USGA
Green Section
TURF TIP
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Collecting data on maintenance inputs and playing surface performance can greatly improve management and communication.

USE DATA TO OPTIMIZE GOLF COURSE MANAGEMENT

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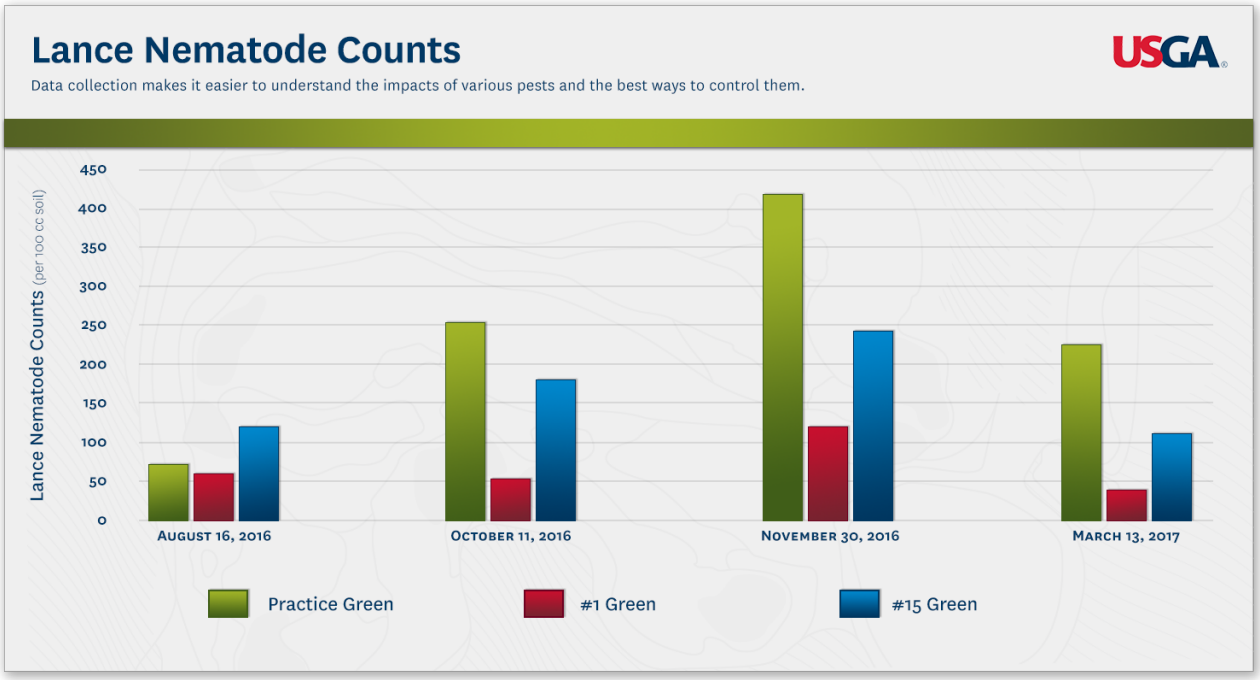
- Creating spreadsheets and recording data can help you organize and find information that will help you optimize management.
- Gathering and analyzing data can help you make better decisions and communicate the rationale behind them.
- Filtering details of product applications or maintenance activities over points in time can help you repeat successes and avoid failures.
- When daily record keeping in a database becomes habit, golf course operations becomes streamlined.

In today's computer age, there are many commercial software packages designed for inputting and recording important information such as golf course weather, labor allocation and tasks, products applied, and timing of activities. Microsoft Excel is a good program that is easy to use for computer-based record keeping. Its flexibility to add capabilities such as graphs or calculations over time is an additional benefit.

Creating a database of information on golf course maintenance practices can seem daunting at first. For simplicity, create smaller data sets for areas such as greens, fairways, roughs, and miscellaneous activities.



Another approach is to keep all the data sets together in the same file but on different sheets.

When starting a new spreadsheet, an important step is to create columns with specific information headings. For example, the first column can be the date – make sure to include the year as well as the month and day. For the second column, list the activity the data refers to – such as spraying greens or fertilizing fairways. For the third column, list the product, then in the fourth column you can list the rate. Additional columns may always be added later, but these first four columns help to organize and summarize valuable information that can later be utilized in various ways.

For chronic pests like nematodes, developing a management schedule and recording results over time can really help prevent damage. To record data from nematode sampling, the first column of your data sheet could list each green or area sampled. The next column could list the sampling date with the nematode counts. As long as the same lab is used each time, the units will always be the same. Separate sheets can be created within the file for the various nematode species you are sampling for. If more than one area is sampled, it is easy to calculate averages for each date. Better still, a simple graph can be generated showing variations in nematode populations over time. Once you have tracked the data for a number of years, it becomes easier to visualize what is happening. Including a column that notes turfgrass quality and root depth for each sampling date helps to correlate the nematode species counts with turfgrass quality and performance.

Another useful database to compile is one for putting green applications. Use the same name for the same product each time. It then becomes easy to filter through all the products applied in the course of one year for certain products of interest. This is especially valuable information to have when deciding how much of a particular product to consider buying through early order programs. If there are yearly maximum allowable rates of a product that can be applied, this filtering capability makes it easy to calculate how much has been applied over the course of a year.

There are many valuable ways to use a computer database to streamline golf course maintenance. Starting the process and keeping the database up to date can seem challenging at first, but soon data collection and analysis will become second nature and your maintenance practices will begin to show the benefits.