IPM and agronomic practices and weekly count quotas for your golf course maintenance crew will be a good start on weed control. If the weed population is great enough, the use of preemergent herbicides may be necessary for the first few years. After weed banks are reduced, use of a preemergent can be halted. You may want to set a long-term goal of being totally weed free in two to three years.

**Manual Weed Control versus Spraying (when appropriate)**

Here are some of the advantages of manual weed control versus spraying: herbicides cost money, you reduce the amount of pesticides used (again saving money), and most of all, it makes good, common sense. For example: figure the time and materials cost for a spray technician to spot spray goosegrass plants; spend that amount for manual removal of them, and it would not take as long, or cost as much, to rid the fairways of the goosegrass. When you spot spray, you can certainly count on several repeat applications to kill the goosegrass, not to mention possible interference from rain. The seed head remains viable even when the goosegrass is dead. You also chance severely damaging or, at the least, yellowing the surrounding turf for several days. The advantage to manual removal... the goosegrass is gone... no root, no seed head, no need for repeated herbicide applications... no more goosegrass!

**Summary of Weed Control Practices**

Through good cultural practices, using the components of IPM, and a disciplined approach to limit the amount of herbicides used on the golf course, we have become almost weed free. It may take more time if the weed problem is severe, but it can be accomplished. Irrigation timing and frequency, controlling pests and disease, using proper fertility levels and frequencies, and proper mowing practices, all contribute to a healthy turf, which contributes to good weed control. As a student, preparing for a career in turf management, I remember an old saying that still holds today: "Weeds are not the cause of unhealthy turf, they are the result of it."

**Matt Taylor**
Collier's Reserve
Naples, Fla.

**Split Applications for Sedge**

Our number one weed problem this year has been purple and yellow nutsedge. The reason it was such a problem was that the rainy summer made our control efforts less effective. We also have some crabgrass and goosegrass to contend with on a small scale.

We found that a split application of Image at 3/4 ounce per 1,000 square feet followed up with 1/2 ounce per 1,000 square feet gave us satisfactory control of purple nutsedge when conditions were favorable. The 1.0 ounce rate of Image seemed to shut down our bermuda so we
use the combination of the lighter rates. We also use Basagran for our yellow nutsedge areas.

For our other grassy weeds we spot spray with MSMA at a rate of 2 pounds of active ingredient per acre. A second application two weeks later is usually necessary, but is also usually effective. We apply MSMA only from June to September to avoid affecting the vitality of the bermudagrass in the spring and fall.

At Isleworth we overseed our fairways so we make a preemergent application of Barricade to our slopes and roughs. This prevents germination of Poa annua and any ryegrass seed that may be scattered by carts or equipment. We make three half-pound per acre applications of Barricade: October, Mid-January, and June or July.

Buck Buckner, CGCS
Isleworth C.C.
Winderemere, Fla.

Planning, Patience, and Prudence

Weed control has been a tough proposition this year because the constant rainfall either prevented initial spraying or necessary scheduled follow up treatments. Sedge, our biggest weed problem, loves moist conditions so it flourished. We have populations of the traditional yellow and purple nutsedge and some kyllinga. A tank mix of Basagran at (2 qt/A), with MSMA at (1 qt/A), and Horticulture Oil at (.1 Qt/A) to be effective when conditions permit us to spray. A new product called “Manage” is due out next month for use in Florida and is reportedly dynamite on sedge!

I like to stop all contact herbicide spraying by October if possible to avoid damage to the bermuda in the cool season since it will not recover rapidly.

However, in the warm season we do battle with crabgrass, paspalum, and doverweed on the driving range. We use MSMA on the crabgrass, DMC on the paspalum, and 2+2 on the doverweed.

In the fall, we apply pendimethalin to our green and tee slopes to control stray overseed material and Poa annua. It is not very mobile so I have been happy with the results. We use Kerb 50W at the 1 pound per acre rate on about 20-25 acres of fairways that have recurring Poa annua infestations. If we do get Poa germination later in the season, I take it out with Simazine.

If we spot goosegrass emerging, either my assistant or myself will spot spray with Sencor in a one quart spray bottle. We do not apply pre-emergents for crabgrass or goosegrass. If we do find a goosegrass area too large for the spray bottle, we will spot spray with the boom sprayer and we will use Illoxan.

Stuart Leventhal, CGCS
Interlachen C.C.
Winter Park, Fla.

Responding to Changing Conditions

For eight years our greens did not have Poa annua, now we have seven greens with a noticeable infestation. We are us-