

# **How to Communicate Key Points of Integrated Pest Management (IPM) to Your Membership**

## **Introduction**

Integrated Pest Management (IPM) represents a change in philosophy from trying to eliminate pests – and often using toxic pesticides to do so – to learning to determine how high a pest population must be present to cause unacceptable levels of damage to the turf, and to manage those pest populations to remain below that “acceptable” level. (In other words, you need to determine “how many is too many?”) Virtually every management decision (selection of grass species and cultivars, mowing heights, fertility program, watering schedule) is part of an IPM plan. The goal is to minimize agronomic stresses so the turf might be able to tolerate some level of pest activity.

The purpose of this document is to provide suggestions of ways a golf course superintendent might be able to explain some of the key concepts of IPM to the membership – or greens committee or club president or owner. If the superintendent is comfortable with the concepts of IPM, he or she will be more comfortable trying to explain to the membership what the IPM goals are for the facility.

To help you, [gcsaa.org/ipm](http://gcsaa.org/ipm) provides numerous resources that describe various aspects of IPM in more detail. Becoming more familiar with the many facets of IPM will make it easier for you to communicate some of those points to your membership.

## **What ARE the key points of IPM?**

There are several key aspects of IPM, many of which are described briefly here. More detailed information is available in fact sheets (identified in each paragraph below) on this website.

### **Site assessment**

Perhaps the most important aspect of an IPM program is conducting a thorough assessment of the property. This assessment includes identifying the most likely pests (e.g., insects, pathogens, or weeds). But the assessment also documents general management practices and how they vary from green to approach to fairway to tee to rough. It should include noting the grass species, mowing height, fertility program, shade and air circulation, areas where does not drain well, localized dry spots, and local topography (especially direction of slopes), among other things.

### **Stress management**

In essence, IPM involves stress management. Turf can often handle one or two stresses, but three or four different stresses might result in a decline of playability or aesthetics. Any agronomic strategies you employ to provide optimum growing conditions for the plant (e.g., raising height of cut, changing mowing patterns, skipping a clean-up pass

occasionally, fertilizing at the right time, providing water at the right time, removing trees to reduce shade and increase air circulation) is part of an IPM plan. If you can minimize the agronomic stresses, the turf may be able to tolerate slightly higher pest populations without showing symptoms. Completing a site assessment helps you to identify areas where you can adjust your management strategies to improve growing conditions.

For example, if you document that *Pythium* symptoms are most widespread and severe in areas where drainage is poorest (which is often the case), you may be able to convince your club to begin a project to improve drainage in the worst areas.

### **Setting tolerance levels (“action thresholds”)**

As mentioned before, IPM depends on establishing tolerance levels (“How many is too many?”) for the various pests that cause damage on a golf course. Pests include insects, pathogens, weeds, and vertebrate animals, among other things. If monitoring of pests indicates the population will exceed the tolerance level, then actions are taken to reduce the pest population. IPM does not rely on eliminating pests, but instead aims to maintain pest populations at levels below an unacceptable level. Tolerance levels are site-specific (and may be different from one part of the golf course to another) and depend on many factors.

### **Monitor pest activity and agronomic conditions regularly**

Setting reliable thresholds depends on being able to monitor pest activity regularly and to recognize when pest populations are likely to exceed your tolerance level.

### **Identify and optimize management options**

Providing the optimum growing conditions for the turf (putting the turf at an advantage or putting the pest at a disadvantage) is the core of an IPM program. Sometimes a pest population will exceed your tolerance level, so you must take some action to reduce the pest. In an IPM plan, a superintendent should look at all the possible options.

**Cultural strategies** are part of an IPM plan. For example, improving drainage can reduce the severity of several turf root pathogens. Avoiding saturated soils when crane flies are laying eggs can reduce the survival rate of the larvae. Reducing compaction by aerifying or by managing vehicle traffic can reduce the spread of annual bluegrass. Any cultural practices that provide optimum growing conditions for the turf should enable it to withstand at least some pest pressure.

**Biological control options** are part of an IPM plan. Many biological control agents are quite specific as to which pests they will attack, and so they are less likely than many pesticides to cause unexpected interactions. There are some challenges to using biological control agents but there are some options that are available and work quite consistently against certain pests.

While there are limited biological control options that target turf pathogens or weeds, there are some options that can be considered to manage some turf insects.

**Chemical control options (pesticides)** are also a part of an IPM plan. Normally the superintendent is expected to choose a pesticide that will be the least disruptive to the environment, including relatively low toxicity to humans and other vertebrates. There are many environmental factors to consider when selecting a pesticide.

This [gcsaa.org/ipm](http://gcsaa.org/ipm) includes several fact sheets related to pesticide selection.

### **Why is communication important?**

One of the most critical skills a good superintendent has is the ability to communicate with lots of different kinds of people. He or she must be able to communicate with the pro shop (and develop a good working relationship so each understands the challenges the other faces). The superintendent clearly has to communicate with the general manager and the greens committee, to explain **why** the maintenance staff needs a new mower or sprayer or supplies – or why the greens need to be aerified right after Labor Day. The superintendent needs to develop a working relationship with the various local, state, or federal regulatory agencies that govern aspects of course management – regulation of water withdrawal from wells or public water supplies, timing of irrigation, and a whole host of other regulations.

A superintendent also must be able to communicate with the members / golfers. That is easier (and more fun) when things are going well, but it might be even more important when things are not going well. If your area is under drought stress (and the accompanying water restrictions), it is important to explain to the membership why some of the turf areas will look parched. You would be wise to develop contingency plans and be able to explain to the members what steps you plan to take to protect the greens. If a new pest arrives in your area, it is important to explain what the pest is (in simple terms!), what you are doing to monitor for its presence, and what you plan to do if the pest settles on your golf course. If you want to undertake a major renovation, it is critical that you present a very detailed plan of action, outlining each step of the process as you envision it. If the club manager imposes a budget cut on your facility, you should provide him or her with a detailed list of services you will no longer be able to provide (e.g., edging cart paths, intense bunker maintenance).

### **Ways to communicate with your membership about IPM**

#### **Create a website for your maintenance facility**

While it can be time-consuming to create a website, templates for fairly simple websites are available. If your club does not have a website, you might consider creating such a website for your maintenance facility. If your club does have a website, look into creating your own page on that site. You could include a calendar of scheduled maintenance events (when you expect to aerify, any major or minor renovations) and write a short “article” each month or so, highlighting what you have been seeing. Pictures are always good. You might post pictures of various

activities (e.g., the appearance of a bird that is not normally seen in the area, monarch butterflies settling on plants on the golf course, changes you have made to enhance local wildlife).

### **Create a newsletter**

Some superintendents prepare a newsletter for distribution to the membership on a regular basis. This can be an excellent way to provide information to the membership. The newsletter might be quite detailed (two or three pages), listing the new projects that are underway, explaining why an area is currently torn up to install new drainage, or mentioning local pests that members might be seeing on their own properties. Or a letter could be quite concise, just mentioning what you expect to see in the next few weeks, based on current and expected weather conditions. Getting a letter out every month or two during the season could help open the lines of communication with the members / golfers and with the club house staff.

Remember that most of your members are NOT turf experts (even though some of them THINK they are!), and they do not understand why you do some of the things you do. You might include a “turf tip” in each newsletter that pertains to things they might see on their own lawns. For example, if you experienced a tough winter and snow mold is showing up on the golf course, you could explain a little bit about snow mold and mention that the members might be seeing the same thing on their home lawns. Or you might let them know when a local insect pest is likely to become active – and how to look for it. Or you might discuss mowing heights in simple terms and explain why the members should mow their own lawns considerably higher than the golf course fairway.

Perhaps you can choose a golf topic for each newsletter and provide a short article. For example, you could explain why it is important to repair ball marks correctly. Or you can talk about golf cart etiquette. (Why should a golfer NOT park the cart on the collar?)

Fortunately, the United States Golf Association (USGA) has created a series of short video clips on You Tube, some of which are in a series called “Fore the Golfer”. If your club distributes an electronic newsletter, you could include a link to one of these clips in each of your newsletters. If your club does not distribute a newsletter electronically, you can provide a link in your own newsletter on your own website or on the club’s website.

Note too that the USGA has created several additional video clips, some as podcasts or webcasts, that cover topics in more detail. While these may be too detailed to be of interest to your membership, there is a lot of information available for superintendents to peruse. The webcasts cover a wide range of topics, as does the “How It’s Done” series. In addition, there are several videos from a USGA Water Summit that took place in May 2015, as well as an overview of USGA Putting green construction recommendations.

### **Post updates at the pro shop**

Another way to keep your members / golfers informed about maintenance activity on the property is to post updates at the pro shop. Short notes (with pictures) can provide information on short-term projects (e.g., clean up after a recent thunderstorm) or long-term projects (e.g., bunker renovation).

**Make a point of chatting with members as they are playing – or after they have finished a round**

While most golfers are concentrating on their game while they play, many of them would love a chance to talk with you about the conditions they are experiencing. Not all of them will complain about green speed! Listen to their questions, and thank them for their feedback. You may choose to respond to their questions through a general newsletter or Facebook entry so that everyone has access to the answer. After all, if one golfer has a question, there are probably others who just haven't had the chance – or the courage – to ask.