not germinate at the same time, split applications, eight weeks apart, are encouraged to maintain effective control throughout the season.

Our research has shown that split applications generally out-perform single applications for goosegrass control and late-season crabgrass control. (However, a single pre-emergence application of Dimension has controlled crabgrass