



# GOLF COURSE SUSTAINABILITY PRACTICES

*Ace Your Acres, Pounds, and Gallons*



## WATER



### Look for leaks

Inspect every sprinkler at spring start-up to ensure proper throw height, length, and rotation speed.

### Prevent with PM

Perform preventative maintenance of sprinklers to avoid malfunction and loss of turf when you rely on it most.

### A little stress goes a long way

Allow turf to experience some stress before applying water, particularly in the spring and fall, to create deeper rooting and more resilient plants.



### Find your number

Use a soil-moisture meter to easily develop irrigation management targets.

### Improve the competition

Seed with the newest turfgrass varieties and manage for turf that requires less water, pesticides, and fertilizer.

### How much is enough?

Record how much irrigation water you use annually. This may help justify irrigation in the event future restrictions are required by municipalities.



### Hope for the best, plan for the worst

Develop a drought emergency plan to prepare for a changing climate - and to show responsible use of resources.

### Let data tell the story

Use evapotranspiration (ET) data to track water loss from the soil, then irrigate accordingly (inches).

### PRO TIP

*Convert irrigation run times from minutes to inches. Know how much you use as it relates to rainfall amounts.*

### PRO TIP

*No strength without stress. Like an athlete, if you can stress your turf at the right times, it will become stronger for the future.*



### Be precise, measure twice

Calibrate all fertilizer and pesticide application equipment twice a year, and monitor product use during applications.

### Know your nutrient needs

Conduct routine soil-nutrient sampling of areas you fertilize.

### Don't apply late

Avoid applying fertilizer late in the season when turf growth is slow and fertilizer is likely to leach or runoff into water bodies.



### Target traffic

Adjust fertilizer application rates based on wear and tear from traffic by applying more to high-traffic areas, and less to low-traffic areas.

### Go by growth

Schedule nitrogen fertilizer based on visual turf growth indicators like how often buckets are emptied when mowing greens.



### Measure, don't guess

Schedule nitrogen fertilization based on routine measurement of clipping volume.

### Write it out

Be prepared to justify fertilizer use by documenting your nutrient management plan. What/where/when/why/how.



## NUTRIENT MANAGEMENT



### Predict the risk

Use pest-pressure models as a tool to predict pest outbreaks, which can be found at [turf.eas.cornell.edu/app](http://turf.eas.cornell.edu/app).

### Instill a spill drill

Employees should have easy access to a written spill control procedure in the event of an emergency.

### PRO TIP

*Not many trees thrive in prairies nor grass in the forest. Be sure your turf can succeed by ensuring good growing conditions.*



### Welcome to: the buffer zone

Maintain a 25' chemical-free buffer zone around water bodies to prevent pesticides and fertilizer from moving into aquatic systems.

### Spot treat

Strategically apply pesticides only to areas under high pest pressure to reduce pesticide use and save money.

### Don't go when pressure is low

Avoid preventative pesticide applications when pest pressure is low during the spring and fall.



### Scout it out

Routinely scout playing surfaces and record when and where pests emerge to time applications for maximum effectiveness.

### Less pounds on the ground

Select products that require lower application rates and lower amounts of active ingredients.

### Buffer zone 2.0

Maintain longer vegetation around water bodies which prevents pesticide and fertilizer residues from reaching the water, and reallocate the labor normally used to trim them.



## PESTS



### Blow it off

Use a backpack blower or air compressor to blow clippings off equipment before washing to cut water use by 50% and extend equipment life.

### Low flow the way to go

Use a low-flow hose nozzle for equipment washing to save water.

### Plug floor drains

Prevent oils and chemicals in your shop from getting into the environment by plugging floor drains that don't drain directly into a holding tank.



### Clipping control

Collect and re-distribute or compost clippings from the equipment wash area.

### Know the flow

Use a water meter to track water use for the equipment washing operation.

### PRO TIP

*A well-kept maintenance area reduces risk and speaks volumes about your attention to detail.*



### Reduce, reuse, recycle

Recycle water from the equipment washing operation using a closed-loop system.

### Long grass, less gas

Convert out-of-play rough areas to long grass that requires no mowing, fertilizer, or water.



## POLLUTION



*What will be your approach?*

Provided by:



New York State  
Pollution Prevention Institute

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